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Hygiene, Preventive Medicine,
Medical Sciences and
Allied Subjects.**

*Institute of Hygiene & Preventive Medicine
6-Birdwood Road, Lahore-(West Pakistan)*

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HOSPITAL PLANNING, DESIGNING AND MANAGEMENT*

By

*Professor Nazir Ahmad ***

Civilized communities have arrived at two important conclusions. Firstly that the health of every individual is a social concern, and secondly, that medical care in its widest sense must be for every individual and is an essential condition for maximum efficiency and happiness in a civilized community. There is no difference of opinion on these two conclusions. In fact they are the fundamentals of health and welfare planning which aim at total well being of the people, who should be happy, productive and intelligent participants in nation-building activities. Hence the application of all known public health and social measures, which conduce to the diminution of sickness, is of vital importance in the organization of community health services.

In every country, as civilization advances and the public consciousness is aroused, not only is public health increasingly developed but there is a corresponding

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increase in efforts towards the development of satisfactory and complete medical care of the sick.

A private medical practitioner, who serves as first line of defence for the individual in the community, plays a very significant role in providing health coverage. But adequate medical care for a large proportion of the total number of sick persons in the community necessitates the organization of measures and of institutions beyond the power of the individual private medical practitioner.

Even before medicine became scientific, the need for hospital treatment had been appreciated. The earlier hospitals were quite often lodging houses for the sick poor. General hospitals were first provided in the West in the Middle Ages (12th and 13th centuries). In the eighteenth and 19th centuries the general hospitals multiplied. In the latter part of the 19th and early part of the 20th century, as more knowledge and better skills became available, there developed specialization and refinement. However the focus has remained on the diseased individual with diseased organ or system, instead of community medical care needs.

Hospitals are the chief instrument for providing specialized medical aid, and fulfil a great community need. The coverage and utility of a hospital has to be made available on the basis of medical need. Planning, constructing, equipping and financing a hospital is a major and costly undertaking. We should be quite clear about the philosophy of the medical care programme which is intended to be offered and we must base our policy on this philosophy. We must keep in mind the end product in this case, *i.e.*, effective medical care which can be rendered efficiently and smoothly and which meets medical as well as human needs.

In the past the hospitals carried on limited type of medical care. They concerned themselves with diagnosis of the disease and its treatment. The hospital programmes were tailored to meet the individual needs rather than community needs. Community participation was not sought for hospital management, programme

planning and for establishment of priorities. Moreover our hospitals have functioned in isolation. There has been no co-ordination between the different varieties and categories of hospitals at various levels. Similarly there has been no co-ordination between medical care programme operated by private practitioners and that offered by the hospitals. They worked completely independent of one another. Thus maximum advantage has not been taken of the potentialities that are available.

The technical services of the hospital are meant for the community. Therefore the hospital must be planned to serve the community in a manner that community members feel satisfied irrespective of the fact whether it is a general hospital or a specialized hospital. Designing must be with a purpose so that functioning of the hospital is smooth and flow of service and management is efficient. Size of the hospital should be such that it should become an efficient and economic unit. For construction greatest reliance should be made on local products and personnel.

Scientific approach necessitates that the hospital designing and management must be standardized in terms of size, building, services, staffing and management. These standards must be available to governmental as well as to non-governmental agencies. Good health is purchasable. Medical care is no doubt costly but there is an assumption that health is worth whatever expenditure is incurred for efficient maintenance. Whatever is the investment in health and medical care programme, it is justifiable cost of unaided sickness which would be overwhelmingly great, in terms of invalidism and loss of productive individuals.

A vast majority of our population is rural. In the absence of good system of communication the rural population is mostly isolated from urban welfare services. Making available adequate medical coverage for the vast rural areas is a knotty problem. Nevertheless it has to be solved. Good health is a basic human right and all citizens are entitled to it, through one form or other, irrespective of the place of residence and other considerations. A large proportion of our population is composed of women, and children under the age of 14 years. Hospital medical care facilities for this large segment of our population are extremely inadequate. I hope that the future plans of hospital designing and management will take note of these

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factors and that hospital beds will become available in accordance with the size and needs of various population groups.

We must also define priorities. The policy makers and planners need to have clearly defined objectives so that actions are meaningful and are directed towards meeting the set goals for meeting the aspirations and requirements of our people.



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PLANNING FOR FUTURE HOSPITALS IN PUNJAB*

By
Mr. I. A. Imtiaz,**
S.Q.A., C.S.P.,

A community has common social interests and organizes welfare services needed by large number of its members. Prevention of disease and promotion of adequate facilities for the care of the sick are major responsibilities of every community. A community looks to its doctors for protection of health, from health hazards and for repairing the damage when its members are attacked by sickness. Communities, therefore, use their resources and organize them in a way that doctors are able to carry out their responsibility in an effective, efficient and economic manner.

The community does a great deal to help the doctor. It provides for his professional education at far less than actual cost. The licensing system protects him against quackery and unfair competition. His workshop, the hospital, is usually available to him if he applies for staff membership. Community provides him with research experiences if he so wishes. Whether he is affiliated with a hospital or not,

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** Chairman, Planning & Development Board Government of Punjab.

the laboratory services in the hospital are there to supplement, those in his own office. Many patients come to his office as a result of community health education programmes or as the result of community health surveys, for the follow-up of suspicious findings uncovered during the screening process. Medical care prepayment plans and social security organization help to avoid financial worries for both the doctor and the patient.

The health department's statistical records serve as indicators of community health problems for keeping the doctor posted on current community health problems. Various official agencies of the community provide support to the doctor for preventing disease amongst family members of his patients.

The doctor repays his community obligations in many ways. He is needed to participate in community planning, so that he can assist in contributing medical point of view. Planning can go on whether the doctor participates or not but without his ideas the picture is bound to be incomplete and out of balance. As a good citizen a doctor provides financial support to his community welfare agencies.

As a member of his local professional organizations, viz., Public Health Association of Pakistan and Pakistan Medical Association, he takes part in their scientific and community activities. A doctor may be asked to be a member of a speakers bureau for health educating the people or school children.

It seems desirable that horizon of knowledge of doctors be broadened through study of subjects like economics, political science, medical sociology and other social sciences. He ought to further actively endeavour to reinforce his knowledge in such areas even after medical graduation. This is my suggestion.

The hospital, the workshop where the doctor works most efficiently and economically, is a crucial element in providing modern medical care. Hospitals are essential for diagnosis, complex types of therapy, research and medical teaching. Organized community action is necessary to build, equip, and operate the modern hospitals. The doctor, when working in a hospital, becomes part of a complex team

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created to give medical care. The intimate person-to-person relationship, possible in solo practice is somewhat modified by the hospital environment, as many new elements enter the picture. The doctor's relationship with medical, nursing, and laboratory staff and the hospital administration creates new problems and requires tact, wisdom and adequate preparation. The patient comes in contact with a great many hospital employees and really enter a new world.

Public attitudes towards hospitals have changed amazingly during the past few generations. Hospitals are, today, no longer considered necessary evils to abate public nuisance or places for the sick poor.

Previously hospitals were run as charity institutions. They were not expected to be self supporting. Business like management was not demanded. Medical staff members received little or no supervision or control and practised as they pleased. Discoveries in recent decades and increasing costs of medical care have created a revolution. Knowledge of sources and modes of infection have led to control measures through asepsis, antiseptics, and antibiotics. Spread of communicable diseases through hospital can now be prevented, child birth can be made safe, difficult and time-consuming operations can now be undertaken. Methods and instruments for precise diagnosis have come with great rapidity. Nursing care has improved and emergencies can now be adequately handled. The hospital has become the safest place to go when sick.

As the hospital has become a respected and necessary institution, enlightened hospital administrators, doctors and the people have begun to think of hospital in terms of community needs rather than merely as institutions for treating the sick. In addition to its traditional function of treating the sick, the hospital is now considered a centre for community health activities, working towards disease prevention and education of the public. With broadening horizon, the hospital needs to coordinate its thinking, planning and activities with other community agencies with similar goals. It has also become apparent that medical care can be improved through regional organization of hospitals of varying size and type, through supervised home care of certain patients and through group practice by the members of hospital medical staff.

Increasing responsibility of the government, limited tax funds, shortage of philanthropic individuals, and rising medical costs make it necessary to convert

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hospital management into efficient business management and make hospitals self supporting. It has become increasingly necessary to employ administrators competent to run the hospitals as business institutions; the costs of the medical care of socially indigent population being paid by local, district or provincial agencies or by employers, or by special philanthropic organizations.

It is thus apparent that we in the Punjab need to have fresh thinking about the place of hospital in the community, about its relationship with other health and welfare agencies, about its efficient performance and economic managements.

HEALTH PROBLEMS OF THE PUNJAB AND COMMUNITY NEED FOR HOSPITALS

By

Prof. A. H. Awan, M.D., M.P.H.

Pakistan, starting from a scratch, has made considerable progress in almost all sectors, inspite of our politico-economic difficulties and problems created as the result of Indian hostility to the idea of a sovereign and viable Pakistan.¹ Besides the high potentialities of the nation to rise to great heights during an emergency,² people in general are hard-working, dynamic, viable, progressive and God-fearing. They, by large, want social change and improvements, and look to developed nations for inspiration, guidance and acquisition of technical know-how. Since the birth of Pakistan there has been a gradual growth of considerable magnitude in political, economic, industrial, social, public health, religious and educational fields, though much more social reform and change appears to be indicated and wanted.

In Punjab, as elsewhere in Pakistan, our culture is agrarian, inspite of the semi-industrial state which we appear to have achieved.³ Agricultural productivity constitutes the major economic activity of the people of Punjab. Majority of people live in far flung rural area. Literacy rate is low. Communication system in rural area is yet not satisfactory. Family in Punjab is mostly monogamous, patriarchal, patrilineal and patrilocal. Joint family system, early marriages, high birth rate, and large family size generally prevail. Though death rates have been falling, they are still very high. Crude death rate in Punjab was reported to be 28 per thousand during 1950-52.⁴ Present estimates put it at 19 per thousand population.⁵

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1. Aziz Beg (ed.), *Seventeen Days of September*, Lahore: Babur and Amer Publications, 1966, p. 15.
 2. *Ibid.*, p. 16.
 3. Census Commissioner, *Population Census of Pakistan-1961*, Census Bulletin No. 2, Karachi: Manager of Publications, 1962, p. 4.
 4. M.K.H. Khan, "Crude Birth and Death Rates in the Province of West Pakistan," *Report International Population Conference, Vienna*, New York: United Nations, 1962, pp. 415-416
 5. K. J. Krotki and Nazir Ahmad "Simultaneous Estimates of Population Growth: The Pakistan Experiment," *Pakistan Development Review*, Vol. 3, No. 1, 1960, p. 75.

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The following are major health problems in Punjab :

(1) *Lack of Vital Statistics Data* : Official statistics in Punjab are very deficient in reliability and are of little use for purposes of planning, evaluation of health programmes, and public health education.⁶ Collection and recording of vital statistics in rural areas is much more defective.⁷ In fact a proper mechanism for this important function has yet to be organized.

(2) *High Infant and Maternal Mortality* : A large number of mothers die either directly due to childbirth or indirectly due to causes associated with child-bearing.⁸ Our maternal mortality is estimated to be 6-10 per 1,000 live births per year⁹ as compared to 0.9 per 1,000 in U.S.A. in 1949,¹⁰ and 0.39 per 1,000 in England during 1960.¹¹

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6. E. Gustafson, *Existing Birth and Death Registration Systems in East and West Pakistan : A Summary Report*, Karachi: Population Growth Estimation, Central Statistical Office, 1964; Sultan S. Hashmi, "Estimating Vital Rates in Developing Countries with Special Reference to Pakistan," *A Paper Presented at R.C.D. Seminar on Family Planning (Karachi, April 6-8th)*, 1966; and Pakistan Central Statistical Office, *Present System of Registration of Vital Events in Pakistan : Its Deficiencies and some Measures for Improvement*, Karachi: P.C.S. Office, 1966.
 7. A.H. Awan, *The System of Local Health Services in Pakistan and Planned Administrative and Technical Support*, Lahore: Public Health Association of Pakistan, 1969, pp. 43-57.
 8. Asghari K. Awan, "Maternal and Child Health Problems," *Pakistan Journal of Medical Research*, Vol. 7, No. 3 (July, 1968), pp. 218-221.
 9. *Ibid*, p. 218. Also see A. H. Awan, "Rural Health Problems," *Report on National Conference on Rural Health*, Lahore: Public Health Association of Pakistan, 1964, p. 36; Government of Pakistan, "Health," *The First Five-Year Plan (1955-60)*, Karachi: Manager of Publications, 1957, pp. 609-617; Government of Pakistan, "Health," *The Third Five-Year Plan (1965-70)*, Karachi: Manager of Publications, 1967, p. 245; Asghari, K. Awan, "Maternal and Child Health Studies at the Public Health Nursing School Lahore," *Medicus*, Vol. 20, No. 12, 1960; Asghari K. Awan, "Maternal and Child Health," *Report on National Conference on Rural Health (December 1-4, 1964)*, Lahore: P.H.A.P., 1964, p. 67; and M. C. Gesche and S. Ahmad, "Maternal Mortality in Rural East Pakistan (Preliminary Report)," *Mother and Child*, Vol. 8, No. 1 (Jan., 1969), pp. 10-15.
 10. Y. P. Bedi, *Handbook of Hygiene and Public Health*, 7th ed., Amritsar: Anand Publishing Co., 1964, p. 187.
 11. I. G. Davies, *Modern Public Health for Medical Students*, London: Edward Arnold Ltd., 1963, p. 355.

Our infant mortality rate is also extremely high and reflects the poor socio-economic state of the people, and poor and deficient organization of Health and Welfare Services. Our infant mortality rate is 150 per 1,000 live births.¹² The infant mortality rate in England and Wales was 150 per 1,000 live births in 1900 but had fallen to 21.8 in 1960.¹³ The infant death rate in the U.S.A. was 100 in 1915 but had fallen to 25 per 1,000 in 1965.¹⁴ Infant mortality rate is 27.9 in Fiji, 25 in Singapore, 31.2 in Thailand and 36.7 in South Vietnam.¹⁵

High maternal and infant mortality rates are measurements which have been in use for a considerable time as tools for evaluating the development status of a society.

The position of woman in any civilization is an index of the development of that civilization: the position of woman is gauged best by the care given [to] her at the birth of her child. Accordingly, the advances and regressions of civilization are nowhere seen more clearly than in the story of childbirth.¹⁶

Women and children constitute more than two-third of our population. Therefore high morbidity and mortality in this group has profound repercussions on the physical, socio-economic and emotional well-being of the entire community. Women and children constitute a special vulnerable risk-group. The special risk is connected with the process of growth and development, the distinguishing characteristic of maternity and childhood periods.¹⁷

Maternal and child mortality can be significantly reduced in Punjab provided causation is understood and control measures are applied through preventive MCH

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12. S. S. Hashmi and M. Aslam, *Abridged Life Tables of Pakistan Provinces by Sex 1962; Research Report No. 48*, Karachi: Pakistan Institute of Development Economics, 1962 (Mimeographed).
 13. I. G. Davies, *op. cit.*, p. 386.
 14. Committee on Maternal and Child Care, "Reducing Infant Mortality," *Journal of American Medical Association*, Vol. 193, No. 4 (July 26, 1965), pp. 310-319.
 15. International Planned Parenthood Federation "I.P.P.F. Seeks Co-ordinated Effort to meet South-East Asia Challenge," *I.P.P.F. News*, No. 184 (June, 1969) p. 1.
 16. H.W. Haggard, *Devils, Drugs and Doctors*. London: William Heinemann (Medical Books) Ltd., 1929, p. 395.
 17. H. R. Leavell and E. G. Clark, *Textbook of Preventive Medicine*, New York; McGraw Hill Book Company, 1953, p. 244.

services and adequate hospital care programmes. These services are cheap, simple and can be easily organized.¹⁸

(3) Rapid Propagation Growth and Need of Organizing Family Planning Services as Integral and Vital Part of Family Health Services :

Demographers and statisticians have proved that population explosion is counteracting progress and is adversely affecting national economics.¹⁹ Our future development and tapping of natural resources will not be able to improve our economy unless we control rapid growth of population.²⁰

Maternal and child health and family planning are really two sides of the same coin. Family limitation is not only an objective in itself (and which can be best achieved and administered in a family health programme), but is also a means towards better health for mothers and children in particular and the community in general. Family Planning services can be best offered through our MCH centres and medical care units (e.g., general hospitals and maternity units). Maximally decentralized programmes are desirable to meet family planning goals.

(4) Environmental Sanitation : This includes problems connected with the non-availability of clean, pure and safe water-supply, collection and disposal of refuse and excreta, sanitary housing, vector control, prevention of pollution of human environment, industrial health and food hygiene.

(5) Malnutrition and Undernutrition : The problem exists specially in children and women.

(6) Lack of School Health Services : About 25 per cent of our children go to school. School child population constitutes a priority group for offering health education and preventive services. Furthermore early detection of diseases and disorders through organized survey programme helps in earlier recovery and decrease of death and disability. Hospitals in our urban and rural areas have yet established no relationship with school authorities for assisting in the school health programme.

18. Haggard, *op. cit.*, pp.5-6.

19. S. Gore, "A Mother Needs Adopting Family Planning Practices," *Birthright*, Vol. 4, No. 2, 1969, pp. 1-4.

20. G. W. Jones, *The Economic Effect of Declining Fertility in Less Developed Countries*, New York : Demographic Division of Population Council, 1969, pp. 1-30.

(7) *Health Education Status* : Health educational status of the community, consequent health attitudes, practices and habits, customs and mores greatly determine the state of health and effort for providing organized medical care and public health facilities.

(8) *High Prevalence of Communicable Diseases* : Communicable diseases constitute the biggest health hazard in Punjab and are responsible for most of our morbidity and mortality.²¹ Most of these diseases can be easily prevented. These diseases are important not only because of sickness and death but also because of the economic loss which is produced on account of their impact on agricultural productivity and industrial output. It is unfortunate that inspite of greater prevalence of communicable diseases, as compared to all other diseases, the allocation of hospital beds, nursing care, allocation of funds, and training and employment of specialists, are comparatively exceedingly small as compared to similar allocations for other diseases. In fact Punjab possesses not a single first class infectious or communicable diseases hospital, and does not have a single post of a senior medical specialist or a consultant for the treatment of communicable diseases. Post of Professor of Infectious Diseases does not exist either at the Institute of Hygiene and Preventive Medicine or at any of the medical colleges.

(9) *Paucity of Medical Care Facilities* : There is a great shortage of public and private medical care facilities. Most of the facilities provided, specially outside Lahore and Multan, are substandard. This is specially so in the area of nursing care. This is so inspite of the recognition of this need by the people and great persistent demand. Even there is great shortage of hospital beds for private patients, who can fully meet medical care expenditure themselves. Private medical care institutions are too few inspite of great scope for flourishing buisness. No economic and technical assistance is yet provided for stimulating group practice, or for development of private hospitals.

Hospitals operate on primitive lines and their programmes are organized on the basis of meeting individual needs and not community needs. Community has no say in hospital planning, management, expansion or establishment of priorities. Hospitals have no worthwhile relationship with private general practitioners, who

21. Nazir Ahmad, "Communicable Diseases and Their Control with Particular Reference to Rural Areas in West Pakistan," *Report on National Conference on Rural Health* (Dec., 1-4, 1964), Lahore : P.H.A.P., 1964 pp. 63-66.

are generally looked down by the hospital technical staff. Hospitals have not assumed any responsibility either for maintaining efficient technical standards amongst private physicians in the community nor for organizing continued education programmes for their professional growth. Residency or registrarship appointments are only available to physicians employed by health services department. Such appointments are not open to private physicians. This leads to poor professional standards amongst private general practitioners serving the major sector of the community. The general practitioners constitute our first and foremost line of medical defence and their neglect is costing the community in a big way in terms of poor standards of medical care. Use of hospitals as charity Institutions is likely to result in the development of unwholesome attitudes towards clients among the hospital staff. There is really no free patient in a hospital because community pays for the medical care of the indigent patients. So all patients ought to be treated as private patients and should have that status and dignity.



PRESENT MEDICAL CARE FACILITIES IN THE PUNJAB

By

DR. FAIZ ALI SHAH, P.H.S.)*

1. In the Punjab, medical care facilities are mainly provided by :—

(i) The Private Sector through clinics, nursing homes and hospitals of the private medical practitioners; by hakims, v aids and homoeopaths and by aided and unaided philanthropy.

(ii) The Government Sector, through institutions maintained by Central, Provincial and Local Governments.

(iii) The Autonomous Bodies like Railway, WAPDA, WPIDC and other such bodies.

(iv) The Social Security Institution.

2. The 1st two have been long with us; except for the Railway, medical care arrangements by the autonomous bodies have a short history the Social Security Institution is just five years old and solving its teething problems.

3. The Government Sector has two main roles, free medical care to the entitled persons, performed as a duty and expected as a right; and medical care of the public which continues to be extended as a matter of grace and accepted with resignation all though efforts have been made since independence to improve the prevailing conditions.

4. In the provision of medical care at public expense the distinction and disparity between the public and the public servants both citizens of the same state, is a relic of the colonial days. When the British came to the sub-continent, they found the local population obtaining medical care from Hakims, Tabibs, and V aids, the practitioners of the indigenous systems of medicine. As wise Imperial policy they allowed this to continue uninterfered. But they created a health service for their own countrymen, especially for those in the Armed Forces. And when, after the 1857 unsuccessful war of Independence, the British Crown took over direct administrative control and rule of the country the official medical services were extended to the civil servants appointed principally to collect revenues and maintain law and order. This led to the appointments of Civil Surgeons, Assistant Surgeons and Sub-Assistant Surgeons to render medical aid to government servants of different statuses and

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income groups. Those in the Imperial Services were entitled to the best available care, in hospital and at residence, during service and after retirement, for families and even for their domestic servants. Those drawing salary of less than rupees 150 had no title to free medical care and were treated at par with members of the general public. Others had simple and austere privileges and received free medical care from the Assistant Surgeon or the Sub-Assistant Surgeon in accordance with defined rules, at the hospital, during service and for themselves only.

5. As a matter of humanity and professional common sense, the private citizens were allowed benefit of these facilities, either on payment or as charity. Mainly it was charity and the hospitals came to be designated "KHAIRATI HOSPITALS" which designation continued upto almost independence. The facilities to the public were, therefore, poor in quality and meagre in quantity, to the extent of being negligible. What we see to-day is basically a continuation of the said practice.

6. Since independence more so, since 2nd Plan, residual funds have been made available to improve the available facilities. The province now has almost 12,000 beds in 199 hospitals. Another almost 2,200 beds are provided in dispensaries, rural health centres and T.B. Clinics. Details may be seen in Table I. The revenue budget this year is Rs. 472 lacs and the development budget Rs. 962 lacs, per capita provincial Government expenditure on health is Rs. 4.5 of the revenue budget, a little over rupees three crores are for medical care, giving a per capita Government medical care expenditure at under rupees one per annum. Over 51 per cent is spent on salaries of officers and establishment. This expenditure on salaries and allowances has been consuming an ever-increasing portion of the medical care budget. Mayo Hospital figures may be taken as guide. In this premier institution, the share of salaries and allowances has risen from 14.2 per cent in 1947-48 to 32.6 per cent of the budget in the current financial year. The range may be seen in Table II.

7. And whereas the cost of medicines, diet and other contingencies have all increased, the allocation per bed for contingencies in mofussil hospitals in West Pakistan has decreased from Rs. 4.29 in 1962-63 to Rs. 3.50 in 1968-69 compared to Rs. 10/- and Rs. 8/- per bed per day estimated as contingency budget requirements for District and Tehsil Headquarter hospitals. Even Nishtar Hospital Multan, a teaching institution, has suffered for being in the mofussil, its contingency allocation having gone down from Rs. 9.57 per bed in 1962-63 to Rs. 7.65 in 1967-68 at which level it has remained in the subsequent years. In the words of a past President of Pakistan Medical Association the Public Sector provide "medical aid to those who least deserve it and neglects those who deserve it most, is too expensive on Salaries/Allowances and too low on medicine and equipment; it is too inadequate in quantity and poor in quality".

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8. The gains in the 'entitled' sector have been far more impressive. The per capita annual expenditure on medical care in the province is under rupee one but for the Services Hospital, Lahore the current year's allocation per bed is rupees 57 which is three hundred per cent as large as for the Mayo Hospital. The large expenditure on medical re-imbursement is additional. Those interested in detail of the gains of the public servants are referred to the West Pakistan Government Servants (Medical Attendance) Rules, 1959 and may compare the same with the 'rules' in force before independence. They may also see the budgetary allocations shown in the revenue budget of this year for 're-imbursement of medical expenses' incurred on the single item of purchase of medicines not available in the hospital. I am referring to these in particular because the following situation is a natural corollary to those revised Medical Attendance Rules.

9. Of the Autonomous Sector, the Railway has been with us the longest. Its medical branch, inherited from the British days, is providing reasonably good medical care to its 1,35,000 odd employees and their dependants at an economic cost of about rupees 40.5 per employee per year. Others, set up since independence, also have tried at individual medical self-sufficiency at expensive, sometimes wasteful costs which in 1969-70 varied from the low of Rs. 105.04 per employee in the Punjab University for its 2,020 employees to high of Rs. 1,381.50 by the WAPDA for its 10,890 employees in Lahore. Those more interested may refer to Table III which gives the relevant data on this expenditure.

10. As mentioned earlier, the Social Security Institute is now five years' old. On 1-3-1971 it had about one and a half lacs secured persons on its rolls. In the budget 1969-70, its allocation for medical care per secured person was about Rs. 69/- This compared to the Employees State Insurance Corporation of India expenses of Rs. 64/- per secured person and his dependants for the year 1966. The Health Study Group recommended its rapid horizontal and vertical expansion and to include in it the autonomous bodies and finally the Government employees. When doing so it is estimated to have over 1,75,000 secured persons in Lahore area alone and with families this may be 20 to 25 per cent of Lahore population. In its allocation for 1969-70 is taken as a guide for the future, the medical care budget of the Institute for Lahore area alone will then exceed rupees one crore and twenty lacs. Presently, it provides out-door medical care and consultant medical and surgical services through dispensaries established and consultants engaged by it. And it is negotiating arrangements with Provincial Health Department for hospital care facilities.

11. These three sectors together provide medical care to only a small minority of population. The majority is looked after by the private sector. Of the 5,000

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estimated doctors in the province, about 1/4th only are in Provincial and Local Government service. 2/3rd to 3/4th of our doctors are working privately as also most of the practitioners of the systems of medicine. These private practitioners provide medical care of varying standards to suit all levels of affluence and poverty through costly consulting surgeons and physicians, mostly retired Government servants, in cities like Lahore to outright quacks in most of our villages. It may be pointed out that in 1970, the Punjab had one doctor for 6,300 persons. About 3,880 or 75 per cent of these doctors are working, in service and in private, in the nineteen district headquarter towns with 45 lacs or 14.2 per cent of the provincial population. Further, the three major cities of Lahore, Multan and Rawalpindi, have over 2,800 doctors. A separate study indicated that less than 800 of the 23,672 villages in the Punjab had any medical facility through the public sector. Therefore, the dependence on the hakim, the homoeopath and the unqualified but recognized allopathic practitioner, etc.

The acute over-all shortage of qualified doctors makes legislative control of misuse extremely difficult and has led to official recognition of the status quo. And there has been so far no effort on the part of the Government to develop private medical care as industry, through controls, permits, licenses, sanctions, land acquisitions and tax holidays as has been done for industry, both large and small. Only by doing so, our medical services will extend their coverage and improve their quality towards the goal of a National (or Provincial) Health Service with assured medical care for our total population. Even an advanced country like great Britain with National Health Service, had to do so and set up in 1967 a General Practice Finance Corporation to assist the general practitioners in the financing of practice premises. In the 1st eleven months of its existence, the Corporation processed 320 loans totalling 1.57 million.

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(a)

TABLE I

NUMBERS OF HOSPITAL, DISPENSARIES, RURAL HEALTH CENTRES AND T.B. CLINICS IN
THE PUNJAB, WITH THEIR BED STRENGTH, AS ON 1-1-70, DISTRICTWISE

HOSPITALS AT

HOSPITALS AT																
S. No.	Name of Distt.	H. Qrs. Nos.	H. Qrs. Beds	Teh : H. Qrs. Nos.	Other Places Nos.	Total Nos.	Dispensaries Nos.	R.H.C. No.	T.B. Cls Beds	Bed.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1.	Campbellpur	2	145	3	81	4	78	9	304	31	120	4	16	3	6.	
2.	Rawalpindi (b)	5	503	3	134	4	406	12	1043	41	92	3	12	3	—	
3.	Jhelum.	2	120	2	89	3	31	7	240	33	86	2	8	2	4	
4.	Gujrat.	3	123	2	56	4	174	9	353	41	121	1	4	1	—	
5.	Gujranwala.	5	122	2	38	—	—	7	160	52	85	1	4	3	—	
6.	Sialkot.	4	313	4	179	3	32	11	524	49	126	1	12	2	—	
7.	Sheikhupura.	3	72	1	24	3	57	7	150	44	89	3	12	1	—	
8.	Lahore.	15	4197	2	48	2	45	19	4290	84	102	2	16	9	—	
9.	Mianwali.	2	137	3	103	3	54	8	294	41	90	4	16	2	—	
10.	Sargodha.	5	392	3	92	7	101	15	585	48	134	2	8	2	—	
11.	Lyallpur.	7	433	3	72	6	186	16	691	104	164	2	8	4	10	
12.	Jhang.	2	68	2	82	4	76	8	226	50	194	2	8	2	—	
13.	D.G. Khan.	2	143	3	44	6	102	11	289	24	51	2	8	1	12	
14.	Muzaffargarh.	2	139	4	59	3	30	9	228	31	66	2	8	2	—	
15.	Multan.	6	710	6	194	12	224	24	1128	83	128	1	4	4	—	
16.	Sahiwal.	4	229	3	106	6	106	13	441	59	172	1	6	3	—	
17.	Bahawalnagar.	1	100	2	80	—	—	3	180	55	56	1	4	1	—	

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
18. Bahawalpur	4	493	1	65	—	—	5	558	44	36	3	12	2	—	
19. Rahim Yar Khan	1	144	3	118	2	26	6	288	52	88	2	8	2	—	
Total :		75	8583	52	1664	72	1,725	199	11972	966 (c)	2000	39	174	49	32

NOTES : (a) Does not include information on medical establishments of Defence Services and Cantonment Boards, Railway and Jails.

(b) Does not include information on Central Government establishments.

(c) 142 of these are located at District and Tehsil Headquarters.

TABLE II
DETAIL OF PROVINCIAL GOVERNMENT MEDICAL-CARE BUDGET

S. No.	Institution/Pro- gramme.	Total Budget	Establishment Share.	Percentage of the total
		Lacs	Lacs	
1.	Rural Health Centres	42.02	24.41	58
2.	Hospitals and Dispensaries.	116.06	71.03	61.2
3.	Lady Willingdon Hospital.	7.95	3.58	45
4.	Lahore General Hospital.	12.17	5.09	42
5.	Mayo Hospital.*	61.10	19.92	32.6
6.	Nishtar Hospital.	24.62	10.18	41.3
7.	B.V. Hospital, B. Pur.	13.49	6.59	49.7
8.	Dental Hospital, Lahore.	1.41	1.07	76
9.	Contribution to Ganga Ram and Fatima Jinnah Medical College Complex.	28.24	N.A	
		<u>307.74</u>		

*For 1947-48, the figures against this institution were Rs. 18,88,180, Rs. 2,78,990 and only 14.8 per cent respectively.

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TABLE III

DATA ON TOTAL AND PER EMPLOYEE MEDICAL BUDGET OF VARIOUS AUTONOMOUS BODIES
LOCATED IN THE PUNJAB FOR FINANCIAL YEAR 1969-70.

S. No.	Name of the autonomous organization.	Staff strength	Medical budget	Expenditure per person.	Remarks
			In rupees		
1.	Pakistan Western Railway.	1,35,018	54,68,000	40.5	
2.	Punjab University, Lahore.	2,020	2,12,952	105.04	
3.	W.P. Small Industries Corporation.	1,763	1,90,000	107.07	
4.	Board of Inter. & Secondary Edu. LHR.	455	65,636	144.00	
5.	W.P. Industrial Development Corporation.	10,472 (14,755)	16,00,000	153.00	
6.	Board of Int. & Sec. Education, Sargodha.	272	45,000	165.44	
7.	Agricultural Development Corporation.	1,294	1,27,000	196.02	
8.	University of Engineering & Tech. Lahore.	933	2,09,988	225.06	
9.	W.P. Agricultural Univy, Lyallpur.	1,053	2,70,090	256.05	
10.	P. I. A.	13,000	36,57,164	281.03	
11.	Lahore Improvement Trust.	473	1,50,000	317.01	
12.	WAPDA, Lahore.	10,890	14,50,000	1,331.50	

Source : Data collected by the Health Study Group

Present Medical care Facilities in the Punjab

FUNCTIONING OF THE MODERN HOSPITALS

By

Dr. S. Amjad Riaz Shah

The most important functions of a modern hospital are three in number :

- (1) The care of the sick.
- (2) Education and training of various category of health personnel.
- (3) Research.

It must be clearly understood that when we talk of modern hospitals we talk of them as they exist in advanced countries of the World and as they should exist in Pakistan.

The modern Hospital is not necessarily a hospital in a new and a modern building but it is the concept and organization of a hospital which should be modern and aimed at achieving the above objectives.

1. The care of the sick, the sick fall into two categories, the acutely ill and the ones who are not too acutely ill. There is a fundamental difference to the approach in the treatment to these categories of patients.

(i) The Acutely Ill.

The whole basis for treatment to this category of patient is that they are in imminent danger of death, and the modern hospital machinery is geared towards saving these patients from death. Ideally, and what is practiced in most of the modern hospitals of the World today, is that the time interval between the arrival of the very sick patient and the start of intensive treatment is cut down as far as possible.

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Whether it is an accident case, a surgical emergency or a medical emergency, the time the patient is received, transported, seen by the Doctor and started on the treatment, must be very short, otherwise not only is the patient most likely to die but the hospital cannot be called a modern hospital. This fact is the single most important but fundamental basis of judgement of the efficiency of a hospital. In our country today very little importance is attached to this crucial factor. In a Govt. Hospital the invariable slow and cumbersome routine is not at all conducive to efficient patient care and the Mayo Hospital is an example. It is not the fault of the Doctor when the patient is given medical attention rather late. The Doctor is merely the last and the most important link in the chain of organization of the treatment of the patient from transportation through registration and through the hospital corridors and ultimately to the Doctor. I may add that a good private clinic will function much better because the sick patient can be attended almost immediately by the Doctor and the treatment is started although the costs may be high. Summarising the problem, the present hospitals in Punjab and which are planned for the future, great emphasis must be laid on the fact that the such patient cannot wait and once he is inside the precincts of the hospital a great sense of security and satisfaction must pervade which again is half the cure in itself.

(ii) Care of not too sick patients.

This involves 75% of the total admission to the hospitals and consists of large variety of diagnostic problems.

In medicine, surgery and other sub-specialities the modern hospitals must be fully equipped for the diagnosis and the treatment of problems. These are the two most fundamental departments which should be organized with special care and adequate funds and should be upto date. The Pathology Laboratory and Radiology departments are less expensive than of all the other department. In modern hospitals of the world to-day it is these two departments around which revolves the medical care of the patient.

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2. Education and the Training of Various Category of Health Personnel.

Another problem today in Pakistan is the lack of well trained auxilliary staff like nurses, Laboratory Technicians, X-Ray Technicians, Theatre Assistants etc. Not only are the training facilities inadequate, there is also dearth of well educated girls joining the nursing profession. Not only that, it is our sad experience that most of the able and good Nurses, Laboratory Tehnicians etc. leave Pakistan for Middle East or Europe in search for better facilities and better living conditions. Unless we take steps and offer a lot better to this group of health personnel, we will not improve the standard of our hospitals no matter how many specialists we employ. This and other topics are going to be taken up later on during the conference.

3. Research.

Modern hospitals in order to constantly improve their standard of providing better medical care to the patients and for contributing to national and international medical literature must conduct research in many aspects of their day to day functioning with the exception of the armed forces or Karachi, how much emphasis is laid on research in Pakistan we all know. It does not require a large amount of funds to conduct research. What we need today is simple fundamental research on our problem of preventive diseases or whether the methods we use today in our hospitals, are they suited for our need and environments or do we need a fundamental change or are we not making a large waste of national resources in manufacturing sub standard drugs and so forth.

I may add a few concluding words -let us not think that to run a truly modern and efficient medical service, we must have a modern hospital building to go with it. We have seen in England and Japan some of the best medical care given in hospitals and building that are only the barracks left after IInd world war, which are much more shabby than say our Lyallpur and Sargodha Distt. Hospitals.

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In the last analysis good medical care is a product of a healthy, an educated society, which places human life and values above all else. It is not simply that the Government must be asked to provide everything from aspirin tablets to Battleships. In the coming years, new and healthy patterns of societies must evolve which are health conscious, they must pool together and finance to build modern hospitals for modern medical care. The Government must be left alone to cope with elementary care for the indigent and poor. The middle class and the affluent must learn to pay for good medical services, whether it is through their own pocket or health Insurance cover or other sources.

Thank you.



THE PLANNING AND DESIGNING OF FUTURE HOSPITALS IN THE PUNJAB

By
Col. M. Atta Ullah,*

1. Modern science provides us with techniques for preventing a whole range of diseases that were once the scourge of mankind. Equally spectacular advances have been made in the curative field. But the full application of these preventive and curative measures requires much larger resources in men, money and materials than are immediately available in Pakistan. In moving towards a national health service, we must, therefore, ensure that our scarce resources are used to the best advantage.

2. This need for maximum cost-effectiveness is particularly important in our hospital services. Hospitals involve very high costs, initially for building and equipment, and subsequently, year after year, for their efficient running. Our present situation in this matter is unsatisfactory, especially on two counts. Firstly, although the stated main aim of Government's free and subsidised hospitals is to help the poor and the needy, in practice they come last, and the benefits mostly go to those with money or influence. Secondly, the design, planning, financing, staffing and administration of our hospitals follows a stereotyped pattern inherited from the British days, and is unsuited to our economic and social conditions. The remedy for the first problem is to base the future expansion of our curative services mainly on self-financing insurance schemes within social security. This has already been accepted by Government in principle. The second problem requires a radical reconsideration of the proper future role of our hospitals, and the basing of their design, organization and administration on that new role. This note is a brief attempt to highlight certain basic questions so that they can be subjected to critical discussion and analysis, as a necessary step towards reaching constructive decisions.

3. For purposes of its planning and designing, a hospital may be considered to have two components; a professional component consisting of operation theatres, laboratories, X-ray units, etc; and a 'hotel-keeping' component. In putting up a new hotel in Lahore, one would first decide the proposed range of charge to its expected clients. We must adopt the same approach for our future hospitals. Depending on

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whether he spends it in a Sarai, or in the Intercontinental, a day in Lahore may cost a visitor any thing from five rupees to about thirty times as much. Similarly, costs in the existing public hospitals in Lahore also vary greatly, ranging from seven rupees per day in the Lahore General Hospital to about seven times as much in the Services Hospital. As there is no evidence that at the more expensive institutions similar diseases are cured more quickly, or have a lower mortality, the situation does make sense in terms of cost of effectiveness.

4. It is, therefore, necessary that for the production and distribution of the commodity 'medical care', as for any other public utility, we should first decide the cost structure at which the commodity can be made generally available. By adopting appropriate designs, plans, financing, staffing and administrative patterns, we must then effectively ensure that the visualised cost structure is realized. There should be no considerations of prestige; and no blind following of the standards of more advanced countries. This is particularly important regarding the relative costs of the 'hotel-keeping' component as compared to the professional component in our hospitals. We must cut down the former ruthlessly, and apply our scarce resources to the maximum extent to the professional side.

5. The following tentative price structure for the commodity "medical care" has been suggested by the Health Study Group for hospitals in Lahore :

- (a) for general practitioner care—rupee one per day ;
- (b) for general hospital outdoor care, including specialist consultation, X-ray, laboratory and other diagnostic procedures, plus medicines—rupees ten for the first day and rupees two for each subsequent day ;
- (c) for inpatient treatment - rupees twenty-five for the first day and rupees twelve per day thereafter.

6. The charges at 5 (a), (b) and (c) above, are for simple and functional care, where inpatients will be self-dieted, and nursed to the maximum by their own relatives or friends. For those willing to pay for special privileges such as private rooms, luxury suites, air-conditioning and consultant care by appointment, there will be higher charge including an element of profit. Those charges may be as the traffic will bear. Competition by the private sector will keep these prices reasonable.

7. Our future general hospitals must be in economic units, i.e. 800 beds, plus/minus 300 beds. Air-conditioning will be confined to such areas as operation theatres,

laboratories, intensive care units, profitmaking private beds ; otherwise they must be simply constructed and furnished. There should be no inhibitions about adopting a barrack-type style to the maximum extent,

8. There must be a practical balance between the facilities and work-load of each hospital, say one general hospital for about 2,50,000 persons and their dependants, within a defined geographical area. For practical reasons, the size and scope of the hospital will have to grow in phases. Phase I would provide 100 beds, but 75% of the total designed facilities in diagnostic, consultative, out-patients and supporting services. The emphasis would be on day care, domiciliary treatment, and referral services to designated general practitioners and attached clinics. New thinking is particularly needed regarding day-beds in sarai-type facilities. Phase II would add 200 beds, and Phase III a further 200 beds, alongwith the remaining 25% of the supporting facilities. All this could take about 5 years. At the appropriate stages upto a further 600 beds could be added. From the very beginning, preventive, personal and community services, especially paediatrics and maternal and child health services, including family planning, must be essential elements of the hospital work.

9. We must also break new ground in the interests of utmost economy, so that the meagre resources allocated to health, benefit the largest number of people. Two such possibilities are the field of diet and nursing care. As a normal practice patients must be self-dieted, either from their homes, or from hospital canteens, with provision in exceptional cases for special subsidized diets. We must also take advantage of our cultural traditions, and instead of keeping relatives and friends away from patients, make them participate in their nursing and care. In addition to possibilities of economy, there would be psychological advantages, and useful training of the community in health care.

10. There must be a drastic limitation in the provision of residential accommodation on the hospital premises. This should be limited exclusively to austere bachelor accommodation for interns and house staff, and rest rooms and canteen facilities for others during their duty hours. All other staff, including permanent nursing staff, should be recruited on the understanding that they will find their own accommodation. There should be a generous programme of assistance by long term loans, mortgages, etc. to enable staff members to acquire and build their own houses. Such an arrangement is more economical for Government and more satisfying for the

staff members in the long run. It avoids many difficult problems of discipline and sanitation.

11. To summarize, before embarking on the construction of new general hospitals, we must subject the following questions to a critical discussion and analysis :

- (a) the cost-structure/tariff of charges, of various facilities ;
- (b) the size of an economic unit, and its construction phases ;
- (c) the need to ensure a practical balance between the hospitals facilities and its work-load ;
- (d) the provision of diagnostic and referral services to general practitioners and attached clinics ;
- (e) the introduction of day-bed and home-care (domiciliary) facilities ;
- (f) the provision of preventive personal and community services, specially paediatrics and maternal and child health, including family planning ;
- (g) self-dieting by patients ;
- (h) participation of friends and relatives in patient care ;
- (i) elimination of on-premises married residential accommodation.

12. The above questions are of grave importance for the future development of our health services. On professional as well as humanitarian grounds it can be justifiably argued that we must build and run our hospitals according to modern international standard. But we must realize that with our limited resources, to do so would benefit only a small fraction of our population. We must also avoid the other extreme of spreading our resources so thinly as to seriously jeopardise the quality of medical care provided. In between these two extremes, we have to find for ourselves the path of wisdom best suited to our social and economic conditions.

PHILOSOPHY OF MODERN COMMUNITY MEDICAL CARE PROGRAMME

By

*Dr. Abdus Subhan Chaudhuri,**

The large number of the Pakistan population, (perhaps 75% or more) have no access to medical care at all, and substantial numbers of the rest, the care they receive does not cover the problems they have, inspite of the recent advances in modern medical sciences. The health cares are very scarce in the communities where need is greatest. Even today large numbers of people are dying of preventable and cureable diseases, and those who are surviving either they are physically handicapped or intellectually impaired for lack of proper health care and modern medicine. What-ever may be the desire of the Government/Nation to provide the medical care to the people, the actual task of doing so is extremely difficult. Community participation is essential in the Planning, organization, and in delivery of health services, provided by official and semi-official and other agencies. This must be based on the concept of a "Community Solution." The desire to serve the entire population of the nation, a region, or even a city profoundly influences every step of planning and allocation of resources for medical care. Health services must reach all communities and every homes even those who do not seek medical care (but they need it most). Every effort should be made to divide the total resources (human, financial and others) by the total number of population, but for example, if resources are too insignificant to serve all, who should be served? Logistically, the answer should follow from sincere, thoughtful choice, (but by what criteria?).

Stream of recent past have brought us to consciousness to serve all the people, because of the rising sense of social responsibility that each community feels for the well-being of its people. The trend of this is complex and varied—the increasing awareness of the affluent peoples and the rising voices of the non-affluent peoples. Further increasing abilities to quantify the needs of people and evaluate the uses of resources are making it clear that lives are damaged and lost in some places while life-saving resources are wasted in others.

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While considering, how to reach all the people with medical care one must realize that although the remedy to some diseases such as malaria, typhoid, is well known, the cost of providing this remedy would consume all available health resources in our country. The most serious health needs can not be met by teams with spray guns and vaccinating syringes. The causes of malnutrition, gastro-enteritis and dysentries are embedded in the ways we live, customs, tradition, poverty, and lack of education. The aforesaid problems plus the high birth rate resulted in over-crowding, less food, less attention to children leads to high morbidity and mortality.

An effective health service must meet the needs that are immediate and urgent, remove the cause, relieve the suffering and save lives, and keep the people and community as productive. Simultaneously, the health service must reach in to the communities and in families to improve the pattern of life, by improving the homes, protecting the water supply, improvement of environmental conditions, family planning, M. C. H. service, prevention and cure of communicable diseases. This should be the minimum care must be provided from the limited governmental resources through rural health sub-centre/community medical care. To make the community health service effective with in such constraints it requires a carefully designed system that provides maximum use of resources and achieves the objectives in shortest possible time. What ever well designed system may be, effectiveness will depend on the education and proper utilization of health worker.

Unfortunately, the medical care in our country is seriously inadequate which indicates not only the acute shortage of resources, but also indicates inadequate planning of comprehensive medical care and the education and training of the health workers.

The causative factors of these inadequacies are that, the system of medical care and education of health personnels are copied from the other parts of the world, and there has been a great reluctance to deviate from these patterns during past years. Therefore, those who are care taker to meet the deficiencies in the health services are faced with exceedingly difficult situations. Substantial changes in the system of medical care cannot be accomplished without corresponding changes in medical education programmes, but these changes should not be carried out in isolation one from the other. Education and medical manpower programmes should be relevant to the job to be done. The physician should learn about a community while he

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learns medicine. To achieve this, the medical teachers shall have to take active part to prepare and guide in designing the medical education programmes, keeping in view the present problems, to meet the immediate and future needs of the community and nation. Comprehensive community health planning need is for physicians and other members of the health care team to be especially trained to deal with the patient, in his social and environmental context. Their efforts must be integrated around the patient to meet his social, emotional, and physical needs. The effective utilization of available health worker will certainly reduce the present shortage, and to meet the future shortage unprecedented effort will be required to train the health worker and it should be intensive, planned and continuous with emphasis on team work.

Today we are talking about "Community Medical Care." What constitutes a community? Is it a segment of a geographical land mass, or it is a political division of an area or is it an administrative segmentation of a locality or zone? Whatever may be the definition of the community may be, so far health services are concerned the boundaries of each community are established by boundaries within which the problem can be defined, identified, taken care of, and solved. The community health services should be operated to meet the health needs of every individual, and should be located within easy reach of people of the community. Further people dealing with community health care, must orient themselves to living and economic conditions of the community. Of course some of the health problems cannot be solved by an individual community in some of the areas, such as water supply, waste disposal, control of pollution, hospital beds etc, in such environment it should be a collective efforts to meet the requirements. There are even some health problems for which the solution must be global, such as control and eradication of malaria, smallpox, V.D etc.

Today in our situation the "Community Health Care" is neither geographical nor administrative, in some place it is vertical or horizontal, in some where it is oblique, but where it is most needed it does not exist.

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Health services cost money. Who should provide that money? In the present economic condition it is not possible for the Government to pay all the cost of health services, therefore, it is desirable that community and the individual to pay (even partly) for the health services except indigent.

Whatever may be the efforts and plan for "Community Medical Care" the success of the programme will depend on the following basic prescription :—

FOR-PAKISTAN

- Re/ (i) The legislative power of the community for health service.
- (ii) Services must be made available, accessible and acceptable to all people.
- (iii) People must be educated to use the service.



AGENCIES RESPONSIBLE FOR MEDICAL CARE

By

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Comparing the modern world, and especially its most intensively civilised parts, with the world of a hundred years ago, the most striking difference is the enormously reduced importance of all forms of microbe-carried diseases. In England for instance, Leprosy and Plague have vanished. With the general improvement in public hygiene, and particularly in the disposal of sewage and purification of water supply, Cholera has ceased to make periodic raids on population and the Typhoid mortality has fallen to almost 1/1000th of what it was a century ago. Isolation and preventive vaccinations have reduced Smallpox to a rare and comparatively mild complaint ; and such still prevalent infections as Measles and Whooping cough are also retreating although more slowly.

2. Microbe-carried diseases still abroad in hot and developing countries like ours at times break loose with devastating results. Malaria, Influenza, Tuberculosis and Smallpox are chief scourges now a days. Influenza presents problems of its own. It is apparently followed by immunity of the most transient kind, and the mildness of many cases, hardly distinguishable from the common cold, makes isolation impossible. But for Malaria and the Smallpox, the cleaning up of Europe shows what can be done. It needs similar efforts in our country and elsewhere to drive these scourges altogether off. Apart from the above the country is faced with innumerable other problematic diseases to combat with, extreme amount of labour is required aiming at medical care of the people.

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3. Survival of the fittest is universal truth and in order to keep fit the responsibilities lie both with individual and the State. In fact a well calculated and coordinated effort on the part of both public and private sectors is of paramount importance for achieving this objective. The responsibilities of the State are fulfilled through the planning, and execution of various health plans and helping the private bodies and individuals entrusted and interested with similar work. The scope of this paper is not to discuss various schemes and health programmes providing preventive care. This will be more or less an enumeration of the various agencies responsible and mode of care provided for the people in the curative field and accordingly this will be more or less a statistical data obtained directly from various agencies and is subject to little bit of variations here and there and relates to Punjab Province only.

1. *Provincial Government.*

The major medical cover is provided by the Government in the form of following categories of Medical Institutions :—

(i) *Medical Colleges/Hospitals.* Three big hospitals attached to Medical Colleges and others like Lady Willingdon and Lahore General Hospitals, Sir Ganga Ram Hospital is also being subsidized by provincial and Central Governments.

(ii) *Mental Hospital.* The only Mental Hospital in the Province with average of 1500 patients.

(iii) *Chest Diseases Hospital (Mainly Pulmonary Tuberculosis).* Government Tuberculosis Sanatorium at Samli has got 250 beds and Government Tuberculosis Hospital Sargodha 100 beds. Tuberculosis wards are also part and parcel of Mayo, Nishtar and B.V. Hospitals.

400 beds Gulab Devi T.B. Hospital is also being subsidized by the Government. T.B. Hospitals at Lyallpur is run by the T.B. Association of Lyallpur and another at Sargodha by the Red Cross.

36 beds T.B. wards have been added to the District Headquarters Hospitals of Sahiwal, Jhang, Gujrat, Sialkot and Mianwali. Lahore Corporation is also managing Tuberculosis Beds in the I.D. Hospital. It is also proposed to add 32 T.B. beds in Civil Hospital Quaidabad.

Total T. B. Beds in the Province are 1442. Government is also running 21 T.B. Clinics for Out-door treatment throughout the Province.

- (iv) *Leper Homes at Rawalpindi and Lyallpur.* These are Mission run Institutions, but are being subsidized by the Government.
- (v) *District Headquarter Hospitals.* These are 16 in number and all are run by the Provincial Government and are well equipped including X-Ray and Laboratory facilities. Some of these have got Blood Transfusion Facilities also. Most of them have got 125 beds but Jhelum, Gujrat, Gujranwala, Sheikhpura, have yet to attain, this bed strength. The present bed strength of these four hospitals is round about 50.
- (vi) *Tehsil Hospitals.* Most of the mofassil Tehsil Hospitals are run by the Government. Out of a total of 52 mofassil Tehsils, 33 have got Government Hospitals, 18 of which have been up-graded to Tehsil Headquarter Hospitals with about 40 beds and other facilities. The up-grading of 15 Government Tehsil Hospitals will be done under a phased programme. X-Ray facilities are available only at 22 Tehsil Hospitals and will be provided at remaining 30 Tehsil Hospitals during the 4th and 5th Five Year Plan Periods. Tehsil Hospital hold a pivotal position with regard to providing medical care in Rural Areas. It is proposed to staff Tehsil Hospital with competent Medical Officers and a Gynaecologist, Woman Medical Officer and provide X-Ray as well as good Laboratory facilities. When this target is achieved it will be great boon for the rural population.
- (vii) *Government Rural Health Centres.* Under this scheme Government proposes to give curative and preventive cover to the whole Rural population of about two crores. (1961 Census). One Rural Health Centre will cover a population of about 50,000 comprising over all five

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Union Councils. Each Rural Health Centre will have one Primary Centre plus three sub-Centres. Each Sub-centre will have one Medical Technician and one Sanitary Inspector for the curative and Preventive work respectively. Up till now, there are 39 Rural Health Centres functioning in the Province. Work has started on 11 new centres. This will give a total of 50 Rural Health Centres as against a total of at least 400. One can safely add the requirement of 80 more, if the population of next Census (due in 1971) is considered. It is proposed to cover this number during the 4th and 5th Plan Periods (200 in the 4th plan period and 250 in the 5th Plan Period). Division-wise distribution of these Centres is :—

Rawalpindi :	10
Sargodha	10
Lahore	7
Multan	6
Bahawalpur	6

(viii) *Government Rural Dispensaries.* Although District Council and Corporation/Municipal Committees/Town Committees are responsible for running the Dispensaries in the Rural and Urban areas respectively, the Government is also supplementing the efforts by running 96 Class (I) Dispensaries, 91-Class (II) Dispensaries in the Province. Class-I Dispensaries are under the charge of Medical Officers and Class II Dispensaries are under the charge of Assistant Medical Officers.

(ix) *School Health Services.* To look after the health of School Children, there are 10 school health Medical Officers.

(x) *Maternity Child Health Centres :* To look after the health of Mothers and Children there are 169 Government M.C.H. Centres out of a total

of 443 in the Province (including 39 which are part and parcel of Rural Health Centres).

- (xi) *Teaching Institutions.* Government is also running 3 Medical Colleges, one Para-Medical School at Bahawalpur, one Public Health School for training of Lady Health Visitors, One Tibbia College at Bahawalpur, 6 Nurses Training Schools, 10 Midwifery Training Schools, (with the help of UNICEF).
- (xii) *Medical and Health Institutions of T.D.A.* Government is also running the Health Institutions previously managed by the Thal Development Authority. Their number is three hospitals, 34 dispensaries and one Mobile Dispensary, 3 Maternity Child Health Centres.
- (xiii) *Blood Transfusion Bank.* Blood Transfusion Banks are being run in all Medical Colleges/Hospitals and Divisional Headquarters Hospitals.

2. LOCAL BODIES.

The said agency includes District Council, Municipal Corporations/Committees/Town Committees.

- (i) *Tehsil Hospitals.* Local Bodies are running 19 Tehsil Hospitals (out of a total of 52) 11 by District Councils and eight by Municipal Committees. The final scheme of things is to Provincialize these Hospitals in a phased programme. Many of the local bodies have already passed resolutions for handing over the hospitals to the Government. The Provincialization of three such hospitals is under active consideration of the Government. There are also 10 sub-tehsil Hospitals run by the Municipalities in fairly big towns.
- (ii) *Dispensaries.* District Councils are running 578 Dispensaries in Rural areas, Municipal/Town Committees are running 98 Dispensaries in Rural Areas.

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(iii) *Maternity Child Health Centres* : District Councils are running 85 M.C.H. Centres while Municipal Committees/Town Committees are managing 75.

(iv) *T.B. Clinics*. The number run by the District Councils and Municipal Committees is 'NIL' and 6 respectively.

3. **RED CROSS**. Red Cross is running following Institutions :—

Hospital.	One
Dispensaries.	35
M.C.H. Centres.	31
Blood Transfusion Unit.	One
T.B. Hospital.	One.

4. **RAILWAYS**. Railway is running a Central Hospital at Lahore, Rawalpindi, Multan, and Small Hospitals/Dispensaries at Gujranwala, Wazirabad, Lalamusa, Campbellpur, Muzaffargarh, Khanewal, Samasatta and Bahawalpur. It is running 11 MCH Centres at Railway Centres in the Province.

5. **SOCIAL SECURITY**. Is running 81 dispensaries spread all over the Province and looks after labour force working at these places. District-wise distribution is as follows :—

Multan... .. 11	Lyallpur.....21
Lahore.... ..20	Gujranwala20
Rawalpindi.....9	
TOTAL :—	81.

6. **CHRISTIAN MISSIONARY**.

13 Mission Hospitals are functioning in the Province and playing an

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important part in alleviation of human suffering. Total bed strength is 1233. Missions are also running 5 M.C.H. Centres.

7. **WAPDA.** Wapda provides medical aid to its employees and is running 5 dispensaries, including, Chief Medical Officers Clinic.

8. **CENTRAL GOVERNMENT.**

Central Government is running following Institutions :—

1. Central Government Hospital Rawalpindi 300 Beds.
2. Polyclinic Islamabad 56 Beds.
3. Central Government Dispensaries at Islamabad. Seven.
4. Central Government Dispensaries at Lahore. Two.

Apart from Central Government employees these provide Medical Aid to the general public also.

9. **W.P.I.D.C.** WPIDC is running hospitals at Daudkhel, Multan and One M.C.H. Centre.

10. **TRUST AND PRIVATE HOSPITALS.**

Muslim and Evacuee Trust are running five institutions. Three are aided institutions and two are non-aided.

11. **FAUJI FOUNDATION MEDICAL CENTRE AT RAWALPINDI :**

This fine institution caters for all types of medical needs of ex-servicemen of West Pakistan and their families. It has got 220 beds.

12. **DEFENCE SERVICES HOSPITAL.**

Defence Services Hospitals spread over all Cantonments also provides medical aid to Service men and Specialist care to the Civilian Population also.

13. **AGHA KHAN TRUST.** runs a few MCH Centres only.

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14. **URBAN COMMUNITY DEVELOPMENT.** is running 17 MCH Centres in the Province.
15. **MATERNITY CHILD WELFARE ASSOCIATION.** is running 7 MCH Centres.
16. **UNICEF.** Provides drugs and diet supplements for all the MCH Centres in the Province. It also provides transport and equipment for all the Rural Health Centres, BCG teams, all supervisory staff of MCH Programme and Assistant District Health Officers, Midwifery and Public Health Schools, and the Ambulance and Equipment for Referral Hospital.
17. **P.I.A. AND COAL WELFARE BOARD,** provides medical aid to their workers in their respective areas of activity.
18. **CANTONMENT BOARDS.** provides medical aid to the Civil population in all big Cantonment areas through Cantonment Board Hospitals and Dispensaries.

ORGANIZATION OF BASIC DEPARTMENTS IN NEW (MEDICAL) COLLEGES AND INTEGRATED TEACHING

By

*Professor N.A. Seyal**

In my short paper this morning I am going to introduce some new thinking in the field of Medical Education which aims at integrated medical teaching, reducing the length of course of medical education and also the cost of construction and equipment of the new medical colleges. In our country the immediate objectives of the new medical colleges ought to be production, as rapidly and as economically as possible, doctors capable of working in adverse conditions in rural areas, self reliant in absence of adequate laboratory services, familiar with indigenous disease and oriented towards preventive and social medicine. This product should however be of internationally acceptable standards.

I claim no originality for the ideas presented in this paper. In fact most of the material presented is from the WHO Conference on Medical Education held in Tehran last December—particularly from the experience gained at the Institute of Medical Science Addis Ababa described in the above Conference by Professor Howarth, the Director of the Institute and I extensively quote from him.

The Medical curriculum has traditionally been divided into two more or less self contained stages. The pre-clinical stage devoted mainly to teaching of Anatomy (including Embryology, gross and microscopic Anatomy) Physiology, Biochemistry and Pharmacology. These subjects cover respectively the structure and function of human organism, the Chemical back-ground of the function and the chemical modification of

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the function of both of the human body and of its pathogenic invaders. These are the basis of rational medicine and by medicine is meant a study of human organisms individually and collectively in health and disease within their environment with a view to saving of life and alleviations or elimination suffering.

The clinical stage instruction in para-clinical subjects is mainly devoted to teaching of application of medical science to the practice of clinical medicine. These two stages have been sharply divided resulting in very considerable duplication of teaching, wasting a lot of precious time and presentation of various subjects in isolated water tight compartments. Many of the facilities *i.e.* accommodation and equipment required by the four basic subjects is common to these all *i.e.* lecture room with teaching aids, laboratory with balances, centrifuges, incubators, microscope glass ware, power and gas supplies, workshop and animal houses etc. The facilities required by Physiology and Pharmacology are virtually identical. Anatomy however has the unique requirement of a dissecting room.

It is academically desirable, logical and economical to group these subjects together a medical science unit which in order to facilitate with other medical subjects should be a part of the structure of a teaching hospital.

Such a unit has two main functions (i) to provide a basis for the student's clinical training (ii) to produce and maintain pre-clinical teacher and researchers.

The objective of the unit is to train in clinical problems and to think in terms of organs and systems rather than Anatomy and Bio-Chemistry etc.

Organization of a Medical Science Unit

The following outline gives the basic structural, staff and organization requirements for a multidisciplinary teaching unit giving a one year course with an annual intake of some thirty students with the objective of producing doctors. With an increased student intake or with an extended course the structural and staff requirements—especially the latter—must be increased. Provision for extension of the building should be made at the outset.

Floor Area

Initially, the total working floor area should be about 8000 sq. feet, with possibilities of expansion to 40,000 sq feet; occupied by a dissecting room—anatomy suite connected to a multipurpose laboratory, lecture room, central administration

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stores, animal house, glass blowing room, workshop, mortuary and photographic room. In addition there should be research laboratories for staff members.

Academic and Administrative Organization.

That the unit be "non-departmental" instead of isolated, autonomous discipline with departmental accretion of equipment, animal house, workshop glassblowing rooms, secretaries, technical staff, etc. etc. Every effort should be made to discourage departmental aggregation by fostering the notion that all staff members are medical scientists with special interests in a particular field.

At first it is desirable that there should be one Director of the Medical science unit. The Director should have teaching and/or research experience in at least two of the basic sciences and should be the Professor of one of them. He should also have postgraduate clinical experience. The Director should be Chairman of a committee consisting of heads of disciplines charged with the academic organization of the unit. A clinician, Preferable the Professor of Medicine should be a member of the committee. All heads of disciplines should, if possible, be medically qualified and one senior and one junior staff member are needed for each discipline.

Technical Organization.

A technician and one trainee should be attached to each discipline and responsible in academic matters. A trainee technician course should be organized as rapidly as possible. In this course, trainee should circulate through all disciplines in the unit.

Curriculum.

The curriculum should be clinically orientated and in all subjects discussion should include common clinical problems and their technical background.

Lectures.

Each discipline should present a brief—very brief synopsis of its content - with emphasis on its correlation with other disciplines. The objects should be to provide the student with a sketch of the overall pattern of the subject and its contribution to preclinical and clinical medicine.

Thereafter, the organ/system approach should be adopted. In this each organ/system of the body may be considered serially from the points of view of each discipline in turn, being determined by the progress of dissection. After a study of each system

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the students should briefly visit the hospital to observe the effects of disease upon this system. At this time the preventive and social aspects of the system may be introduced. For example, in dissection, the first structures encountered are skin, muscle, nerve, and bone; after this the physiology, biochemistry and the pharmacology of these structures are discussed. The student then visits the hospital to observe, for example the effects of trauma and disease on bone, peripheral nerve and muscle etc. At this stage effects of nutrition on skeletal and muscular development and upon neural function may be introduced. Thus, a first year clinical student thus trained facing his first cardiac patient is no longer required to dredge from his memory preclinical data, presented in a very different context over the preceding 2-3 years, which might have bearing on the problem before him. His preclinical data on, "heart" is available to him all in one place because he was taught that way. It is necessary even at this elementary level to use clinical sessions in the later stage. Preclinicians should also be used to revise the preclinical background of selected clinical problems in the later clinical years in collaboration with a pathologist and a specialist in preventive medicine, where relevant, so that the clinician may be spared the need for dissertations, on the structure, function, pathology and social aspects of the system he is to present clinically. The clinician is thus able to get on with his business of diagnosis, therapy and prognosis.

At a later stage of development a small number, or even one, pure clinician with a knowledge of practical clinical problems might teach selected entire organ/system at the preclinical level described above. This is the concept of an integrated basic science teacher.

In this system the medical student starts his training with heavy emphasis on basic medical science with a minor clinical component. Later the position is reversed.

Anatomy (Lectures/Practicals).

A doctor examines a patient through his skin, a surgeon usually operates through the skin. In the intact patient information might also be gained about structure/function by radiological means. It follows that gross anatomy should concentrate upon surface and functional anatomy as seen in the living model and also upon X-Ray screening and general radiology. The time spent on dissection should be severely curtailed and where possible, the living model, the skeleton, presected specimens, radiology and models substituted. Embryology should assist in understanding anatomical arrangements which would otherwise be learned by rote e.g. the peritoneal cavities and the cerebral ventricular system. It should also stress, with the

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assistance of the paediatricians, congenital abnormalities commonly found in the nation. Histology should be angled towards physiology and histopathology and the basic principles of the latter introduced.

Physiology.

The physiologist should teach functions of organ/systems and their interrelations.

Biochemistry.

This subject deals with the chemical background of function. Upon it, the student should base his concept of the normal, so that he can understand those deviations which he will encounter in his paraclinical and clinical studies. There should be a heavy emphasis on biochemical systems deranged by common diseases and nutritional defects – especially those of national importance.

Pharmacology.

This provides the technical basis of therapeutics. The mechanism of action of common drugs should be explained and such physico-chemical properties as have predictive value. Pharmacology draws upon each of the other three subjects for much of its basic data. It thus has a useful function in revision and integration and should be taught last in an organ/system study.

Practical Classes.

The multidisciplinary laboratory is the key unit in multidisciplinary teaching. There are many forms. The following basic criteria for a satisfactory multipurpose laboratory are offered.

1. Minimum student capacity 40. Students working in pairs *i.e.* twenty places with gas, compressed air, continuous and pulsed D.C., A.C. and retractable operating tables at each place.

2. Capacity to serve at least :—

(a) Embryology.

(b) Histology.

(c) Physiology.

(d) Biochemistry.

(e) Pharmacology.

(f) Some aspects of gross anatomy *e.g.* brain dissection.

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3. Capacity to change from one subject to another within 10-20 minutes.
4. Maximum staff required—one senior and one junior academic plus one senior and one trainee technician for each discipline. All students to be visible from any point in the laboratory.
5. Facilities for observations on human subject.

Equipment is arranged in functional units on wheeled trolleys which, when not in use, stand in readiness on benches of the service room. When needed they are wheeled across the hatch flaps into the teaching benches and aligned with a student place. Histological equipment—microscopes, slide boxes etc., are placed ready for use on the wall benches in the communicating wide corridor.

Student Assessment.

Since the overall objective of the preclinical unit is to train students to use their basic science in the solution of clinical problems as assessment is required at the end of the course. A discussion of the virtues of the various examination systems is outside the scope of this paper. The main criteria for construction of such an examination appear to be :

1. There should be a directing problem which demands selection from each of the four preclinical disciplines.
2. The problem should be clinically based but purely preclinical problems may be employed.
3. All four preclinical disciplines should, if possible, be represented.
4. The problem must be common and practical and not contrived and artificial.

In the case of a clinical problem a short preamble outlining the main clinical phenomena might be required, an essay-type question meeting the above criteria might read as follows :

The bile duct may be obstructed by stones, inflammatory process or tumours arising within the walls of the duct or in neighbouring structures. Such obstruction prevents excretion of bile into the gut disturbing digestion and increasing the concentration in the blood of bile salts and bile pigments. Increase of the latter causes jaundice. Especially when obstruction is due to stone or inflammation there is spasm of the smooth muscle of the duct and pain.

How are bile pigments and salts produced in the liver? How do they contribute to digestion? What is their fate in the gut? Discuss the innervation of the

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smooth muscle of the biliary pathways. What drugs might be expected to relieve the spasm of the smooth muscle and what drugs might be used to relieve the pain? Through which structures must a surgeon pass in order to reach the bile duct. What are the immediate relation of the latter?

Alternatively, and with a brief preamble.

Diabetes mellitus is a disease caused by a failure of the islets of Langerhans to produce sufficient insulin.

Outline the mechanism of insulin synthesis; how is the secretion of insulin controlled; how does insulin act to control the concentration of glucose in the blood? What forms of insulin and other pharmacological agents are available for the treatment of this disease. How do they act? Describe the histology of the pancreas with special reference to the Islets of Langerhans.

Both these questions are extremely searching and few traditionally trained students would be able to answer these questions satisfactorily, in all aspects at any stage in their careers. I doubt if more than about six of my audience could answer these questions now. This is a condemnation of the traditional system for the education of doctors from which most of us have suffered. The system was supposed to teach us to handle problems like this - it did not then, it does not now.

It will be apparent that the contribution of basic medical science to the efficiency of the graduating doctor should also be measured for it is expected that he will take it with him into his clinical life. A minor preclinical component, perhaps that considered most important in the question context could thus be included in the question of the final Examination in Medicine. It will be seen that the above pre-clinical question could be readily modified for this purpose.

e.g. Discuss the diagnosis, therapy, and prognosis of diabetes mellitus. How is the secretion of insulin controlled and how does insulin act to control the blood glucose level? What influence has insulin upon the metabolism of fats and proteins? What social and cultural factors may play a part in the causation and course of diabetes mellitus? What are the major pathological findings in an elderly diabetic?

It will be seen that other types of examination could be devised to scan the same areas.

The omissions of some material from the composite paper may be made good in an oral examination or a short "subject" paper.

It is commonly stated that the products of a Faculty of Medicine should reach "internationally acceptable" standards of Medical competence.

In fact such standards do not exist. Nevertheless, a Faculty should protect itself from the possible criticism that it is producing "second class doctors". This may be partially achieved by importing experienced external examiners from well-established universities for final preclinical and clinical examinations; of course, such examiners will usually be unable to assess the composite paper in toto because of their own academic limitations. However, they might assess those parts of it related to their own subjects and the "subject" examinations.

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(a) *Position of funds* : At present hospitals are mainly run by the Government or autonomous bodies. There are also hospitals run by private or foreign agencies but the expenses are so high that a common man cannot be benefitted by such institutions. Even the Government or autonomous bodies lay stress on contributions from the philanthropists but to what extent. Their contribution is almost negligible and not without any motive behind it. If the hospitals run by the Government or autonomous bodies give proper medical cover to the urban community, there is no reason why a common man will fall victim to a private or foreign institution. The autonomous bodies earmark some budget on the hospitals run by them but the budget provided is next to none.

Even the Government hospitals are helpless from doing proper justice to a common man in an urban area e.g. he has to wait for his admission into hospital for a very long time, he is not in a position to purchase medicines from the market, he cannot afford to pay for Blood Transfusion if required, so on and so forth. There are cases reported in the "Dailies" and otherwise who due to lack of either of them, end in fatality. On the other hand a well-to do person manages free admission to a hospital as an indigenous patient thereby depriving the right of a common man. There is no hard and fast method available with us to differentiate between these two categories of persons. If they are required to produce a certificate of their income from local councillors etc, again these certificates may be falsely issued or any delay in procuring them may in some cases deteriorate their ailments and lead to further complications. Best suggestion is that such hospitals should be run by the Government alone and the Government should get contributions from autonomous bodies and the urban community itself. The Government should collect tax from the community under the head "Health Tax" and an assessment should be worked out for each individual, may he be rich or poor. The hospitals should then extend medical facilities to all the persons in an urban community without any difference between poor or rich. However, if the rich intend to take facility of private wards, they may do so and for which they should pay to the Government additional charges over and above the "Health Tax" already paid by them.

(b) *Public Health Education in Urban Community* :—

It will be of no use to open hospital after hospital. It is equally essential that the people must be properly motivated and should be made conversant with public health problems. It is the lack of this education that most of them get themselves

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treated by 'Veds', Homeopaths, Hakims etc. and only seek medical treatment at the hospitals when their ailments go from bad to worse and pass on infection to others. The Government, may pass an Act after an Act to prevent the quackery but it will not have any effect in a country like ours where majority of the public lacks even primary education. Enforcement of public Health Education is the only remedy to stop this quackery and motivate the masses on public health problems.

(c) Technical Staff :—

Any hospital which has a proper building, stocked with medicines, fully equipped with modern equipment will be of no use at all unless there is proper technical staff like Doctors, Nurses, etc. In all the hospitals such staff is hardly sufficient to meet the dire needs of the urban communities. To achieve this aim, the number of medical colleges should be increased. The facilities should also be enhanced in case of medical graduates to go abroad for postgraduate degrees or arrangements be preferably made on large scale for postgraduates colleges in this country, and which will save the foreign exchange of Government and the number of the doctors will also increase. In the similar manner, the number of Nurses' Training Schools should also increase to meet the demand for Nurses. After we get the required number of the doctors and the nurses, there will be no shortage of the technical staff in the hospitals. But it is important that their status and pay must be enhanced if we expect full justice from them in their profession.

3. Once we achieve the basic needs of a hospital, further role of a hospital in an urban community like categorization of the hospitals according to population, evacuation of serious patients to hospitals by means of an Ambulance free-of-cost, giving of free medical treatment to the patients, remain then a very simple affair, and which is being taken up by other learned speakers. However, in this respect I suggest the introduction of an 'Intensive care unit' in a Hospital which is not introduced in any Civil Hospital in our country as far as I know. This unit should be located in

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the premises of a hospital where serious cases of all kinds should be kept and vigilantly treated and looked after. It should comprise of separate male and female sections. The unit should be air-conditioned and fitted with modern equipment and appliances. Besides, the necessary medicines should be stocked and made readily available. It should also include the arrangements for Blood Transfusion so that no time is lost in placing the indent with the Main Blood Bank of the Hospital and awaiting the supply. The entire technical staff in charge I.C.U. should be experienced and highly qualified. It will not be out of place to mention here that I introduced intensive care unit in B.V. Hospital, Bahawalpur which is about 450 bedded hospital and where I worked for about 3½ years. I found the working of this unit extraordinarily good and I am sure if this unit is given a trial in Civil Hospitals in the country it will be worthwhile and which will prove useful for the benefit of serious patients and rate of mortality will definitely be reduced.

THE ROLE OF HOSPITAL IN A RURAL COMMUNITY

By

A. Tabibzadeh

Introduction.

In history, societies have felt the need of being protected against epidemics and danger coming from the sick people.

Primitive tribes practised the isolation of a contaminated village-signs were made by making a knot of herbs or branches, which could not be trespassed. Hospitals came to mean special places set aside for those whom the community wished to isolate the crippled, the aged, the orphaned, the sick and the poor. It is demonstrated that the isolation hospitals were founded by municipalities and under municipal police control. This form of hospital remained for long the places for the outcasts of society.

During 19th century, hospital was still a place to be avoided. The rich stayed at home. They preferred to be born, fall ill and die in comfortable surroundings. This was understandable, since hospitals were dangerous place because of cross infection.

During the 20th century, the hospital became the best place for a serious and complicated ailment treated, or in some countries the best place for a woman to have a baby.

The hospital began to play an increasing role in teaching of medicine, and the services made available to large numbers of people. The role of the hospital in a community health programme cannot be considered alone. The scope and aim of its

*Who Representative in Pakistan,

contribution must be to some extent influenced by the contributions of the other workers in the health and education fields.

Rural Hospitals

The rural hospital is the smallest curative unit serving a rural community, and its structure varies with basic features of life. The rural hospital should cover health education in rural communities and serve as a demonstration centre for general hygiene work. Today, many planners would give the hospital a central location in the community, thus stressing its new functions of rendering health services to the community as a whole including those who are not at the hospital. Therefore, to expand the scope of the hospital to cover the whole community, through out-patients care and preventive measures, is the aim of the planners of today. The role of the hospital in a rural community is being discussed. WHO said that "though hospital treatment may be expensive, when national estimates of bed costs per year are considered, it is impossible to weigh cost against the value of human health".²

As long as medical techniques in everyday use did not demand complicated equipment and qualified personnel, these country hospitals were able to provide simple medical care for the rural population. But in the past 50 years methods of diagnosis and treatment have become much more complex. In many cases, biological analysis, radiological examination, closed circuit anaesthesia, the observation of electric currents in the brain and the heart have become indispensable. Surgery has made amazing advances, and even the simplest, most commonplace operations demand special equipment to ensure the sterility of the instruments and the operating room.

The rural hospital endeavoured to keep pace with these developments, but it ran into difficulty because of the high cost of technical equipment, which could

1. Rural Hospital - R.F. Briggman, WHO Geneva, 1955.

2. World Health Magazine, December, 1970.

scarcely be justified in terms of the limited number of patients it served. The purchase of material and equipment presented financial difficulties which grew as techniques advanced. Thus, in a rural hospital of 25 to 50 beds, the cost per case became prohibitive, while the standard of treatment and accommodation of the patients still left much to be desired.

These financial and technical difficulties corresponded, more or less, with the profound changes in the way of life and mental attitude of people in rural areas—further proof of the close connection between health problems and the level of social and economic development. With modern means of transport, in particular to the motor car, country people are now much more mobile. The same forces have brought them into closer contact with town life. In developing countries this process may not be so dramatic, yet hard roads have replaced the old tracks which used to be buried in sand or submerged in water according to the season.

Thus, the traditional country hospital in many states is losing ground. In the United States, the number of patients admitted to hospitals with from one to 24 beds, as a percentage of all admissions, fell from 3.4 in 1953 to 1.7 in 1962, while the numbers admitted to establishments with more than 200 beds represented, in 1962, 52 per cent of total admissions, compared with 43.6 per cent in 1953. In France, legislation passed in 1952 put a stop to general surgery in rural hospitals and this was followed in 1962 by regulations providing for their conversion into surgeries for group practice by the doctors of the neighbourhood or communal health centres. In Great Britain, the hospital programme envisages the closure of 1,300 small country hospitals. In the USSR, the best-situated rural hospitals are steadily being converted into establishments with 150 to 300 beds.

When we are dealing with fundamental problems of health, there can be no doubt as to its value in providing logical basis for choosing between a number of alternative methods of achieving a given aim. (Examples at Annexure-I).

There are other ways also by which hospitals can be integrated into a community health service. In the North American and the European patterns or Hunterdon

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Country pattern, the hospital is the centre of comprehensive medical care. In such an arrangement the hospital is "an integral part of social and medical organization, the function of which is to provide the population with complete health care.¹ It may become the leading spirit in the scheme to link together all aspects of the health art and to prevent disease.

Existing Institutions.

The first thing to do therefore is to assess the importance and the value of existing medical care system. To accomplish this the number of doctors, hospitals, hospital beds, yearly admissions, the running budget *e.t.c.* is to be found out.

The second step should be to determine the population at risk for each district and availability of medical care institutions. The best method is to adopt the administrative and geographical area for which periodical population census is made. Then a list of these areas is given to each hospital and the number of patients living in these areas and admitted during one year is to be calculated. This could be done by a sampling method (Annexure-II).

The table showing the relative density of the hospital frequentation in each area. It is obvious that three areas : (a), (b), 'e) could be considered as well served by the hospital and that most of the serious cases have been hospitalized. On the other hand, the other areas which show a frequentation of 5 or less are evidently out of reach and most of the patients remain without adequate curative facilities. The table shows need for more hospital beds, and shows how and where these beds could be distributed, either in extending the hospital and improving the communications, or building a new hospital in a group of remote areas which are too far away to benefit from the hospital.

1. The Health of the Community by C. Fraser Brockington,
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Epidemiologically speaking, rural communities in some part of the world where people seldom leave their homes—when they leave their place by train or by bus may provide one clue to the possible exposure to infection. Therefore preventive services to this community should receive top priority.

Basic Health Services Plan.

In this region WHO has assisted in the formation of adaptation of such plans, with emphasis on an adequate network of basic health services and on coordination both at the national level and between various specialized agencies. Governments have expressed the need to develop and strengthen the basic health services so that the gains accruing from the control or eradication of various communicable diseases will not be lost.

Conclusion.

The goal is to bring better health for all people. Improving the rural populations' health is assential. This will be done by health centres practising a comprehensive health programme. The availability of good roads, means of transportation specially equipped emergency ambulances, and means of communications, telephone etc., are very important.

There is doubt that ambulatory services will be much more developed in future. Rehabilitation in hospitals will play a more important role, and will be associated not only with treatment of the physically handicapped but with all branches of medicines.

In an isolated region, a remote mountain valley, an oasis, vast savona lands, or small islands, the traditional rural hospital of 15 to 30 beds cannot be dispensed with. In difficult conditions, such as these, economic considerations take second place, but the cost will be justified if the rural hospital provides a comprehensive health service for the whole population of its area.

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In the end I thank you all for inviting me to this conference and take this opportunity to convey on behalf of Dr. A.H. Taba, Director Eastern Mediterranean Region, and my own behalf, best wishes for the success of the Conference.

Annexure—I

An example of this approach is found in the Samobor Demonstration and Training Area, established in 1957 by the Andriji Stampar School of Public Health, Zagreb, Yugoslavia. The area covers 300 sq. km and contains 36,000 inhabitants. A project was started in the area in 1958 to reduce infant mortality from the existing figure of 44 per thousand live births to 20 or even less. For this purpose, two methods were used :

1. In the town of Samobor a child health dispensary and a 12-bed unit for normal deliveries were set up, staffed by a paediatrician and two nurses ;
2. In the village of Rude, which with six adjacent villages has a population of 2624, a clinic was set up staffed solely by a midwife and visited three times a week for six hours by a general practitioner.

After ten years, infant mortality in Samobor had fallen to 17.1, while in Rude it had fallen to 18.1. While these figures must be viewed in the context of a general decline in infant mortality due to an improvement in socio-economic level and other factors, it would appear that essentially the same results were achieved in Rude as in Samobor, but with a much cheaper type of health service, an experience which may be of value to developing countries where both financial resources and highly trained health personnel are in short supply.

Annexure—II

In a rural underdeveloped province there is only one 100-bed hospital and for this province the bed/population ratio is only 1.04 beds per thousand inhabitants.

The survey gives the following results :

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Hospital X	100 beds.	Bed occupancy	: 100%	Average length of stay 20 days
Name of areas (1)	Population (2)	Annual number of admissions (3)	Hospital frequentation (h) = $\frac{(3)}{(2)} \times 100$	
a	10.000	400	40	
b	20.000	1.000	50	
c	5.000	25	5	
d	6.000	25	4,2	
e	12.000	400	33	
f	8.000	20	2,5	
g	5.000	20	4	
h	6.000	20	3,3	
i	9.000	20	2,5	
j	10.000	50	5	
k	5.000	20	4	
	96.000	2.000	21	

Bed population ratio : $\frac{100}{96} = 1,04$

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RELATIONSHIP BETWEEN A RURAL AND URBAN HOSPITAL

By

*Dr. Nasir Mahmud Khan, M.B.B.S., T.D.D., M.R.C.P.,**

An ideal rural Hospital should be available for service for not more than 10,000 population. In Punjab these areas are very few and most of the population is scattered in small villages, so a rural Hospital should be set up at a central village and be at a place close to the other villages for which it should cater for, and people have an easy access to the main village hospital. The building of the hospital should be an impressive one, with all the modern facilities for laboratory investigation and routine test. It will not be out of place if I suggest that a jeep type ambulance should also be provided for the transport of emergency cases from the village hospital to the urban hospital located at a Tehsil, or District Headquarter, whichever is nearby. The hospital should be manned by a qualified doctor and assisted by a team of dispensers, Laboratory Assistant, Nurse Dai, Dressers and orderlies. More staff should be provided to assist the doctors. It will not be out of place to mention that there should be two doctors to run the hospital. One can work during the day and the other at night and also can go for visit to the adjoining village where he can also supervise the working of Health centre manned by the Nurse Dai and other staff and these people can also rotate their duties after every one or two months, and in case one goes on leave, the other can look after, as it often happens that in case there is only one doctor and if he is sick or goes on leave, the hospital is without a doctor for that time. Sometimes it also happens that he becomes a prisoner, and cannot leave the hospital and in case of emergency, the doctor is not available,

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Then there is a suffering to the patients and and these patients have to seek the advice of quacks.

An indoor ward of 10 beds should also be provided for emergency cases of medical nature and minor surgical operations.

Supply of medicines should also be regular and in abundance because it is a common experience that there is hardly any supply of medicines in village hospitals.

Next in the ladder comes the Tehsil or District Headquarter Hospital which should also be able to cater for a population of 100,000 thousand locally and about 10 village hospitals. It should be manned by full staff of medical personnel and para medical staff.

An additional facility at Tehsil Headquarters of hospitals be manned by doctors holding post Graduate diploma in medicine or surgery, or at least experienced medical officers of 5-10 years standing experience, or Doctors who have done house Job in medicine and surgery in medical institutions recognised by the Pakistan Medical Council.

I need not go into the details of a District Headquarter Hospital which should be an ideal institution not less than any medical college hospital with all the facilities for advanced surgery and full team of specialists in all fields of modern operations and medical facility with full cover for Laboratory investigation.

I would also like to state here that the Specialist in District Headquarter hospital should be assisted by a full team of Registrars and House Physicians and Medical Officers in the O.P.D. because it is a common experience that in case a specialist is busy in some other job, or is on leave, there is no stand by arrangement and the institution gets crippled. The idea in our mind is that there should be more specialists, but in between specialists and other junior doctors there is always a big gap and no stand-by arrangements exist. I will recommend the appointment of Roving Registrars or Medical Officers.

It has been a common practice that the man in need goes to the specialist at his door. The cycle should be in a reverse order in modern socialist society. As

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the sick man had to travel for a long distance on a rehra or gudda and even when he reaches the destination he is not sure to get himself availed of the specialist facility as the specialist may be very busy, or may not be available for other reason, and it is also daily experience that the specialist may not be in the knowledge of the background of sickness of patient, the amount of trouble patients take to reach from a long distance, or due to shortage of beds, he may not be in a position to admit him in the hospital, and that man in need had to lie on the road side and wait for his turn to get advice. Sometimes he may be in next World before his turn comes for admission in the hospital, or even he is being attended by the specialist.

In view of this, I will recommend the following measures :—

1. The Consultant staff should be in a position to visit the rural hospital at a regular interval. The time and place should be adjusted by mutual co-operation, but it should be at least once a week.
2. It should be seen that if the visit cannot be arranged, it should be his Assistant to go and visit in his place (Registrar).
3. Those in need of Specialist care and treatment should be referred by that Consultant to his hospital and make it sure that he is admitted in that hospital.
4. It is best to provide surgery at a Tehsil Headquarter Hospital and the surgeon, or physician should be able to deal with this problem at that place instead of all patients being referred to at District Headquarter as it is both inconvenient to Specialist as well as the patient and his relations.
5. There should be a close liason between the District, Tehsil and village hospital and an Administrative Medical Officer should be in a position to guide them and maintain a close relation between the 3 institutions. He will also be working as a liason between Doctors and the District Council who will be an over all authority for the management of the whole unit.
6. All emergencies at the village and Tehsil Headquarter hospitals should be promptly attended to and they should have no difficulty in transportation, or admission in the hospital where it can be best managed and no time should be lost.

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7. A complete record of all emergencies should be maintained and regular reports should be sent daily to the Administrative Medical Officer so that if there is any difficulty it should be rectified and also help in future guidance and planning.
 8. The Rural Hospital should be considered as part and parcel of the Tehsil or District Headquarter hospital, and should be treated as such on both administrative, preventive and curative aspect.
 - *9. In the end I feel this is possible if our only Aim is "Devotion to the cause of sick Humanity".
-

*Same apply to Laboratory facilities provided at the rural hospital, and it should be a part of the central units of Laboratory operating at District Headquarter Hospital.

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INTERRELATIONSHIP BETWEEN PUBLIC AND PRIVATE HOSPITALS

By

Dr. Ramzan Ali Syed

In this connection I would like to mention first the factors that are responsible for the evaluation of private Hospitals.

1. *Number of patients*

When the number of patients is so much that this cannot be adequately examined and treated by a limited number of Doctors attached to any Public Hospital in a given period, the surplus number of patients has to seek advice and treatment in private Hospital.

2. *Status of patients*

- (a) Poor people for economic reasons have to get treatment from Public Hospital.
- (b) Middle class patients usually attend Public Hospitals but some times for purpose of convenience and prompt relief they prefer to attend private Hospitals.
- (c) Upper class patients expect immediate and preferential treatment which they get in private Hospitals by appointment.

3. Certain traditions among the public that eye operations particularly cataract and glaucoma should only be done at the time of change of seasons, swell the number of patients to such an extent that they cannot be accommodated in any public Hospital and, therefore, they are obliged to seek admission in private hospitals.

4. Surgeons and Physicians who have retired from active service but are still physically fit to perform their duty, would prefer to do their job rather than sit at home and wait for the arrival of eternal peace. They therefore join certain private hospital already existing or endeavour to start their own, if circumstances permit.

5. Some people from business point of view construct private hospitals engaging the services of available Surgeons and Physicians.

6. Some God-fearing philanthropists construct private hospitals for the use of general public. By the name of private hospitals, it should not be construed that they only cater for private cases, they also treat poor people and have wards for them. The private hospital besides the other essential necessities must be fully equipped with upto date surgical appliances and instruments. The staff engaged

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must be experienced and ready to do service at any time the need arises. The primary aim of hospitals is to serve the ailing humanity. It should not be regarded as a forced labour. So the willing and cooperative service of all hands concerned will not only satisfy the needy patients, but it will enhance the reputation of the institution, making it more popular. In reality private hospital is like a new business shop decorated with much glamour as to allure customers accustomed to visit the adjoining busy market centre.

As a complete unit the private hospital must have the services available besides those of Surgeons, of Bacteriologist, Pathologist, Physician, Neurophysician, Orthoptist, X-Ray Specialist, Electro-Mechanical Engineer, and a qualified well staffed chemist shop.

Private Hospital which does not have full term service of these essential extra hands, has to depend upon the personnel of Public Hospital for a part time service if permissible or private consultation whenever needed.

The existence of public and private hospitals together will lead to healthy competition in treating as many patients as possible and what is more important trying to evolve better technique in operative procedure so as to bring out better results with little or none post operative complications. The improved methods of treatment will shorten the hospital stay and post operative convalescence, give better visual recovery and make the patients return to duty early with confidence to earn one's own living. This will also enhance the total number of patients treated. The Surgeons in both hospitals will vie with each other in their dealing with the patients so as to improve upon the ultimate end result of operative or non-operative treatment.

This competitive working of the staff of public and private Hospitals will provide ample opportunity of clinical meetings, where important cases will be discussed, diagnosis corrected or affirmed, line of treatment modified etc. The enthusiastic workers will be prompted to read papers on important subjects, clinical observation on merits or demerits of particular operative technique, pitfalls and how to avoid or rectify them. Such a Scientific Society will encourage youngsters to take up research problems.

The main hurdle in the research work in Pakistan is excessive over work of Surgeons and Physicians who are left with no time to think of research. This can be rectified if there are many private Nursing homes or Hospital so as to take away the load from the public hospital and give the Surgeons ample time to plan and carry out research problem. It is evident therefore that simultaneous working of public and private Hospitals will prove very beneficial to the progress of medical science, prove better training facilities to the undergraduate and post-graduate students, ensure ever increasing number of jobs where the qualified post-graduates can be fixed and last but not the least new and better methods of treatment are developed and practiced.

It is the age of specialization. So much advancement has occurred in the different parts of medicine and surgery, that these parts have to be separated from the main body. Each speciality is to have one or several institutions of its kind to practice newly developed operative technique and to make research for still better and more effective measures of controlling these diseases. The rivalry among these hospitals public or private shall have very healthy and encouraging influence on the progress of medical science.

GENERAL PRACTITIONER AND THE HOSPITAL

By

*Dr. Safdar Bokhari.**

All over the world the greatest burden of offering Medical care falls on the Private Medical Profession who offer their services on direct payment basis.

Various other categories of healers also give private medical care. In 1969, the Planning Commission of the Government of Pakistan requested the Public Health Association of Pakistan to conduct a research on the "system of Local Health Services and planned administrative and technical support", and in a sample population it was assessed that the following healers were engaged in giving Medical Care to the community :—

Qualified Doctors,
Nurses,
Health Visitors,
Trained Dais,
Dispensers,
Homeopaths,
Hakims,
Faith healers and others.

Keeping the discussion in logical bounds, it is essential to establish that only qualified doctors be accepted as the General Practitioners (GPs.) A GP usually assumes the status of a family doctor who is acquainted with the background and personal problems of his patient—he is the person best equipped to give advice on all the health and various ecological problems.

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He is interested in his clients and they have got faith in his competence. Employing his knowledge and skill, his cure rate approximately touches 80 to 95%, which appears to be quite satisfactory.

In the field of Social Medicine, he is successful in averting many family disasters, he stops many diseases to become effective, he soothes the frustrated ones and takes them out of the jaws of suicide. He normalizes a backward student by assessing his physical or mental shortcomings. In fact he is the best person to advise on a planned family pattern.

He is a healer, a soother, a benovent, affectionate and trustworthy gentleman of the community.

But inspite of all these qualities and sincere efforts, frequently he is compelled to seek the help of a Hospital for the evaluation, treatment and advice in respect of his complicated or seriously ill or injured patients.

At present, our hospitals are totally disregardful of the respectful existance of a GP—the same GP who deserve to be called the strong and the “Long-Arm of the Medical profession”.

Principally, a case referred or recommended by a GP should be given priority in providing consultation and advice to the hospital but in our hospitals such practice is as yet seldom observed.

To a very great extent, the contributing factor causing difficulties in the Performance of hospitals to be ideal institutions are too small bed strength, understaffed departments, lack of proper equipments, paucity of para-medical and auxiliary staff and non-availability of modern medicines.

Hospitals are of vital necessity to the community. To the hospital, the community entrusts its newborn, its sick and its aged. To the community the hospital should offer compassion, devotion and skill.

From the hospital the community expects healing, guidance and care. From the community, the hospital deserves support, understanding, and trust.

Hospital must earn status of a place of hope and cure where wonders are done, dim-minds lighted, sick persons cured, and broken bones mended.

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The working spirit of a hospital must be of reverence, of dedication and care and above all should project attitude of selflessness and affection.

A GP expects a hospital to be a health care centre of the community sometimes replacing his office as such, because here is concentrated the constellation of specially trained personnel and specially designed facilities that he requires to give his patients for the benefits of modern medicine.

Routinely today, the GP needs a series of Laboratory tests for his patients, that usually can not be done anywhere else.

In the Hospitals, the patients can have the benefit of a galaxy of medical skills if his own GP needs to avail himself of this in the process of routine diagnosis and treatment.

Hospital should serve both as a community health resource and a community health centre.

It is regarded as the community health centre by the public, the medical profession, and other organizations interested in health care. The public will come to regard the hospital as the health-care centre of the community because medical treatment can be obtained at any hour of the day or night.

Whether it be a child who has suffered an injury an elderly person who has had an acute attack of some sort, or a woman who is about to give birth—all can receive medical care by going to the Hospital.

Hospitals must also be converted into immunization stations thus convincing the public to expect this as the logical place to go for advice and assistance in public-health matters. Thus, a grateful public would think of the hospital when it thinks of sickness and health.

Finally, the public, through experience would learn that all the marvels of medical science are concentrated in the hospital.

Therefore, the GP would convert this community to turn to the hospital when he requires superior skills and facilities of modern medicine.

For the community, the hospital should serve the purpose of a school—a specialized school, to be sure, since the curriculum pertains only to health. To this

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school, an expectant mother and her husband may go for prenatal instructions to help them have a healthy baby and to guide them in raising a happy family.

To this school may go other members of the community, such as firemen and policemen, to learn how to cope with the injuries that persons may suffer in a fire, an explosion, or a wreck.

The Hospital, therefore, must view itself as the major, but not the sole, element of a spectrum of health-care institutions all devoted to the same end, to give the patient the proper care and the proper facility at the proper time.

The vital link between the community and the hospital is the GP since it is he who assesses the patient's medical condition and it is he who directs the efforts to improve the condition.

It is the GP alone who has the knowledge, competence and experience properly to employ the complex diagnostic and therapeutic facilities and services of the hospital for utmost benefit to the patient. It is the GP who must determine the need of consultation from specialist and make efforts to fully utilize the superior hospital facilities in his effort, to restore the patients health.



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SOCIOLOGY OF MEDICAL CARE*

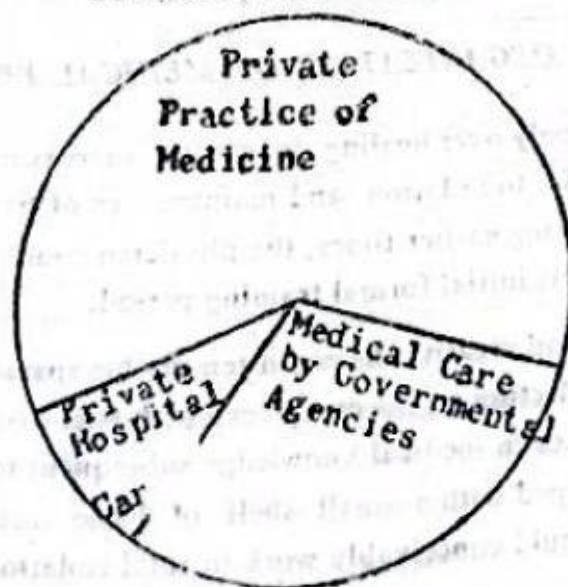
By

Professor Mrs. A.K. Awan: Ph. D.**

1. INTRODUCTION

In a modern community many health services are provided by private practitioners and health agencies, both voluntary and governmental. It is within the environment of the community that disease processes undergo their natural history and man makes efforts to deal with them. The community has structure and organization of varying complexity, which show relationship with health problems and type of organization for medical and health care. Private practitioners do a great deal of health work. When situations become so complicated that individual doctor cannot cope with them unaided, there must be some kind of organized community action, i.e., hospitalized care etc. Various health services fit together to build a team which is prepared to make modern health knowledge available to people in a manner that most effective results can be produced. The coordination between the above two sectors of medical care is a primary function of the health department leadership.

Practice of Medical Care



*The Paper was presented at the Provincial Health Conference on Hospital Planning, Designing and Management, held on 22nd to 25th April, 1971, at L. M. C. Hall, Lahore, (Pakistan)

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2. DOCTOR, HIS BUSINESS AND BASIC NEEDS

When a doctor wants to start his work, like any other businessman, he wants to know a great deal about the place where he will work, live, and raise his family. The doctor will require scientific facilities for diagnosis, treatment and care. He and his wife will want a safely constructed respectable home, a pleasant neighbourhood, pure water, proper sewage and waste disposal facilities, and other basic amenities of life. A safe food and milk supply will be essential. Their children would need good schools. The family will like to have adequate recreational facilities in the neighbourhood or at an easy distance.

Doctors' job today differs from that of his predecessors. Urbanization and industrialization put new demands on him. Medical care has become more complex and supplying it has become a teamwork job. Society has carried the concept of individual worth and of social welfare far beyond what it was a few years ago, and doctor is affected by these newer social philosophies.

Physician, today, has become virtually a symbol of healing to people in all social classes and is gradually pushing out the practitioner of folk medicine. Because medicine is practiced in privacy and because physician usually offers personal services to individuals, it is often considered a simple "practitioner-client" relationship.¹ But it is much more than that. Medicine today is practised in an organized framework, which influences both doctor and patient.

3. THE ORGANIZATION OF MEDICAL PRACTICE

Physician's monopoly over healing is getting increasingly established and is justified by his scientific foundation and maintenance of basic standards during his prolonged training. During earlier times, the physician could learn most of what he needed to know during his initial formal training period.

...if he was wise and creative, he could temper his sparse formal education by continually reflecting on his experience with past cases. Furthermore, significant advances in medical knowledge subsequent to formal training were few. Equipped with a small shelf of basic technical books, the early physician could conceivably work in total isolation as efficiently as

1. Robert N. Wilson, "Patient-Practitioner Relationship," in H.E. Freeman, S. Levine, L.G. Reeder (eds.), *Handbook of Medical Sociology*, Englewood Cliffs, N.J.; Prentice-Hall, Inc., 1965, pp. 273-295.

the knowledge of his age would permit. By and large, he could handle as well as the next man any ailment that presented itself to him.²

Today, medicine has greatly advanced. The development of medical science has led to training of specialists, who have seized fragments of the domain of general practitioners. In addition newer diagnostic and therapeutic tools, required by doctors for efficient professional work, are too expensive for any individual to own and use at his own convenience and too complex for him to operate even if he could afford them. The hospital, therefore, has come to serve as a locus for such capital equipment, and specialists such as radiologists, and clinical pathologists have become essential personnel in treatment centres. The physician has come to depend upon the hospital and upon the new specialists for access to the new medical technologies.

Clearly, with the rise of modern medicine it became difficult to practice alone and what is more, positively unrealistic to attempt to handle the whole range of human ills.³

In "solo practice," which is the typical mode of practice in the Punjab, a doctor works on a fee-for-service basis, has professional autonomy and has no longterm obligation to his clients.⁴ This arrangement is inherently unstable. In a system for free competition he may neither count on the loyalty of his patients (with whom he has no contact) nor on that of his colleagues (with whom he has no ties and who are competing with him). He is not likely to solicit advice or trade information from his competitor colleagues and he certainly cannot refer his patients to them for consultation (for fear of his patients being snatched or attracted away).⁵ He works in isolation without any assistance or control by his colleagues. He is very vulnerable to control by his clients. To keep them, he must give them all what they want or someone else will attract them away by doing so. All alone he cannot offer patients what they desire under the affect of modern communication media. Conscientious

2. Elliot Freidson, "The Organization of Medical Practice," in Freeman, Levine and Reeder, *op. cit.*, p. 301.

3. *Ibid.*, p. 301.

4. This involves a man working by himself in an office which he secures and equips with his own capital and with patients who have freely chosen him as their personal physician and for whom he assumes responsibility. He thus lacks formal connection with his colleagues.

5. D. Reitzes, *Negroes and Medicine*, Cambridge: Harvard University Press, 1958.

practice under these conditions is difficult and frustrating,⁶ except when the supply of physicians is sufficiently restricted to fail to meet the demand, thus enabling the physician to get away while working as a "lone-ranger" and escape from control exerted by clients. In the Punjab today, the supply of physicians in many areas is so limited that client control can be at present avoided, but developments in medicine result in increasing competition and control by colleagues. Furthermore, doctor is human and needs off-duty periods. In order to take an evening or a week-end off or a vacation, or in order to be sick, one's practice must be "covered" by colleagues who can be relied on to avoid "stealing" patients. For the above purpose, as well as to benefit the patient fully with advanced specialized medical knowledge, one needs assistance of one's colleagues and a cooperative arrangement becomes necessary. A rather natural and conventional arrangement is to work out a fairly definite reciprocal arrangement.

The general practitioner habitually refers his Patients to a limited number of specialists who may be trusted to act "ethically" by eventually returning his patients to him, and who, in turn, will refer patients needing general services to him.⁷

The time appears to be passing in the Punjab when the general practitioner was in a strong enough position to be the key "feeder" to a network of specialists. As the patient has developed more sophistication and the number of available specialists has increased the patient circumvents the general practitioner and seeks out his own specialists.

Well integrated arrangements, with clear communication channels, appear to be indicated in the medical practice of today. This may take the form of group-practice or bureaucratic practice.

In group practice physicians have cooperative arrangement wherein they share expenses for maintaining common facilities as offices, equipment, assisting personnel etc. and work on fee-for service basis, either pre-paid or post-service-paid. This kind of cooperation brings financial security as expenses are shared, leads to fixed clientele as referral is within the group, and patients benefit because of pooled specialised facilities.

6. F.L. Pleadwell, "Samuel Sorbiero and his Advice to a Young Physician," *Bulletin of the History of Medicine*, Vol. 24 (May-June, 1950), pp. 255-287.

7. Freidson, *op. cit.*, p. 304.

In bureaucratic practice an agency, governmental, semi-governmental or private, takes over the responsibility for providing medical care on fee-for-service basis. Cooperative practice, here, is of large scale in character and offers greater specialized-care advantages. The physicians are employed who work on salary or share basis. The administrative wing of the hospital frees the physicians from housekeeping and administrative responsibilities. Thus, in this arrangement, a third party is brought into play besides the physicians and the clients. A greater control of medical practice becomes possible. This restriction on physician's practices does not appear to interfere with his professional freedom.⁸

There is widespread agreement that a physician cannot practice the best possible medicine without easy access to modern diagnostic and therapeutic facilities. Solo practitioner lacks such facilities and therefore cannot do his best for his patients. Group practice and bureaucratic practice contain conditions that encourage a much higher quality of medical care.⁹ Cooperative practice facilities result in frequent consultation and exchange of professional information. Supervision is possible in such enterprises which further helps in toning up the quality of professional work.

Patient satisfaction is vital in medical care specially when medicine becomes a political issue. In spite of the present universality of solo practice, large proportion of population cite grounds of dissatisfaction. They complain that doctors are not easily available specially on week-ends and during nights. They also complain that doctors do not give enough time or possess the required modern medical knowledge needed by clients.¹⁰ They also complain that they are made to go on a round of consulting many doctors at different places and thus a lot of time is wasted and patients suffer unnecessarily.

Emotional satisfaction on the part of the patient seems more likely to be gained from a physician who is in a position to be more easily responsive to the

8. Harry Eckstein, *The English Health Services*, Cambridge: Harvard University Press, 1958. Also see S. Taylur, *Good General Practice*, London: Oxford University Press, 1954.

9. O.L. Peterson, et al., "An Analytical Study of North Carolina General Practice, 1953-54," *The Journal of Medical Education*, Vol. 31 (December, 1956), Part 2.

10. Ben Gaffin Associates, "What Americans Think of Medical Profession," *American Medical Association Brochure*, n. d. Also see E. L. Koos, *The Health of Regionville*, New York: Columbia University Press, 1954.

patient. Research findings show that solo fee-for-service programme elicits more patient satisfaction than the bureaucratic or group practice. Patients of the latter group are prone to complain of lack of personal interest, insufficient explanation of their condition by the doctor, waiting in the office and difficulty in getting house-calls. Of course there is evidence that people also feel that medical care of a technically higher quality could be obtained from the cooperative effort of a medical group.¹¹

Physician's satisfaction may also be more influenced by the arrangement of work rather than arrangement of payment, provided payment is adequate.

11. O.W. Anderson and P.B. Sheatsley, "Comprehensive Medical Insurance" *Health Information Foundation Research Series*, No. 9, 1959, July, 1971 : Vol. XXI (2)

TYPES OF HOSPITALS AND POPULATIONS THEY SERVE

By

*Dr. Major G.N. Bajwa**

SJ., PHS (I) ;

The title of my talk 2 Types of Hospitals and the population they serve has, to put it mildly, a very broad meaning and if it is felt that I am wandering away from the topic under discussion the fault is partly at least of the heading.

There has been a recent increase of interest in the study of problems of medical care in the country. There is great need for such study and this conference is a manifestation of the interest and a step towards fulfilment of the need. There is also need for systematic discussion in order to sort out priorities among the many problems calling for investigation.

We have travelled far in providing public medical care services, but little has been done in the way of careful study of needs before planning. Trends in the provision of medical care were dictated by rising standards of living and developments in the field of medicine. Development took the form of piecemeal planning in response to pressure groups and unorganized public demand. Public demand itself was insufficient to ensure growth where need was greatest for demand sometimes could not reveal itself in the absence of services to supply its needs. Services were developed to deal with problems which were considered serious. There was no obvious necessity at the time to measure carefully the extent of the problems or the effects upon it of the service, any thing was better than nothing.

The result is that we have all sizes and shapes of hospitals spread over the country. The hospital, however, makes only a small portion of the medical care programmes. Hospital, however, inevitably attracts more attention than other sectors

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Types of Hospitals and Populations They Serve

of medical care, because of its important role in the health programme and it being the physically most felt portion of the health services. The hospital exists for the community who entrust its sick to it. The hospital offers compassion, devotion and skill. The community seeks healing, guidance and care. The hospital seeks support, understanding and trust. The public feels that in the hospitals, there is delay in attention, gross overcrowding, rapid and perfunctory examination and prescribing and a general lack of privacy and proper consideration for the comfort of the patients. In words of one complainant "Nothing can be worse than the necessity of despatching patients at railroad speed.

As far as I know the concept of hospital as we have it today is new in our country and is imported from West. I have not come across any building of old hospital in this part of the country. We have thus no historical background of our own hospitals or organised health care system. The State, however, accepted the responsibility to provide medical care many years ago with the result that the public became entirely dependent for their medical care on Government institutions. This, however, was not the case with the countries from where we have borrowed this system. Hospitals have developed gradually into what they are now.

There are interesting facts in the history of development of hospitals.

Outpatient medical care is said to have existed in remote ages in Mesopotamia where the sick were brought to the market in the mornings. The shoppers were obliged to speak to them. They would tell the patients about the medicines, they had personally used or heard of having been used on some one else for the type of disease the patient was suffering from. It was considered to be very callous to leave without speaking to the sick.

The need for hospital medical care in the United Kingdom was realised fairly early. It originated for the provision of medical care to the poor sick. The outpatient departments were reported to have become burdensome in the journals of St. Bartholomew's hospital for the year 1678. It was laid down that not more than eight patients were to be entertained per day. There was one more hospital in United Kingdom at that time—St. Thomas but it did not accept outpatients. Guy's hospital which was built latter was meant for the chronic sick. It is interesting to mention here that while the hospital staff feels itself responsible only to treat the acute

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illness or acute episode of a chronic illness the population feels that the hospital should provide all types of care *i.e.* to the chronic and infirm as well.

Hospitals meant for acute diseases are expensive to maintain while those for chronic disease can be run at relatively lower cost because less staff and medicines are required. It is thus poor use of a bed in an acute disease hospital if it is kept occupied by an old person with general Debility for which little medical or nursing is required.

To continue again with the historical background of development of hospitals, many of our colleagues who have received training abroad have seen the Royal Edinburgh Infirmary. This was the first hospital to be started, in Scotland and opened in 1729 in an area of the city called Cowgate. It started with six beds only. In the first year of its existence, thirty five patients were treated. It was mentioned in the first report that, besides, these thirty five patients, several outpatients were attended by the Physician and Surgeon who also gave their advice daily to all sick who came to the infirmary at the hours of visiting. Westminster Public Infirmary came into being in 1720. To begin with a small house was hired. There was accommodation for few inpatients only and the remainder were treated as outpatients in the hospital or the doctors visited the patients home to provide medical care.

All these hospitals were voluntary hospitals with trustees and governing bodies. Their rules of business sound strange these days. A person subscribing three guineas a year was a trustee of the charity. Each trustee could recommend only one outpatient and one inpatient at a time with a total allowance of two inpatients and four outpatients in one year. This quota system allowed the hospital to control the number of patients coming to it for treatment. Moreover the hospital could refuse to accept the patients that had been recommended. The rules specifically excluded, for example, persons with venereal diseases or who were disordered in their senses or who were judged to be consumptive or asthmatic or in a dying condition. Pregnant women were excluded and even children under seven years of age, unless they had met with an accident or urgently needed to be cut for the stone.

These rules were revised in the beginning of the nineteenth century. It was first done in the New Castle-upon-Tyre Infirmary where medical staff were allowed complete freedom to decide as to which patient should be treated as outpatient and which should be admitted.

Hospital gradually became popular centres for the provision of medical care and they started feeling the inconveniences of overcrowding. There were very few hospitals and efforts were made to remove the load on them by diverting the patients to dispensaries of which many came into being after amendments in the poor law. Another step for controlling the numbers was the appointment of almoners who would make searching inquiries into each intending patient's ability to pay for treatment somewhere else. Consultants also set a limit to the number of patients they would see during a session.

On the one hand the increasing popularity of hospitals as centres of treatment was causing anxiety to the hospitals and they were trying to find measure to cut down the numbers, another section of the population, namely the general practitioners were also worried on this account because the popularity of hospitals detracted the patients from them and thus caused them financial loss. The "Lancet" thought the conditions in the outpatients Department of hospitals were not attractive enough to detract patients by any means from the general practitioners. The British Medical Association campaigned to have the outpatient care by hospitals restricted to patients whose general practitioners had directly sent them to the department for consultation. This demand of the Medical Association was accepted by the hospitals since it served their purpose as well. The consultative cases and those requiring specialized treatment started forming an increasingly large part of the outpatient load. The normal sequence of patient flow through the hospital became from an outpatient consultation to inpatient admission, followed by outpatient follow-up. The general practitioners and the hospital based consultants started exchanging detailed information about the patients.

Another development was taking place simultaneously. It was the system of seeing patients soon after they had been called to the hospital instead of throwing the doors open at a certain hour to all who could get in and then seeing them. This method now known as appointment system came into being for various reasons. One of the interesting ones was that there was not a big enough place for all patients who had assembled to take shelter from air-raid during the war, so appointment system was introduced to stagger the number of persons collecting at any given time. In some places, the waiting space was inadequate for the long queue.

I have dealt at some length on the historical development of hospitals and their methods of working at various times and feel this is our way of describing the types of hospitals and their work during their evolution.

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I feel there are many similarities in our hospitals of today and those of England some 300 years ago. There are many lessons for us in the process of development which we could gainfully make use of.

It has been mentioned above that the hospitals were few and far between and those that did exist were of a very small size. The situation is now much changed. What are the reasons that have led to the increase in the number of hospital beds and how do we calculate the demand for additional beds for a given population. Having decided to build a hospital in an area how do we control the quality of work in it. What influence does the population have on a hospital? The citizen is concerned in three ways with the hospital. He is the consumer of the service the hospital has been constructed to provide. He is the Tax-Payer from whose money the hospital has been constructed. He is also in a way in charge of the working of the hospital through his elected representatives who lay down laws and rules for the working of hospitals. Hospitals and the Health Department is very frequently the target of criticism these days. We have shortcomings but much of the criticism is generated because of the gap between the supply and demand. It is our duty to advise the Government on the scale of provision required to meet the increasing demand of medical care for the public. How can we lay down such formulas. Investigation should be set up to find out answers. The methods to be adopted will depend on whether we have a completely new population to be served such as might arise with a new town, whether we are dealing with new development or extensions in an existing area, or whether we are trying to meet the demand over a large geographical area like the province or the country.

The usual approach to the problem is to calculate the number of beds required in any speciality or group of specialities by multiplying the population supposed to be served by the number of beds per head of population thought to be appropriate. If the appropriate figure is one bed per thousands and the population of the area is 300,000 we will need 300 beds. The difficulty is to find the appropriate or desirable number of beds required per head of population and also to accurately define the catchment area i.e. population to be served by a hospital.

Both these figures are continuously changing. The number of beds required for accidents today may be grossly insufficient in the next few years. The number of beds required for treatment of cancer is now much more than it was a few years ago. In some countries the beds used for Tuberculosis are lying vacant since many years. Psychiatric beds are getting in short supply.

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Similarly the catchment area of a hospital is variable and indefinable. It varies with individual specialities. For example, probably all cases of accidents and sepsis in Lahore go to Mayo Hospital but such cases from Lyallpur do not come to Lahore. All cases in need of Surgery even from Multan and Peshawar will come to Lahore.

Public demands and expects satisfactory service from the hospitals. The hospitals can function properly after their difficulties have been removed. We should place our problems with proper replies before the Government.

**ORGANIZATION AND DIRECTION OF HOSPITALS,
ANALYSIS OF HOSPITAL ORGANIZATION, GOVERNMENT
GOVERNING BOARDS, STAFF COMMITTEE AND ITS CHAIRMAN,
THE ADMINISTRATIVE AND TECHNICAL SERVICES**

By

Lt Col. K.A. Rashid*

P.S.C., Parmo.

M.B.B.S., M.R.C.P., M.I.H.P., F.C.C.P.

It must be appreciated at the out set that the Administrator is a practical thinker and does not build castles in the air. He does not deal with deal files, but with living beings, who are emotionally adjusted variously. The administrator has to deal with a patients, the personnel, the public, the police, the press, the public prosecutor; last but not the least, the P.W.D. The dealing with these categories at the Secretariat level is on a different basis. It is something like dealing with dead files, where problems are passed on from hand to hand without reaching decisions. Therefore, the responsibilities of an Administrator in organizing a hospital and its various Departments are a matter of practical endeavour, which has to be demonstrated. As I speak from my personal experience and not from books, therefore, many of you are likely to disagree with me. Administration, gentlemen, is an art which I have said has to be practically demonstrated and illustrated. This cannot be learnt from books. Therefore, to solve administrative problems by bookish knowledge seems to me to be rather unrealistic. It is the personality and the integrity of the Administrator, who by his initiative, guts and go head qualities is able to produce results. No amount of committee meetings, advisory bodies or councils can replace a true Administrator. The values of committee however, is not denied, but where actual work is concerned in this country such committees have shown no results. Meetings have proved to be social gatherings, where people give vent to their respective emotions, and end up without decisions. Wherever work is going on, it is due to the efforts of a single man, who frequently shakes off the lethargy of such committees. An Administrator can replace committees and councils, but committees and councils, cannot do away with an Administrator.

Academic councils are an essential part of the teaching organization. They lay down the teaching, and the examinations procedures. They are unavoidable, but other organization like Hospital Committees and Councils are non-essential.

*Medical Superintendent, Mayo Hospital, Lahore.

Organizing and directing the hospital affairs in our country is much different from what we see in the West. The main difficulty arises in man management. Indiscipline is rampant in our people both who seek hospital services, and others who serve. There is no punctuality, there is no integrity and there is no concept of devotedness and self-sacrifice.

The normal organization of a hospital is its essential administrative departments, such as the Stores, the Kitchen, the Workshop, the Laundry and the Laboratory which synchronise their work. It is the function of the Administrator to see that they are well stocked and well organized, so that essential services do not break down. It is at the same time the duty of the Government to see that the hospital is not overloaded with patients. The public must be allowed opportunities for a fairly large number of admissions for which hospital should be enlarged, either by public contributions or by Government subsidiary. They should not be committed to work where there is no provision in the budget for such an overload on the establishment. To keep a hospital over-loaded without proper funds and establishment would be asking for trouble. This cannot be done, it is asking for the impossible.

In so far as the technical services are concerned, my experience shows that hospitals are neglected of technical hands. They are either deficient or unqualified. Para-medical staff qualified in Government Institutions are being employed by non-medical organisation, purely due to better prospects in life. It is time that better terms were formulated to absorb these technicians into hospitals thus putting their services into better use. The lack of proper qualified technicians is one of the reasons of lack of initiative in medical research in our hospitals.

In addition to the Departments mentioned above, a hospital may have other sectors as its specialities go on developing. Such Departments are an Orthopaedic Workshop, a school of Physiotherapy, a School or College of Nursing, Radio-Isotopes etc. These Departments go on enlarging as the needs of the public are realised and funds become available. This is all in addition to the normal clinical departments which are necessary for catering to the needs of the patients. Even this can be further developed according to needs and the availability of funds. A medical record section is very essential. Without this no research on any medical subject is possible. Laboratories have to be modernised and computerized. One can thus go on adding to the organizations. The more it becomes complex the more intricate becomes its administration.

PRIVATE PRACTICE BY FULL TIME AND PART TIME STAFF OF THE HOSPITAL

By

*Dr. M. Alamgir Khan**

F.R.C.P.,

In a young country like Pakistan, where constructive planning is the essence of development, haphazard and ill conceived schemes herald confusion, chaos and frustration. Ideal planning necessitates a judicious assessment of the needs and the means with the purpose of achieving an initial best possible compromise between them but with schemes to enhance the means in a step-ladder fashion. Our needs have no horizon but our means are extremely limited. There is an appalling paucity of adequate medical cover—one general doctor to 7,000 population instead of the desired ratio of 1 to 1000. The experienced consultants are so few that they can be counted on finger tips and are available only in the medical teaching institutions. Hospitals are sparse, very much under-staffed, ill equipped, poorly financed and the number of beds bears no proportion to the population of the draining area. For instance, Mayo Hospital originally built for 2 lakhs of population of Lahore is now catering for the needs of 22 lakhs of people of Lahore, in addition to the complicated patients from all over West Pakistan. The budgetary provision of Mayo Hospital hardly lasts for the first 3 months. Therefore, the patients, on frequent occasions, have to buy even cotton wool for their operations. The drugs are very expensive, because some drug companies make over 30% profit on them and go unchallenged. For hospitals, substandard drugs are supplied as these are accepted by the purchasing authority because of their low rates. The budgetary provision for Health in Pakistan is about the lowest in the world, about 2%.

Certain facts emerge from these considerations and they should be widely known to the Government, the public and the medical profession :—

1. At this stage of our development, we cannot have ideal conditions either in the medical cover or the emoluments of the doctors. Therefore, com-

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comparisons with advanced countries are not possible. It is true that a consultant of the standard of a Professor of a Medical College here, is paid equivalent to about Rs. 1260/-per month in England and it is also true that no patient is refused a hospital bed in that country but what needs to be considered is the time taken by U.K. to attain these standards.

2. It is not at all possible for the Government to provide free treatment to the public. Every one, except the very destitute must share the expenses of his treatment even in a Government Hospital. This is true for diet as well. We are not in a position to have fully dieted hospitals. The treatment and diet can be subsidized, but should not be completely free.
3. The present number of doctors and consultants cannot possibly meet the heavy demands on them unless they spend extra time.

Only the poor or the lower middle class should be looked after in the hospital out-patients' Departments. Those who can afford should not grudge paying consultation fees to the doctor of their choice outside the working hours of hospitals, when he spends extra time and labour at the expense of his rest, relaxation, hobbies, social engagements, family life and above all his health. This he will do only if there is a monetary incentive which is the best incentive for extra work in any sphere of life and doctors are no exception.

I am not at all in favour of Institutional practice, because this means forced labour camps of the doctors where they give share to the Government out of the earnings of their extra time and labour. Not only it will cost lot of extra expense to the Government for proper secretarial and ancillary staff, equipment and buildings but it will also be just the right culture medium for public complaints, as these so called private clinics will be run by the Government—always the target of criticism by the public. It will also break the subtle private patient and doctor relationship. It will definitely be detriment to the interest of patients coming from far and wide and seeking consultations without appointment and quite often at odd hours. It also stops all emergency consultations that many times general practitioners, per circumstances, seek from the consultants at the residence of the patients.

Doctors are the cream of the products of the Universities. They work really very hard and keep on burning the midnight oil all through their lives to keep themselves abreast with the galloping advances in Medicine. A doctor takes on an average

twenty to thirty years to become a matured consultant i.e. a Professor in a teaching institution and no where in the world so much work in the outpatients' departments, wards, teaching rounds and lectures is put in by a consultant as in our hospitals. Their present pay is far below the pay of even a part time consultant. Even the basic needs of his official duties like a peon, a steno, stationary and a proper office are denied to him. We know that, at present, it is not possible for the Government to remunerate him adequately but at the same time we do not expect an undue interference in the use of his extra time for private practice which is one of his service conditions and which has always been given as the argument for his lower grade of pay.

It is pertinent to remark that this restriction of private practice is a step in which there is no beneficiary. There is no constructive motive behind it. Repeatedly it is ascribed to jealousy. As a matter of fact, it is definitely detrimental to the public interest. A certain section of the public which is being catered for, will be deprived of this facility. A patient wants a consultation from a particular consultant. If he cannot have his services at his private clinic, he will join que in his out-patient sessions, will crowd it further and most likely, because his influence, will deprive a poor patient of his chance of seeing the consultant as the time is limited. It will also undo the influence of the consultant with the Philanthropists, which he uses in many beneficiary schemes for the poor patients. For instance I personally have a ward fund of about Rs. 10,000/- out of which we supply medicines etc., to the poor patients who cannot afford and the hospital cannot supply. Even cash for fare etc is given to the poor patients. At Multan, I was instrumental in getting the Ismail Anti T.B. Trust with a capital of 12 lakhs of Rupees, started. Under its auspices, one T.B. Clinic is still functioning there. Many other consultants have done much more than this.

It is wrong to say that medical education is suffering on account of private practice, because our doctors are in heavy demand in all the advanced countries in the world. Moreover, there is a general decline in the standards of education in our Universities although their teachers have no private practice.

I feel that the sphere where definite organization is needed is that of Research which is absolutely vital for any country if it wants to exist in this scientific era. Research is an attitude of mind and cannot be forced on any one. The teachers of basic departments in medical institutions and of scientific subjects in the Universities are non-practising but their output of research is in no way better. The reasons are

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different. A worker loses all impetus for research in the face of poor facilities, inadequate equipment and funds, bankrupt libraries and non-existent recording system. I am of the considered opinion that a Research Cell should be organized in each medical teaching institution headed by a full time willing worker with adequate facilities at his disposal. This should be a non-practising job carrying a monthly pay of at least Rs. 5000/-. He should organize the Department not only himself but also for other members of the staff who may like to make use of facilities available there. At present, only two such jobs will be required for Panjab, one here and one at Multan. I am sure that the Finance Department can afford this but let this be a well planned experiment, not like the Pakistan Medical Research Council Organization in Lahore who neither have a building, nor adequate equipment and not even enough reagents. They do not have any out-patient or inpatient facilities. If properly organized, this will be a really constructive step conducive to far reaching and nation-building effects.

MEDICAL CARE OF SECURED PERSONNEL IN INDUSTRY

By

Mian Asghar Ali, TQA

In a social security programme, medical care is regarded as its most fundamental branch. Indeed, the most delicate and perplexing problems in the whole field of social security are those that arise in connection with medical care. The basic principle on which the Government has taken over responsibility of providing comprehensive medical cover to the workers in the industrial sector revolves round the following four fundamental assumptions :—

(a) It is a matter of common experience that men, whatever be their economic and social status in life, are exposed to certain risks and contingencies, the frequencies and intensities of which may vary according to a number of factors. This is the first basic assumption. For if there were no risks to be encountered or if it were within the power of men to foresee and avoid all possible contingencies as individuals, the need for medical cover under a social security system would not have been felt so keenly as in the recent times.

(b) The second basic assumption is that, whereas persons belonging to higher income groups are able to save enough to meet the possibility of any risks and are otherwise in a better position to fend for themselves, those belonging to lower income brackets tend to ignore savings either because savings are not possible on account of low wages or because there are other compelling needs which claim priorities over savings. Since they fail to accumulate sufficient reserves to meet possible contingencies—which are more frequent in their cases than in the case of well-to-do people—it is not uncommon to find that they and their dependents are often reduced to a state of extreme privation and misery.

(c) The third assumption is that the existence of such persons in distress, whose number is constantly on the increase in industrial and urban societies, is not

*Commissioner, ESSI.

only an undesirable trend on normal grounds, but also threatens the very stability of the society. It is no doubt true that poor and destitute persons were to be found in old and traditional societies as well, but partly because of the greater stability of those societies and partly due to the existence of mutual support and interdependence, they could afford to neglect or tolerate such persons without serious consequences. The industrial and urban societies on the other hand are comparatively unstable and there is high incidence of risks while at the same time, due to the weakening of family ties and declining influence of religion, men are finding themselves increasingly isolated. In such conditions it is imperative that the state should come to the rescue of those who are in need of help and take over the responsibility from individuals and family groups.

(d) The fourth assumption is that help and assistance given to such persons should not, as far as possible, assume the form of charity which is often degrading to the dignity of man, and may lead to indolence and other vices, but should be so organized as to give a feeling of participation to the beneficiaries. To ensure this, social security system is generally financed by contributions from the beneficiaries to which is added the contribution from employers and in some cases from the State. The fund thus created becomes a pool from which the insured person can draw according to his entitlements under the rules.

The medical benefit being the corner stone of the Employees' Social Security Scheme, every care has been taken to see that it is made available to the insured person and his dependents in the best form. The standard of medical care being provided to the secured persons consists of :—

- (i) outdoor treatment ;
- (ii) provision of necessary drugs and dressings ;
- (iii) pathological examinations and X-Ray tests ;
- (iv) domiciliary visits ;
- (v) ambulance service ;
- (vi) in-patient treatment ;
- (vii) specialist care ;
- (viii) ante-natal care, confinement and post-natal care for pregnant women employees (secured persons) ; and

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(ix) emergency treatment in case of accidents, etc.

The measures undertaken by the Institution during the last four years are given below :—

1966-67

The social security scheme was originally started in March, 1967 in Karachi, Landhi, Hyderabad and Lyallpur and in order to provide medical care to the secured persons four whole time and fully equipped dispensaries were established. Additional arrangements were made with Government and private hospitals for treatment of serious injuries and emergency cases referred by the Medical Officers of these dispensaries. It was later decided to enlarge some of the existing dispensaries and these were named as Injury Treatment Centres-cum-Dispensaries. Except for major surgery and chronic diseases other cases were treated at these dispensaries which started functioning round the clock. Twelve more dispensaries were established in addition to the four ITCs by the end of May, 1967 in the four local areas as under :

I.T.Cs.		Dispensaries
Karachi.	1	4
Landhi.	1	3
Hyderabad.	1	1
Lyallpur.	1	4

The Institution commenced giving regular medical care to the secured persons from 1st June, 1967 and by this time all these dispensaries had been fully equipped and staffed to provide out-patient treatment. In each area a panel of Specialists was appointed to treat serious and complicated cases. The Institution purchased 4 ambulances, one for each local area. With the extension of the scheme to Multan, Rawalpindi and Peshawar, 7 more dispensaries were established in these areas, 3 in Peshawar, 2 in Rawalpindi and 2 in Multan. Two more dispensaries were opened in Lyallpur in the month of July, 1967. Thus the total number of medical care units rose to 27 in all the social security areas. Indoor beds were provided at each Injury Treatment Centre and some other dispensaries according to the space available. The area-wise distribution of these dispensaries with their indoor bed strength as on July, 1967 is given below :

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Area	ITC	Bed Strength.	Dispensaries.	Bed Strength.	Medical Posts.
Karachi.	1	2	4	4	—
Landhi.	1	12	3	3	—
Hyderabad.	1	11	1	1	—
Lyallpur.	1	4	6	12	—
Multan.	1	2	1	6	—
Rawalpindi.	1	2	1	2	—
Peshawar.	1	2	2	2	1
	7	35	18	30	2

1967-68

The Institution entered into contracts with various hospitals in the local social security areas for the treatment of cases which required specialised treatment. Such arrangements were made with the following hospitals :

1. Liaquat National Hospital, Karachi.
2. Liaquat Medical College Hospital, Hyderabad.
3. Nishter Nedical College Hospital, Multan.
4. District Headquarters Hospital, Lyallpur.
5. Mian Mohammad Trust Hospital, Lyallpur.
6. District Headquarters Hospital, Rawalpindi.
7. Holy Family Hospital, Rawalpindi.
8. Military Hospital, Rawalpindi.
9. District Headquarters Hospital, Cambellpur.
10. Lady Reading Hospital, Peshawar.
11. Combined Military Hospital, Nowshera.
12. Kulsumbai Valika Hospital, Karachi.

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1968-69

During the year 1968-69 the scheme was extended to industries other than textiles in the existing areas. Some of the industries covered were widely scattered and hence the arrangement of dispensaries had to be modified. New medical posts were therefore opened in these areas. The strength of medical centres area-wise stood as under :

	ITCs	Dispensaries	Retainers/ Medical Posts.
	-----	-----	-----
Karachi.	1	4	5 Retainers.
Landhi.	1	3	1 Medical Post.
			1 Retainer.
Hyderabad.	1	3	1 Medical Post.
Multan.	1	2	2 Retainers.
Lyallpur.	3	4	—
Rawalpindi.	1	4	1 Medical Post.
			1 Retainer.
Nowshera.	3	3	1 Retainer.
	-----	-----	-----
	11	23	13 Total: 47.
	-----	-----	-----

Thus the total number of medical centres rose to 47. In addition two maternity and child health centres one at Lyallpur and another at Karachi were also established.

1969-70

The scope of medical care coverage was extended during this year so as to make it available to unmarried children below the age of 16 years with effect from 1st July, 1969. The institution planned to establish 18 new Maternity and Child Health Centres during the next financial year, 6 for Karachi, 3 for Landhi, 2 for Hyderabad, 2 for Multan, 3 for Lyallpur and 1 each for Rawalpindi and Nowshera. Similarly necessary equipment was purchased to establish laboratories of our own in each social security area.

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1970-71

This year saw further extension in the scheme. The districts of Gujranwala and Sheikhupura were brought within the purview of the scheme with effect from 15th May, 1970 to give coverage to 16,000 workers. Further extension in the scheme has been made to districts of Gujrat, Sialkot and Muzaffargarh and to Jaranwala town with effect from 15th October, 1970. A net work of dispensaries has been established in all these districts where medical cover is being given to the secured workers and their dependents. As a step forward the qualifying condition of payment of 90 days contributions for receiving medical care has been dispensed with and a secured worker and his dependents are now entitled to receive medical care immediately after registration. Very recently the scheme has been extended to Lahore where 18 dispensaries including Injury Treatment Centres and Maternity Homes, have been established.

Problems relating to medical care.

One of the most serious problems faced by us in organizing our medical care service was and still is the shortage of medical personnel. This is particularly so because the social security programme in this country is still in its infancy and few doctors are attracted to serve the Institution with a missionary zeal. At times seemingly better prospects in Government service or offers of service in foreign countries are so tempting that they leave us without any notice. It is imperative that our medical service should be made lucrative and consequently more attractive.

The progressive extension of the scheme to a new geographical area depends inter-alia on the availability of medical personnel and facilities in the area concerned since at its very out-set, a reasonable number of doctors and facilities must be ensured for the provision of medical care to the secured persons. This is not an easy task for the newly born Institution like ours particularly when we are supposed to support ourselves financially without any Government subsidy. Our most pressing need of the moment is to have a net work of dispensaries housed in our own instead of in rental buildings and also to have a really efficient medical care service manned by officers devoted to duty and fully conscious of their obligations to the ailing secured population of the country. It is hoped that with the cooperation of all sections of our society the scope of medical care would be extended gradually to cover all citizens and to give them equal rights in the matter of entitlement to this benefit according to their needs. Till such time as we attain these high standards, we can only wish that those who are

covered under the present scheme as well as those who are likely to come under its ambit would give dispassionate consideration to the limitations under which the scheme has to work before passing any value judgements.

Some useful data relating to medical care is contained in the Annexure for those who are interested in facts and figures.

ANNEXTURE

PERSONS REFERRED TO SPECIALISTS

Name of office.	66-67.	67-68.	68-69.	69-70.
-----	---	---	---	---
Lyallpur.	N.A.	N.A.	2993	5079
Multan.	"	"	1115	2021
Rawalpindi.	"	"	884	2895
Gujranwala.	"	"	—	230
	"	"	4992	10225

PERSONS REFERRED TO HOSPITALS

	66-67	67-68	68-69	69-70
	---	---	---	---
Lyallpur.	N.A.	N.A.	447	549
Multan.	"	"	286	97
Rawalpindi.	"	"	152	686
Gujranwala.	"	"	—	55
	"	"	885	1387

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VISITS OF SECURED PERSONS TO DISPENSARIES

Name of office.	66-67	67-68	68-69	69-70
	---	---	---	---
Lyallpur.	N.A.	2,52,235	3,13,012	5,91,720
Multan.	"	19,656	1,58,592	3,72,444
Rawalpindi.	"	11,788	1,86,660	3,42,432
Gujranwala.	"	—	—	44,600
		2,83,679	7,08,264	13,54,196

PERCAPITA EXPENDITURE ON MEDICAL CARE

Name of office.	66-67	67-68	68-69	69-70
	---	---	---	---
Lyallpur.	1.12	14.00	15.35	37.75
Multan.	—	9.73	19.18	44.00
Rawalpindi.	—	1.55	28.05	59.12
Gujranwala.	—	—	—	5.22
	1.12	12.66	18.46	37.21

LYALLPUR

	66-67	67-68	68-69	69-70
	---	---	---	---
Income.	7,91,101	26,01,698	33,54,436	41,11,271
Expenditure.				
1. Medical care.	40,471	5,56,436	6,47,140	17,49,609
2. Cash benefits.	20,198	2,52,571	2,92,300	5,21,018
3. Admn. Exp.	91,723	3,14,172	3,45,066	2,94,374
4. Fixed Capital Exp. (M.C.)	38,699	85,138	84,620	1,33,382
5. Fixed Capital Exp. (Admn.)	73,636	1,08,768	37,509	37,747
6. Total Exp.	2,64,833	13,17,085	14,06,635	27,36,130
7. Surplus.	5,26,268	12,84,613	19,47,801	13,75,141

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MULTAN

Income.	—	4,77,717	9, 0,06 9	13,28,686
Expenditure.				
1. Medical care.	—	1,07,755	2,86,174	7,54,082
2. Cash benefits.	—	30,441	87,459	1,92,785
3. Admn. Exp.	—	1,49,489	1,96,870	1,76,204
4. Fixed Capital Exp. (M.C.)	—	27,490	49,887	33,984
5. Fixed Capital Exp. (Admn.).	—	57,804	13,543	13,910
6. Total.	—	3,72,979	6,33,933	11,70,965
7. Surplus.	—	1,04,738	3,46,136	1,57,721

RAWALPINDI

Income.	—	4,18,266	10,29,232	13,44,546
Expenditure.				
1. Medical care.	—	92,824	3,52,162	9,29,431
2. Cash benefits.	—	16,161	93,133	1,76,138
3. Admn. Exp.	—	1,28,004	1,84,754	1,77,791
4. Fixed Capital Exp. (M.C.).	—	33,855	61,568	29,001
	66-67	67-68	68-69	69-70
5. Fixed Capital Exp. (Admn.).	—	47,814	15,923	11,832
6. Total :	—	3,18,658	7,07,540	13,24,193
7. Surplus.	—	99,608	3,31,692	20,353

Medical Care of Secured Personnel in Industry
GUJRANWALA

69-70

Income. 2,53,748

Expenditures :

1. Medical care.	79,262
2. Cash benefits.	711
3. Admn. Exp.	57,923
4. Fixed Capital Exp. (MC)	95,044
5. Fixed Capital Exp. (Admn).	31,425

Total : 2,64,385

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Medical care Expenditure

	66-67	67-68	68-69	69-70
	---	---	---	---
Lyallpur.	40,477	5,56,436	6,47,140	17,49,609
Multan.	—	1,07,755	2,86,174	7,54,082
Rawalpindi.	—	92,824	3,52,162	9,29,431
Gujranwala.	—	—	—	79,262
Total :	40,477	7,57,015	12,85,476	35,12,384

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Consumption of Medicines

Lyallpur.	10,412	2,36,357	3,16,831	11,12,626
Multan.	—	20,991	1,31,421	4,22,285
Rawalpindi.	—	11,371	1,24,095	4,22,695
Gujranwala.	—	—	—	44,462

Total :	10,412	2,68,720	5,72,347	20,15,068
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Hospitalization Expenditure

	66-67	67-68	68-69	69-70
	—	—	—	—
Lyallpur.	44,600	39,515	56,337	1,23,083
Multan.	—	22,372	38,951	77,608
Rawalpindi.	—	20,553	63,108	1,97,854
Gujranwala.	—	—	—	3,559

Total :	446,00	82,440	1,58,396	4,02,104
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Specialist Fee

Lyallpur.	109,00	10,676	15,667	29,908
Multan.	—	2,821	8,545	22,344
Rawalpindi.	—	841	15,566	45,807
Gujranwala.	—	—	—	214

Total :	109,00	14,338	39,778	98,273
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Fixed Capital Expenditure Medical Care

Lyallpur.	38,699	85,138	84,620	1,33,382
Multan.	—	27,490	49,887	33,984
Rawalpindi.	—	33,855	61,568	29,001
Gujranwala.	—	—	—	95,044
Total :	38,699	1,46,483	1,96,075	2,91,411

SHORTAGE OF HOSPITAL BEDS AND HOW TO MEET THIS

By

Dr. S. M.K. WASTI : T. PK.,

FCPS : FRCP : DCH : DPH : DTM & H :

I. Functions of Hospital beds.

Hospital beds are needed when (a) O. P. D. treatment is inadequate (b) domiciliary treatment is not possible (c) special techniques of treatment are required which comprise :—

- (a) Continued supervision by experts in various specialities,
- (b) Specialised investigation,
- (c) Skilled nursing,
- (d) Special equipment.

II. Morbidity.

Obviously this depends on the rate of morbidity in the community and how much of it is severe enough to require hospitalisation. Incidence of hospitalisation is increased by, inter alia, the following factors (a) absence of breakdown of preventive measures (b) Poor domiciliary treatment and nursing.

Hence, it is estimated that beds requirement will be 3 to 5 times more in a country like Pakistan as compared to England. This is particularly so because the host of infectious and communicable diseases have not yet been controlled by Public Health measures, which are of very high standard in other advanced countries.

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III. Standards.

It will be pertinent to describe the standards of population bed ratio, which are being followed in U.K. and other more advanced countries of the world.

IV. Government versus Private Sector.

Break up of beds is further shown in chart No. 11, which demonstrates total number of beds maintained by the Government, by the local bodies, and by the private institutions.

*Chart II**Government versus private sector*

Institution	Government		Local Body		Private		Total	
	No.	Beds	No.	Beds	No.	Beds	No.	Beds
Hospitals	102	7648	70	1613	27	2711	199	11972
Dispensaries	213	347	680	1598	73	65	966	2000
R. B. Centres	39	174	—	—	—	—	39	174
Total	354	8169	750	3201	100	2776	1204	14146
T.B. Clinics	18	12	5	6	26	14	49	32

It will be seen that the number of beds maintained by the Government are 8169, by the local bodies 3201, and by the private institutions 2776. It will be seen, that the number of beds maintained by the private sector are strikingly low.

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It must be realised, that the bulk of the capital is in the hands of the public, and not with the Government. Government is just a contractor, who undertakes, certain assignments from the public, who are their paymasters. It has been a legacy from the Colonial Governments, that most of the hospitals were so-called charitable hospitals, and did not play their proper role. It was only in the last 4 to 5 years, that Pakistan Medical Association through its contacts with the authorities of the Central and Provincial Governments, stimulated them to encourage private sector. Now, we find, even belatedly, that realisation has dawned on the authorities, that private sector, should be given due respect, strategic and logistic support, technical assistance, and encourage to play its fruitful role in the promotion of health cover for the population.

V. Suggestions.

Thus, it becomes necessary that :

1. Private sector and social welfare agencies are stimulated to join hands with the Government for opening up hospitals, dispensaries, diagnostic centres, Maternity homes, T.B. Clinics etc.
2. Government contribution should be utilised for organising the private sector and voluntary agencies, and not directly spent on individual patients, as far as possible, except in special circumstances.
3. Morbidity incidence is supposed to be about 3 to 5 times higher in Pakistan owing to the absence of Preventive resources and due to the high incidence of infectious and communicable diseases, BED REQUIREMENT RATIO SHOULD BE BROUGHT DOWN TO THE LEVEL OF OTHER COUNTRIES BY ADEQUATE PREVENTIVE SERVICES. PREVENTABLE CLAMATIES MUST BY PREVENTED.
4. Voluntary agencies are encouraged in urban areas to organise and develop the private sector.

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5. The rural areas, should be divided in economically viable units, having the basic health components, which should include a number of beds attached to the dispensaries and male nurses.

6. Finally, the present socio-economic structure, has since long reached the limits of its growth. New social requirements and communal demands can only be met with by radically altering the archaic socio-economic set up, under the guiding principles of our National Ideology.

FINANCING RECURRING EXPENSES OF HOSPITALS

By

Dr. Z. A. Khan, PHS (I).*

Financing recurring expenses of hospitals in context to planning and designing of the future hospitals for Punjab is one of the most challenging aspect of the programme. Today the health of the people is considered not just a matter of personal concern, but a subject for social and economic concern for the entire community. The concern of modern society in this matter has developed not only from humane consideration but also through recognition of the fact that the good health and economic security of its people are vital assets of a progressing country.

Modern hospital is coordination of varied and complex disciplines of medical care which have developed enormously as a result of great technical advancement during the present century. Hospital operation today presents a challenge to its team of multidisciplined personnel to keep up and utilize these advances. In spite of our apparent progress we still have areas tormented with untreated diseases. There are woefully inadequate health facilities in the vast rural areas of our country.

The increasing demand for medical services, paralleled with the evolution of new techniques in cure, have imposed upon hospitals tremendous economic and management problems. One of the problems is lack of available hospital beds. Due to inadequate public health measures, most of our hospital beds are occupied by patients suffering from various communicable diseases. This necessitates more hospitals, the cost of which is to be borne by the Government.

Staffing of the hospitals and related facilities become more complex when there are inadequate personnel. This adversely affects the quality of care. When it is imperative to increase the staff, the budget has to be balanced. At the present time the ratio of doctors to supporting staff is in inverse proportion to what it

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should be. Most of the Physicians are concentrated in Urban areas and too few nurses, health workers and technicians are being trained. There is also need for general expansion and modernization of hospitals and dispensaries.

Hospitals must operate 365 days a year and although they are looked upon as humanitarian institutions, they encounter the same problems that a modern industry does. The role of a hospital as community health centre is to care for the sick and maintain a staff which will teach others as they learn. In other words hospitals constantly render service while accumulating and dispensing knowledge for better service. As opposed to business firms, hospitals do not have the profit objective in mind but are dedicated to service. So the hospitals should operate on sound financial footing so as to lessen the burden on the patient and the community.

The control of hospitals should be vested principally in local towns or provincial authorities. In France 80% of the hospitals beds are government owned, in Germany 50%, in Norway 80% and in U.K. 90%. In Holland 30% of the hospital beds are government owned and the rest are operated by religious bodies. There are quite a few privately owned hospitals in Western Europe. They tend to cater for the minority of well-to-do patients. In England they are called nursing homes while on the continent these are called clinics. They have tended to grow in large cities to meet the demand of those who can pay for the private attention of a particular physician or a Surgeon. Such private hospital play a large role in countries where public hospital facilities are not well developed. Size of European hospitals tend to be larger because of density of population. Regardless of their mode of administration, European hospitals seem to be important and cherished in their local communities. Local residents make all sorts of contributions of money and work to improve the hospitals. Whether the ownership is government or voluntary, the financial support is mostly by collection of pre-payment insurance or other agencies. Hardly 10% of the costs of hospital operation in Europe comes from payments made directly by patients.

Financing recurring expenses of hospital is not amenable to any easy solution. It is the problem which may require continuous attention from numerous public and private sources for many years to come. The financial support for hospital care depends, of course on the total economy of a country. These may include the level of its living standards, the degree to which the wealth is spread among the population and the level of the gross national product. This also includes the degree of industrialization and urbanization, the level of literacy and education and the status,

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distribution and financial conditions of the medical care services and facilities. The amount available for medical care depend not only on the gross economic resources or national income but also on the rate at which allocations are made from both the official sector and the private sector. The World Health Organization has made studies of the total cost and sources of finance of health service in various countries. The definition of "health services" in terms of appropriate inclusions and exclusions, is not easy, but the general finding has been that various countries spend between 3 and 8 percent of their national income on health Services. With certain exceptions, these percentages tend to be higher in the more affluent industrial nations and lower in the developing countries. Thus the economically poorer countries usually spend less on health Services both in absolute and relative terms to their over all resources.

Many countries have voluntary or compulsory Govt. sponsored medical care programme. Among the modern nations Germany was the first country, when in 1883 Bismark established a Social Security programme including compulsory insurance for sickness, accident and incapacity financed by the employer and the employees. In 1965 the Government of West Pakistan enacted the West Pakistan Employee Social Security Ordinance No. X wherein industrial establishment were to provide certain medical care benefits for their employees with the cost shared by employers and employees. A compulsory Government programme of this magnitude would become quite a tax burden. The experience in other countries indicates that cost always outstrips the forecast, no matter how carefully the forecasts are made. There is another way to go about it. The insurance industry can be authorized and encouraged to establish health Insurance policies. In the United States, for example, they have developed voluntary prepayment health programmes through the insurance companies in preference to large, tax supported government programmes. By the end of 1965 over 156 Million people in the United States (81% of the entire civilian population) were covered by some form of the health insurance protection against the cost of their health care. Such a programme of financing hospitals recurring expenses in the larger cities of Punjab is worth giving a fair trial. However, hospitals catering to Rural population must have their funds from the tax money to ensure stability.

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ADMINISTRATION OF HOSPITALS

By

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Chairmen : Secretary Finance.

Consultant : Dr. Shujahat Ali.

The purpose of my paper is to elucidate the administration of hospitals on medical staff, with regard to types, qualifications, tenure, functions and organization.

In this respect, it would be best for us to consider the types of hospitals because the functions and organization and qualifications of the medical staff would differ accordingly.

There are four main types of hospitals ;—

- (i) Teaching hospitals ;
- (ii) 500 bedded hospitals ;
- (iii) District Headquarter Hospitals ;
- (iv) Tehsil Hospitals.

We shall here restrict ourselves to the non-teaching hospitals for large cities like Lahore, Rawalpindi, Lyallpur etc.

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500 bedded hospital would be an economic one to run and administer. In such a hospital, one would envisage most of the specialities such as Medicine, Surgery, Gynaecology, Ophthalmology, ENT, Orthopaedics, Paediatrics, Anaesthesiology, Psychiatry, Radiology, Pathology and Dental Surgery. In such a Hospital, the following medical staff would be necessary :—

- (i) Medical Superintendent.
- (ii) Deputy Medical Superintendent.
- (iii) Specialists to head their respective units with a registrar and two housemen, to assist them.
- (iv) Medical Officers and Woman Medical Officers of O.P.D.
- (v) Medical Officer Casualty Department.

Medical Superintendent :

In a large institution, the Medical Superintendent should preferably be a whole time person who has had some special training in hospital administration or has had vast experience in it. He should be a fairly senior man preferably the senior most in the hospital because from the point of view of discipline and in order to command respect amongst his colleagues. It is important that head of the institution should be the senior most person.

Tenure :

It is customary in Government Service, to make most posts transferable and the tenure of service at a particular station usually varies between two to four years.

The transferability of posts particularly in the Health Department is rather controversial. Personally I feel that posts of Medical Superintendent and Specialists should not be made transferable because for a doctor it is important to gain the confidence of the people that the hospital caters for.

In D.H.Q. Hospitals where the bed strength varies from 150 to 250 beds, the Medical Superintendent apart from administration has also professional duties to perform; therefore, he is allotted some beds. Particularly he has to deal with medico legal work and should, therefore, be well-versed in this subject. He is also the Authorized Medical Attendant of Government servants of that district.

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Functions and Organization :

The functions of the Medical Superintendent will depend on whether it is a large city hospital or the small district hospital. The Medical Superintendent is the head of the Institution and as such he has the overall responsibility of administering the hospital. In this matter the Deputy Medical Superintendent and Nursing Superintendent assist him in the day to day running of this hospital.

It is obvious that the Medical Superintendsnt cannot attend to each and every detail in the routine administration. Hence the proper delegation of powers to the subordinates and the fixing of responsibility is essential to the smooth running of of hospital.

The Medical Superintendent should be a co-ordinator for the various units ; hence a staff meeting of all the specialists and Medical Officers should be held once a quarter or once a month as and when the need arises so that matters of mutual interest and inter-unit problems could be discussed and settled amicably.

The reputation of a hospital depends to a large extent on the qualities,—both professional and human-of its medical staff but the importance of the nursing and menial staff should not be under-estimated and it is here that the Medical Superintendent with the assistance of the Deputy Medical Superintendent and Nursing Superintendent can do a good deal to enhance the reputation of the Institution, by seeing to such things as cleanliness, prompt attention to patients' needs, diet etc.

Deputy Medical Superintendent :

Deputy Medical Superintendent will perform whatever duties the Medical Superintendent delegates to him. He is usually incharge of the menial staff and it is his duty to see to the punctuality and all cases of disciplinary nature are dealt by him. In a 500 bedded hospital, the D.M.S. should be a whole time person with

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some experience in hospital administration. A Postgraduate qualification in hospital administration would be an added asset.

In D.H.Q. Hospitals apart from the above duties and functions, he has also some professional work. The tenure of Deputy Medical Superintendent should be about three years because being a fairly junior person he would have the opportunity of serving under various Medical Superintendents and thereby gain considerable experience in administration.

Specialists :

The type of Specialists appointed will depend on whether it is a large hospital or a D.H.Q. Hospital. However, most specialities such as Medicine, Surgery, Gynaecology, Eyes, ENT, Pathology, Radiology, Anaesthesiology and Dental Surgery would be represented in a present-day D.H.Q. Hospital. The large institution may have certain other specialities as well such as Orthopaedics, Paediatrics, Dermatology and Psychiatry. Specialists should possess Postgraduate qualifications in their own specialities and/or have considerable experience in their particular field.

Tenure :

As mentioned earlier Specialists appointment should be of a permanent nature so that they could build-up their units and take an active interest in the Institution, and thereby be able to serve the public better.

Functions :

It is not within the scope of this short paper to give a detailed account of the functions and organization of the Medical Staff but briefly :

- (i) The Specialists will be responsible for the running of their units under the overall supervision of the Medical Superintendent.
- (ii) They will render specialist aid to the patients attending the hospital as and when required.

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- (iii) They will organize the management of emergency cases.
- (v) They will be charged with training their assistants in order to equip them for Postgraduate qualification.
- (v) A useful method of rendering specialist aid to the peripheral rural areas is by making the services of the Specialists available once or twice a month to the nearby Tehsil Hospitals.

Registrar :

The Registrar and house officers will work in the wards and O.P.D. under the guidance of the Specialists. They will assist the Specialists in their routine Ward and OPD duties. The tenure of Registrar should be of one or two years whereas the house officers should be given the opportunity of rotating in the various Specialist units every six months.

The internship should be made compulsory and no fresh graduate should be registered unless he has done atleast one year internship in one of the DHQ Hospitals or the large city hospitals. In this way, the young doctors would get a good grounding before embarking into general practice and the hospital would have no staffing problem.

M.O. AND C.M.O :

They should be graduates, preferably with some postgraduate training. Their tenure should be of two years. Their function is to deal with routine OPD cases and feed the specialists with interesting cases and diagnostic dilemmas. Casualty Medical Officer should be a graduate with some experience in dealing with medical and surgical problems and accident cases.

The Medical Officer Incharge of the Tehsil Hospital should be a fairly senior

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doctor because he will be holding independent charge and will have to cope with medical and surgical problems and to deal effectively with emergencies.

In conclusion I would like to mention that medical staffing is a very important aspect of hospital administration because careful and judicious selection of the medical staff possessing requisite technical know-how and the missionary zeal to do good to humanity, will be conducive to a harmonious blending of efficiency and dedication.

NURSING STAFF (STATUS OF NURSES, TYPES, NURSING CARE, RATIO WITH PATIENTS, PHYSICAL FACILITIES AND CENTRAL SUPPLY SERVICE)

By

Miss Ralza Zahoor*

In the sphere of Medical care the Nursing staff has been playing many diverse Roles in the past. The future will increase more diversification and demand of highly trained and more skilled personnels to discharge these greater responsibilities.

New methods of treatment, new drugs and advances in Medicine are putting more stress upon the Nursing staff and to meet this, better training facilities need be organised at all levels, with introduction of refresher courses and specialized training in special Departments as Intensive Therapy, Cardiac Surgery, Neuro Surgery, Psychiatric training, Operation Theatre techniques etc. This requires highly trained teaching staff, a well organised teaching school with modern teaching Aids and Equipments. Student nurses will not be put on 8 hours duty to do routine Nursing care, but they will only come to the hospital wards to do practical work just for few hours under the supervision of Clinical Instructors, the way medical students are attached and rotated in different Departments in the hospital.

Status.

1. Nursing Superintendent	Senior Class I (Gazetted)
2. Assistant Nursing Superintendent) Tutor Sister/Clinical Instructor)	Junior Class I (Gazetted)
3. Nursing Sister/Asstt, Tutor Sister	Class II (Gazetted)
4. Staff Nurses	Special Gazetted
5. Nurse Aid	Non Gazetted

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Types.

After qualifying, any Staff Nurse who takes up special Courses mentioned above should be remunerated, and it would encourage the Nurses to take up the specialised training and responsibilities. Regarding the Sisters, in order to improve the service, I feel that before a Staff Nurse is promoted as a Sister, she should pass the course in Ward Administration from the College of Nursing, Karachi.

Ratio.

One Tutor Sister	for 23 student Nurses
One Clinical Instructor	for 100 patients) for
One Nursing Sister	for 30 patients) 8 hours
One Staff Nurse	for 8 patients) shift.

Physical Facilities.

A modern Nurses Hostel with Sports, Swimming Pool and Library facilities must be provided to all categories of the Nursing Staff and an independent Family Accommodation must be provided to the married Nursing staff in the hospital premises.

Central supply must be introduced in each hospital as it requires lots of extra equipments and material; the feasibility for each Institution should be studied according to the need.

PLANNING FOR BASIC NURSING PROGRAMME

By

*Mrs. Mumtaz Palnda Khan,**

School of Nursing.

The decision to establish a school should be made as a part of the overall planning for nursing education. The school may be sponsored in one of several ways, it may be a government School with control in the national health, it may be independent, it may be under the jurisdiction of a hospital or an educational institution.

Need,

To prepare nurses who will be able to work Cooperatively with the members of the medical and other professional groups engaged in health and welfare work and also to make a distinct and significant contribution to developments in these fields.

Aims and Objectives of the School.

I. To develop a professionally and technically competent practitioner of nursing with skill in :—

- (a) Applying her knowledge of the physical, biological and social sciences to the practice of nursing ;
- (b) Observing, interpreting and reporting ;
- (c) Using manual, psychological and managerial techniques in providing personal and supportive nursing care and in assisting with diagnostic and therapeutic measures ;
- (d) Communicating effectively with patients, families and co-workers ;
- (e) Selecting and using pertinent teaching principle and methods in the teaching of individuals and groups.

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- II. To develop a nurse who is able to plan and organize her own work and to plan and supervise the work of auxiliary nursing personnel.
- III. To develop a nurse who fortifies her interest in people with an understanding of human behaviour and who has skill in personal relationship.
- IV. To assist the nurse in achieving maturity, independent thought and action, and in accepting responsibility as an individual, a nurse, and a Citizen.
- V. To develop a nurse who recognizes her need for continuing education and to provide her with the basic education upon which advanced training can be built.

Philosophy.

The philosophy of the School of Nursing relating to nursing and nursing education should be fully accepted by the controlling authority and the professional staff, both medical and nursing of the hospital. The full authority and responsibility for the development, organization and administration of the nursing service and nursing administration in the hospital should be entrusted to highly qualified and experienced nurse administrators and educationists.

The organization, administration, budget and other institutional policies should be such as to give maximum freedom to the School of Nursing, to develop the programme in accordance with the best standards of the nursing profession.

Organization and Administration.

(a) Educational Building.

When a new School of Nursing is being planned the provision of a separate School building should be considered. It identifies the School as such to the public; it re-inforces the status of the student nurses as students, and it can be designed for its purpose even if its construction is limited by lack of funds.

The School building should have provision for lecture rooms equipped for progressive education in the field of nursing, a satisfactory nursing arts class-room with both demonstration and practice facilities for all the basic nursing procedures, a good professional library with a carefully selected set of books and current journals, Science and Nutrition Laboratories, Administrative Offices, Offices for Teaching Staff, Store rooms, Waiting rooms and Lavatories.

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(b) Clinical Facilities.

It is essential that student nurses be able to obtain not only theoretical instruction but also practical experience in places where there are adequate clinical facilities and under conditions favourable to sound educational work. In a hospital school adjustments to hospital administration are obviously necessary. The welfare of patients is the first consideration, but the interests of student nurses should not be sacrificed. If the staffing of the hospital is adequate, if the school is large enough to permit each class to be of reasonable size, if the provisions for instruction are sufficient, and the size of the hospital and its various services are suitable for educational purposes, co-operative planning can assure the use of the institution as a laboratory, so that both students and patients derive maximum benefits.

(c) Living Accommodation for Staff and Students.

Provision should be made for healthy living accommodation for both staff and students. It must be remembered that this accommodation will be the home of the staff members for years and provision for single bed rooms, bath rooms, sitting rooms, staff common rooms and recreational facilities are essential. The students should be provided with an attractive hostel, including common rooms and recreational facilities which lead to happy and healthy living.

Bath rooms, toilets and wash basins must be provided on a more liberal scale than in the ordinary girls hostel.

(d) Student Health Unit.

Facilities should provide a setting for health counselling, periodic health examinations, immunizations early diagnosis and care during illness. There should be easy access for students and daily office hours with a physician on call at all times.

Relationship Between School and Clinical Fields.

Heads of Clinical Fields should share in the planning of the clinical experience (hospital and public health) and have some responsibility in consultation with the Principal of the School for the direction of the experience in their respective areas of

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administration. The clinical teachers and ward sisters in the clinical fields should be appointed in consultation with the Principal of the School and be responsible to her for their educational functions.

Channels of communication between the school and nursing service staff should be established and maintained which will ensure the interchange of information and co-operation necessary for a high degree of correlation and integration of theory and practice.

Personnel.

(a) Principal of the School.

She should be a nurse with administrative ability and with a philosophy of education in keeping with the purpose of the School. She should have had experience and special preparation in nursing education.

(b) Instructors.

No one ratio of nurse instructors to students can be applied in all situations. In addition to the Principal who may carry limited teaching responsibilities, there should be a minimum of one instructor for introductory courses in nursing, one to co-ordinate the teaching of basic sciences, one instructor in each of the clinical areas of study, and additional instructors as indicated by the size of the student body.

In addition to physicians, whose contribution to nursing education is of long tradition and accepted, other part-time instructors may be recruited from amongst the general educators, scientists, sociologists, psychologists, social workers etc.

Other personnel essential to the operation of the school will be concerned with business operation, clerical services and student services, direction and care of residence, supervision of students in their living, social and recreational activities, student health and counselling. A good administrative officer is needed who can be assigned sufficient time to maintain orderly management of funds, records of receipts and expenditures, ordering of equipment and supplies, and maintenance of inventories. Clerical personnel are required for maintenance of student records,

preparation of teaching materials correspondence and miscellaneous typing. It is important to free teachers from clerical work so that they may give full time to educational activities.

Financing.

After a survey of various decisions. which will affect the cost of establishing and operating the school, decisions should be made as to the constructions, purchases, remodelling of buildings, and to the provision of their basic equipment and furnishings. These decisions will define capital costs. Available funds for establishing the school may meet these costs or it may be necessary to seek further funds if the planning committee is satisfied that they are essential. The analysis which has been made will be invaluable in a review of possible adjustments. After such an analysis, the temptation to feel that initial expense in establishing the school is the main financial consideration will be resisted. In countries where capital costs are met by special grants, perhaps from an international source, it is extremely important to design a programme which can be carried on when special funds are no longer available. Good teaching can be done in simple settings with simple equipments, if the teachers are well prepared and highly skilled.

Operating costs will include provision for all school personnel, administrative and teaching Special services, house-keeping staff's current purchase of library and teaching equipment and other supplies, student's accommodation, health care, books and uniforms. and other student personnel services, transportation and other costs of clinical practice and general maintenance.

Salaries for personnel will reflect the salary structure of the community, particularly for health personnel. If, however, the school is to contribute to an increasingly effective nursing service, the attraction of personnel of the highest potential may call for an adjustment upward of prevailing rates, particularly for the Principal and the teaching staff. Services to students, food, uniforms, laundry allowances, books, health care etc will depend on emoluments, and estimates should take this into account.

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Conclusion.

"A nursing school should not be established unless it can be adequately supported. Education is a matter of public concern, and state and public authorities should recognize their duties to contribute to, and to a large extent maintain, nursing schools just as they do the schools for teachers and other workers largely employed in public service".

CONTINUED EDUCATION OF THE MEDICAL STAFF

By

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Introduction :

It goes without saying that medical education is a continuous process and a physician remains a student of medicine throughout his life. The day he ceases to be a student is the day he either loses his physical and mental faculties or he goes to meet his Creator to receive His Judgement on his performance as a believer, as a human being, and as a physician. A medical man must continue his studentship not only to fulfil his duties medical, ethical, moral and social but also to safeguard his professional reputation in the community he serves. The need for perpetual learning is paramount for the physician of today who is living in an age of rapid scientific advancement especially in his own field.

Graduation from a Medical Institution is no doubt a landmark of immense import in the career of a doctor since it confers upon him the right to practise this noble profession. Graduation, however, cannot be regarded more than a good foundation, on which he needs to build himself as a man of knowledge and as a practitioner of the art of healing. His hardwork in fact has just commenced and years in front require more hard work from him. This is the stage that he starts to learn the practice of medicine which he must continue as long as his physical and mental faculties go along with him. This process he undertakes may be in a teaching hospital as a houseman or of his own in general practice. However, it is the continued education in the form of organized teaching programme which is only possible in a teaching hospital.

Opportunities for Practical Training :

In the teaching hospitals a number of trainee positions such as House Surgeons, Registrars and Senior Registrars are available where organized post graduate teaching

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programmes can be applicable. There is no intention to exclude the Senior appointments such as Assistant Professors or Professors from the realm of continuous learning. But formally organised programme is better discussed in relationship to the trainee appointments. That the graduate of today is entirely appreciative of the need for continuous education is evident from his willingness to take up these positions even as an additional if he does not score a position which gains him a regular appointment. He readily accepts the hard work, deplorable and almost subhuman living conditions in addition to continued dependency upon his parents. He willingly offers himself as a cheap labour but he is, more often than not, accepted only as a free worker. He immensely contributes to better patient care in the teaching hospitals.

The number of such positions is, however, quite small and a majority of the fresh graduates are, unfortunately, deprived of the opportunity to acquire practical knowledge under experienced guidance. It is high time that the compulsory Internship Scheme, presently shelved by courtesy of the Finance Department, should be instituted without any delay.

Organised Training Programmes :

At the present moment the concept of formal education to the house staff, registrars etc. is to my mind non-existent in our hospitals. Doctors in these positions, no doubt, learn from their experience and from watching their Seniors do things in a certain way. Yet there is no formally organized teaching programme for them. Such programmes must be undertaken by all teaching hospitals under directions of one of the teachers, who should lay out, supervision and even adjudge the performance of the trainees. An appointment of a Director of graduate teaching is an urgent need of teaching hospitals which may presently be organized as a local assignment. Their performance should be acknowledged in the language of the certificate they are given on completion of their training. Graduate training programmes of course, include teaching rounds are comprised of clinical conferences, some formal lectures, X-ray demonstrations, journal clubs, Pathological demonstrations etc. Such teaching exercises are too well known to all doctors to be detailed in this writing. However, I do have my own thoughts on the subject which would go as follows :—

Ward Rounds :

The ward rounds by the visiting staff are to my mind the most important avenue of passing knowledge to the junior staff members. For purposes of care the

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patients must be allotted to the house staff by beds, rows or rooms as the case may be. The responsible house staff should conduct the rounds and supply all the information to the visiting staff in respect of patient in his charge. His name should appear on the patient records. Every new patient, who has entered the ward since the last round, should be presented by the responsible houseman. This presentation should preferably be formal reading of a written history and physical examination to be duly commented upon by the teacher. The physical findings should be confirmed or rejected and those missed by him demonstrated. This should be followed by a logical deduction of a diagnosis and proposed line of investigations as well as treatment. The other members of the house staff including registrar should be invited to offer their findings and suggestions together with the supporting arguments. The teacher, of course, sums up his own findings and finalizes the line of approach. He should freely narrate his experiences and quote the current thinking on the subject. Implied in there is the concept of inculcating habits of thoroughness, reading of relevant literature and follow up the cases at various phases of his investigations as well as treatment.

Clinical Conferences :

Clinical conferences are the age old teaching exercises. Although they vary slightly in minute details but the purpose and drill are essentially uniform. Clinical conferences are too familiar a subject to every medical man to be described in details. Personally I have some points to make upon how these conferences should be organised and run which to my mind would yield highest dividends *i.e.* teaching.

1. Firstly the organiser should have the right not only to accept or reject the cases offered by the staff members for presentation but also to call upon any member to present any case which the organiser considers teaching material. For this purpose the organiser must have mini intelligence of his own to gather the information about the cases that are present in any ward of the hospital.

2. Secondly the case presentation should be done by the house surgeon and registrar together. The house surgeon should read the specially prepared history and physical examination with the basic laboratory findings. From this point on the registrar should take over and further proceed with the presentation. Before he carries on, the Moderator/Chairman should take a little break to invite the clinical

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diagnosis from the audience preferably in the ascending order starting from students if they are present in the conference to the house surgeon, registrar and finally some attending staff members.

The registrars should then proceed in giving out their thinking from the time of admission and proposed line of investigations. The results of the investigations such as radiologic film, ECG should be exhibited and preferably interpreted by the radiologist or cardiologist as the case may be. Any special laboratory examinations may also be commented upon by the hematologist, Biochemist etc. Finally the conclusive evidence of the diagnosis may it be a biopsy examination, histologic examination of the surgically removed specimen or a culture of CSF etc. be presented in support of the definitive diagnosis. This should be followed by the line of treatment adopted by the treating clinician and its results.

A variation from this line of course is a patient who has clearly demonstrable lesions such as aneurysms etc. which should be presented before being subjected to definitive surgery. Such cases, however, must be brought back as follow up cases after the definitive treatment.

3. Since these conferences are essentially diagnostic exercises the presentation must never be started by giving out the diagnosis in the first sentence. "This afternoon I am going to present a case of carcinoma of the stomach", for example takes away the entire charm of the presentation, which then becomes a futile exercise. For the same reason the case list must also be prepared in words which camouflage the exact diagnosis such as repeated haemetemesis rather than portal hypertension.

4. Cases to be brought to the Clinical conferences must be fully worked up and diagnosis proven as far as possible. An ill-worked up case wastes more time than it is worth and should generally be avoided. This does not debar bringing up real problem cases where suggestions may be helpful in solving the true difficulties.

5. The number of cases must be limited to provide thorough and full discussion. Again since such conferences are usually held towards the end of the day these should be allowed to continue as long as required even at the expense of reaching home a little late.

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Mortality and Morbidity Conferences :

These conferences are variously held as purely mortality or as mortality and morbidity conferences. Once a month frequency is generally sufficient but more frequent gatherings may be required. The approach in such conferences should be to consider as to what went wrong with the treatment which failed to save the life of the patient. It will then work out as an honest self criticism in order to avoid future mistakes. Of course the real value of these conferences lies in the conclusive evidence of the cause of death which is available only from the postmortem examination. Since postmortem examinations in our circumstances are always not available these conferences will be of lesser than optimum value. This, however, should be no reason to bypass them as a valuable means of teaching.

Formal Lectures :

Lectures are of course the major medium of teaching in our institutions for the undergraduates. It is not at all used in relations to house staff. Lectures have a limited value as means of imparting a lasting impression on the student especially the senior level. However, an occasional lecture by a person of authority on a subject especially when the authority is established by quoting of original work etc., is a distinct method of leaving a deep and lasting impression.

Journal Clubs :

It is well known that the volume of literature coming out on any one subject is so large that no person can possibly read all of it. Journal clubs are, therefore, an excellent method of passing on as much information to the participants. Generally people are assigned various journals and they come prepared with them and present short summaries of the interesting articles. This is followed by a general discussion where literature quotations, personal experiences of senior members all go to enhance the knowledge of the trainees.

Other Methods :

Many other conferences such as X-ray, trauma conference etc., can be easily organised and serve a very useful purpose of imparting knowledge. The trainees can be given individual assignment of writing dissertations, carrying practical part of research projects, preparing the lists of references on a given subject etc. These are

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practical steps that have a definite value in a formal process to continue the education of the staff of a hospital.

Concluding it must be said that by entering the medical profession a young man has accepted tremendous responsibilities of ethical, social, moral and academic nature. Amongst them is his responsibility to advance his knowledge throughout his career as a doctor. For this purpose the teaching hospitals should have organized programmes where the professional knowledge and practical skill of the trainees can be enhanced.

ETHICS AND PUBLIC RELATIONS

By

Dr. Mohammad Rashid Chaudhry

Medical Profession enjoys the greatest opportunities for talents to be ennobled and elevated to the highest level in the service of mankind. It therefore demands the highest ethical standards in the human relationship which if not followed, this great profession would be rendered as base and inhuman as any human being can possibly degenerate,

The medical profession has built up tradition of placing the needs of the patients before every thing else. This end can only be achieved by observing a high standard of professional conduct and behaviour.

A general advice to the medical practitioners in the words of Professor Saundby will be found valuable and are quoted below :—

“The duty that a medical man owes to the profession of which he is a member is one of the highest he is called upon to fulfil, as his obligations to his country can alone be allowed to have greater claims upon him. He should cherish a proper pride in his calling and disparage it neither by act nor words, but endeavour to increase the public esteem in which it is held by good and worthy deeds. His life should be discreet and sober, avoiding excess or extravagance of dress and demeanour.

He should regard with respect the regulations of all duly constituted professional bodies which are set in authority over him by the laws of his country or by the rules of those medical societies of which he is voluntarily a member, and he should obey them in spirit as well as in letter.

He should respect professional opinion, and not stand aloof from movements designed to promote the interests of the professionals; if unable to agree with the course adopted by the majority, he should abstain from manifesting publically his

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dissent by addressing letters to lay news-papers, but should confine himself to urging his opinions in those professional journals which are open to him. In all dealings with patients the interest and advantage of their health should alone influence his conduct towards them. As their trust in the profession is great so the obligation to be true to their interest is greater and any single failure in this respect is wholly discreditable and inexcusable.

The consequences of breach of this rule may be most serious from a professional point of view, involving even the removal of the offender's name from the medical register, but only the grossest cases are thus brought to light. In most instances the individual's conscience is the sole arbiter, for no one can judge motives. Hence there is urgent need to avoid those slight departures from rectitude by which the sensitiveness of this private monitor may become deadened.

The medical practitioner must not only deal honestly with his fellow men, but he is called upon to show more than usual benevolence towards them so as to maintain the honourable tradition by which the physician is regarded as the friend of all persons, without respect to race, creed or social position".

Code of Medical Ethics.

It is a moral duty of every one of us that we follow the code of medical ethics strictly and faithfully. The code of medical ethics is designed as a guide to all medical practitioners in matters relating to the professional conduct and behaviour. The Pakistan Medical Council adopted the following code of ethics in its general meeting held in July, 1954 and approved again in its meeting held in July, 1968. There is hardly any need and even time to go into the details of this booklet which mainly deals with the following subject :—

1. Certificates, Notifications, Reports.
2. Advertising and Canvassing.
3. Unqualified Assistants and Covering.
4. Association with unqualified persons.
5. Contravention of the drugs acts.
6. Code of Professional Conduct ;

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- (a) Premises and doorplates.
- (b) Change of address or conditions of practice.
- (c) Relations with other registered practitioners.
- (d) Association with unregistered practitioners, or unqualified persons.
- (e) Fees and commission.
- (f) Refusal to continue to attend to a patient.
- (g) Patent drugs, secret remedies and chemists.
- (h) Lectures, broadcasting and television.
- (i) Publications.
- (j) Professional secrecy.
- (k) Termination of Pregnancy.
- (l) Nursing Homes.

It is, however, felt that the code of medical ethics as approved and issued by the Pakistan Medical Council is in-adequate and out-dated. Being essentially a copy of the British code of ethics, it does not wholly fit in with the legal framework and social set up of our national requirements. Again there is very little publicity given to the code amongst the medical fraternity and there may be doctors who have not been able to read the booklet due to this reason.

It is difficult to confine ethical code of this great Profession in hard and fast rules of a few lines. The following guide lines may however be kept in mind.

- (i) Duty towards the country.
- (ii) Duty towards the patient and the public.
- (iii) Duty towards the profession.

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(i) Duty Towards the Country.

A medical practitioner must always keep his duty towards the country the highest in all respects. He should cherish a pride in the calling of his country and disparage it neither by act nor by word. As a respectable citizen it would not be out of place to expect him to volunteer his services in case of national emergencies like wars, famines, epidemics or any other diseases.

(ii) Duty Towards the Patient and the Public.

In dealing with his patients the interest and advantage of their health should alone influence his conduct towards them. He must always fulfil his patient in order to maintain the trust of the sick person in the profession. He should always endeavour to relieve the physical or mental suffering of the sick person and provide them the maximum comfort consistent with his professional ability.

(iii) Duty Towards the Profession.

He should always respect medical opinion of his professional brothers. He should promote the interest of his profession and he should participate in the voluntary professional organizations and accept the rules and regulations and abide by the constitutional obligations of such bodies in true spirit.

PUBLIC RELATIONS

It would not be wrong to say that our public relation is very poor, rather this important aspect of patients' welfare is altogether neglected in the hospitals. Every day doctors are criticised in the national press and social gatherings. We should take stock of our great and noble profession from public angle. There are complaints about the doctors that they are callous and indulge in unethical practices. Some critics are modest and attribute the indifferent attitude of doctors in Government service to their over work, other say that junior doctors take bribes while seniors charge the consultation fees at their private clinics

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before granting admission in the general wards. There is also repeated advice to the doctors that they should go and settle down in rural areas.

The medical man in Pakistan has too often been accused of lacking the missionary spirit with the result that the physician of today does not hold the position of respect and affection which is his right and privilege. We must look for the place where the fault lies. Perhaps it lies both with us and the society. Day in and day out we are busy in our professional work virtually ignoring the social milieu and the relationship with the family and friends of the patient. Usually it is not the patient who gets dis-satisfied, the relatives and friends get hurt because they are not properly heard and attended. It is true that the doctor's responsibility is the patient under his care but the patient can not be isolated from his family, to whom the doctor must also owe some responsibility.

This aspect of inter relationship is grossly neglected in the hospitals and a very large of unfavourable and damaging comments about the medical profession accrue from insufficient attention to the public relation between the hospital staff and the patients and their relatives. Arrangements for the prompt supply of information and medical aid in the hospitals, establish good-will with the hospital staff and restore confidence in the medical profession.

In order to achieve this object every hospital should have a public relation officer. The medical social officers who are equipped for this type of work can usefully be employed for this job with some in-service training. Public relation should not be restricted to hospital walls alone, but it should be extended to the patient's homes, where he is to be properly rehabilitated.

Also public needs education on problems of health and diseases through all the available media ; for example, lectures, press, radio, T.V. etc.

Inadequacy of medical facilities for the general public is a fact that hardly need any elaboration. Shortage of hospital beds, medicines and laboratory facilities are a few of the hardships facing the public. It is generally recognized that Government funds in this field must be augmented by private sources because even in the richest countries of the world the amount allocated for the health are found insufficient to cover the whole population. It is, therefore, necessary that the Government should facilitate the private sector to set up private hospitals and dispensaries to relieve pressure on Government hospitals. The public must also be enlightened to render all possible help in this matter.

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In order to establish better and healthy relationship in the public the relatives of the patients should occasionally be interviewed by the hospital medical staff, preferably the doctor incharge whose word of sympathy and encouragement will leave a permanent impression of doctors nobility on their minds.

Lastly we should have good relationship with the press. The press reporters should be requested to verify their reports from the hospital authorities who in turn should look into the report at their first convenience and offer their comments. In fact reports published without verification serve no purpose other than lowering the morale of the society as a whole.

In conclusion we must follow the code of medical ethics strictly and faithfully. We should develop better relations with the public and press. The public relation officer should be appointed in each hospital. Lastly a few lectures on ethics and public relations should be included in the medical curriculum.



PERSONNEL ADMINISTRATION IN HOSPITALS

By
Dr. A.R. Jafri*

1. The hospital as any other organization depends on the staff as such, personnel administration plays a very important role in carrying out the hospital work.

2. Unfortunately in our country, administration in general, and personnel administration in particular are the most neglected fields of activity in the hospitals. Although the demands of hospital services have multiplied fantastically, yet the system of administration to supply these needs and services have remained static and unresponsive.

3. Hospitals are in our country, the dark continent of administration. The greatest difficulty in managing a hospital, is bridging the gulf of distance between the professional demand for excellence and the administrator's concern for institutional limitations and feasibility. Many times, the goals of the professionals and administrator becomes incompatible. This results in the emergence of two competing channels of command. One of these proceeds from the superintendent of the hospital down to the nursing, catering, and janitorial staff. On the other hand, professional independence of doctors, chemical specialists in laboratories and engineers in department of radiotherapy, X-ray and photography, want to remain outside the bureaucratic control of administration.

4. Hospitals are different from any other administrative organization whether in public or in business administration. In hospitals, the line functions are performed by the professionals and the staff functions are assigned to the administrators, which is contrary to the conventional kind of administration. This reverse relationship is a source of great stress between the professional and the administrative staff in a hospital.

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5. As medical knowledge increases so do the demand for the skill and effort of the already numerous and diverse groups of professional, technical and ancillary staff who provide services to the patients. Because the three skills are highly interdependent the work of all these people must come together in the right way and at the right time, if each patient is to receive proper care.

6. In hospital administration, coordination and good supervision are two most essential ingredients of administration. Collaborative performance, is therefore indispensable for hospital employees. This cannot be achieved unless the employees are morally committed to their work and saving the life of the patients becomes not only doing their job but as well doing their voluntary duty.

7. All this is perhaps to say that hospital is an organization particularly dependent for its success and effectiveness on the people who work for it. Every kind of an enterprise, no doubt depends to some extent on its human skills case of an organization which is totally dependent on its workforce unless we do not formulate and adopt positive and dynamic personnel policies in hospitals, it is almost certain that we cannot expect an excellent performance in terms of services from our hospitals.

BUSINESS MANAGEMENT OF HOSPITALS

By

*Dr. M. Ashiq Chohan**

The business department of the hospitals has not so far been given the importance that it deserves. The work load has increased manifold as a result of development projects but the hospital offices, are still under staffed. In big hospitals, of 500 beds and above, in addition to the whole time Medical Superintendent and Deputy Medical Superintendent there should be two Quartermaster Medical Officers to meet the increasing demand of stores and their issue. While one of them will be incharge of receipts, the other will look after the issues. With this hierarchy, efficiency will increase and pilferage will be eliminated to a great extent. In the District Headquarter Hospital, between 250 and 500 beds there should be one post of Quartermaster Medical Officer besides the Medical Superintendent and Deputy Medical Superintendent. Upto 250 beds the post of one Medical Superintendent and one Deputy Medical Superintendent is enough. In the District Headquarter Hospitals at present a senior Clerk carries on the work of the Headclerk as well as of the Accountant. In the office of the District health Officers there is one Head Clerk but the accounts are maintained by a Junior Clerk. This is giving heavy responsibility to a Junior person. Proper referencing and paging of notes and correspondence, setting of files and papers in proper condition and promptness and accuracy in the disposal of work are conspicuous by their absence. Drafting and noting are poor. Knowledge of procedure and regulations and ability to handle difficult cases is also lacking. The standard of recruitment is matriculation but the work and transactions of the offices are carried

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out in English while an average matriculate cannot write correctly even a single sentence. Therefore, the standard of Junior Clerk should be raised from Matric to Intermediate. The account side suffers still worse. There are no arrangements for in service formal training for the account matters to the ministerial staff, while they are expected to be well conversant with the rules and regulations regarding financial matters. It is imperative that formal in service training should be imparted.

Regular Accountants should be provided in the office of District Health Officers and Medical Superintendents and Medical Superintendent should have a regular Head Clerk. District Headquarter Hospitals with 250 beds and above should have a Head Clerk of the scale of Assistant as is at present in the special institutions. The work in the special institutions is of much greater responsibility than that in the office at the district level. It is my considered opinion that the posts of Head Clerks in the special Institutions, which carry the scale of an Assistant, should be up-graded to that of Superintendent in the interest of efficiency of the institutions concerned. In this connection it may also be noted that most of the officers appointed against independent posts are absolutely unaware of the financial regulations and consequently they fall prey to the irregularities committed by the ministerial staff working under them. It is, therefore, necessary that before posting against independent drawing and disbursing jobs, such officers must be given training in the technique of financial matters.

In the Tehsil Hospitals at present there is no ministerial staff provided in the former punjab area. A senior Clerk and one junior Clerk should be provided in the Tehsil in view of the newly proposed re-organization and upgrading.

Linen supply in hospitals usually falls under three broad categories (1) Medicines and Medical Equipment like X-Ray films, Chemicals, apparatus and dressings etc. (2) Bedding and clothing (3) Diet and articles other than the above. Funds allocated for the medicines, equipment and stores and even food are too meagre.

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Sometimes back the optimum contingent grant per bed per day in the teaching hospitals was estimated at Rs. 12/-, in the District Headquarter Hospitals at Rs. 10/- and in the Tehsil Hospitals at Rs. 8/- respectively. Actual allocations are far below the standard. To give an example I quote my own hospital, the Lahore General Hospital Where the contingent per bed per day is Rs. 3.87 only. That is why there is always hue and cry amongst the patients, public and press about deficiency of medicines etc. in the hospitals. This is, because the overall allocation to health Department was Rs. 4.72 crore from the Revenue side and 8.36 Crore from the Development side. Out of this, 8.36, has been allocated to Malaria Eradication Programme and 2.76 to the Family Planning. Only 13.52% of the development budget is being Given to Health Department.

Then comes the difficulty in the form of curbs on the utilization of what ever meagre amounts are actually allocated. The medicines and medical equipment are usually to be purchased from the Medical Store Depot. A certain amount is allocated for the local purchase of medicines but the storage position in the Government Medical Store Depot is far from satisfactory. For example at the present moment such daily use articles as Methylated Spirit, Gauze, Bandages and cotton are not available at the Medical Store Depot for the last more than six months.

The procedure of local purchase of medicines not available at the Medical Store Depot is very cumbersome and restraining. Only 15% of the total budget under pharmaceuticals can be utilized for local purchase. 25% of the 15% is within the competency of the Medical Superintendent. This amount is not enough even for a single item of daily use mentioned above. The remaining 75% lies with the Local Purchase Committee comprising the Medical Superintendent and two other members nominated by the Secretary Health. Thus 85% of the budget under pharmaceutical has to be obtained from the Medical Store Depot from where things are not available by and large. For the procurement of these non-available articles the indent is to

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be submitted to the Industries Department through the Secretary Health with resulting inordinate delay. It has been pressed by the Industries Department that with forethought and foresight, the hospital authorities can submit the indent in time but it is not understood how foresight and forethought can bear fruit when two agencies are involved. The hospital authorities can submit indents to the Medical Store Depot at proper time keeping in view their store position but how they can know as to what articles will be supplied by the Medical Store Depot and what will have to be indented from the Industries Department subsequently.

The erstwhile Government of West Pakistan set up a working group in October, 1969, on the subject of decentralization of financial and administrative powers at various levels. Mr. Irshad C.S.P., the then Additional Finance Secretary West Pakistan was Convener of the Working Group and Mr. Mahali Ahmad P.H.E. (I) Director General Buildings, Mr. A. Butt Joint Secretary Education and myself were members. Recommendations were made by the group and these were scrutinized in the meeting of the Secretaries to the then Government of West Pakistan under the Chairmanship of Mr. V.A. Jaffary S.Q.A., C.S.I., the then Additional Chief Secretary West Pakistan. Mr. Irshad Ahmed wanted to know at this meeting if the recommendations were to be approved by the Governor before execution but the Additional Chief Secretary gave a signal to go ahead. One of the recommendations made by the Group and accepted by the Secretaries Meeting was regarding the local purchase of Medicines in the hospital and it was that the Medical Superintendent would be allowed to utilize 25% of the allocation for medicines etc. for local purchase and 75% from the Medical Store Depot, Lahore. In case of non-availability from the Medical Store Depot the remaining amount also was to be utilized in the procurement of medicines by local purchase by the Medical Superintendent.

While the Finance Department published in the gazette the recommendations pertaining to them, the Industries Department has not to this day budged an inch

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from its position and the recommendations regarding local purchase are still waiting to see the light of day, although the curbs on the local purchase of medicines have crippled the supply of medicines in the hospital. The Medical relief in the hospitals has therefore, deteriorated. These recommendations should, therefore, be got implemented.

In this regard I am voicing the sentiments of the whole department. In the annual conference of Medical Superintendents and District Health Officers in 1969, problems and suggestions were put forward by all the participants but the only common difficulty expressed invariably by every participant was about the procurement of medicines.

A substantial amount of the contingent grant goes to the pocket of the middle man i.e. contractor in the procurement of stores etc. It would be in the fitness of things if the Government may see their way to have the supply of articles from the manufacturing firms. They are presently reluctant to make supplies on credit basis. On the other hand the hospitals are not in a position to effect the same on cash payments there being meagre amount with them in the permanent advance. A high level committee is needed to go into this affair.

The equipment side also needs streamlining. Lot of equipment lies un-installed and out of order for minor spare parts. Machinery and equipment is supplied but the installation is not made a part of the purchase deed. It should, therefore, be made obligatory that all supplying firms shall install and then give demonstration of the working condition of the equipment supplied by them and they shall also undertake regular servicing for a particular period and shall also be bound to supply spares to a certain extent.

In the dispensary patients have to go to one counter for pills, to another for

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mixtures and then to another for injections etc. This rolling about of the patients should be eliminated.

Every hospital down to the Tehsil should have telephone. Upto the District level there should be exchange but this exchange should not be on the S.T.D. system to avoid misuse.

Information departments in the hospitals are un-satisfactory. Regular receptions should be established to give all information to the patients and attendants at the earliest. The Information Department should be interconnected with the Records Department in order to facilitate reference to the previous record of treatment and admission etc.

STANDING ORDERS AND MANUAL

By

*Capt. Dr. Muhammad Hanif Ahmad, PHS (I)**

The object of the original Punjab Medical Manual 1910 was to supply in convenient form, the rules and regulations governing the civil Medical department in the Punjab.

2. They are chiefly composed of the executive instructions which have been issued from time to time by :—

1. The Government of India, in the form of resolutions etc.
2. The Local Government in gazette notifications, circulars and letters.
3. The Inspector-General of Civil Hospitals with the sanction and approval of the Local Government.

A Hospital plays a vital role in ameliorating the sufferings of ailing humanity and to restore them to their normal life. This goal can only be achieved if the administration of a hospital is run under some set principals and orders so that every member of the hospital staff should know the share of his responsibilities and be able to function to the best of his capacity for affording relief to the suffering humanity.

The high authorities having laid down procedures, directives to carry out the same are issued in the form of standing orders which have the binding force to run the institutions. One may pose a couple of queries while keeping within the ambit of the topic :—

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1. If Government Officers who are entitled Medical Charges re-imbursement from their parent departments are exceptionally treated at hospitals and the poor are ignored it will be at the cost of the poor populace who will suffer. There may ensue corrupt practices and bad name to the department and dis-satisfaction of the public. The relatives will be dis-satisfied and impatient. Things will appear in the paper. So some sort of Liaison will have to be arranged.

This may be achieved by engaging a social welfare Officer or a representative of some Local Welfare Organization may be entrusted with the job.

2. Could Transportation of poor patients be arranged for treatment at higher hospitals.

3. Could Blood Banks Service be better regularized for instances are known where Blood bottles were arranged for patients but could not be administered because the patient's soul departed.

4. Like the Doctors in the Public Health side Could Medico-Legal work be entrusted to certain doctors at D.H.Qs. and Tehsil Headquarter Hospitals so as to avoid wasting of time and inattention to patients. Of course such Doctors may be given extra work like Medical stores duties of that hospital. Their posting would be inter-changeable in due time.

5. What we have inherited on achieving independence in this behalf are orders detailed for and Manual made for the smooth running of the administration of a Colonial Rule and least in the interest of the community. We are aiming at a Welfare State and as such the facilities to be offered having been chalked out, we should have clear details spelled out for the execution of such rules and regulations.

Our Departmental Bible known as the Punjab Medical Manual on which we act to-day is a forgotten and worn out hand book and standing orders in many institutions have not been introduced as such. The existing scaffolding of administration i.e. the Manual is suffering from disuse and decay and the foundations of Administration i.e. the standing orders are weak or shallow (Barring for a few exceptions of teaching institutions). Collapse of such a structure is the natural outcome which is our daily observation.

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Attempts have been made during the past 14/16 years or so to get the old manual revised in accordance with the changed needs of the community:—

1. The Late Dr. Abdul Haque a Capable, talented, veteran and a man of letters of the department busied himself for the job in 1955-56.
2. Sh. Abdul Majid O.S.D. in 1962, did a whole time job for two or three years and offered his manuscripts/amended manual.
4. Drs. Abdul Majid and Mohammad Iqbal Ansari were entrusted with the job in 1965. They held Sessions at Murree Hills during hot days and entered into correspondence with the integrating Units of West Pakistan asking for their manuals/instructions. Beyond that no progress was made. In the case of first two agencies it is disappointing to note that their contributions have never come to lime light.

And thus now in 1971 we find our Manual intact and un-interfered with like a Sacred Sovenier.

The Punjab Medical Manual deals with all affairs of hospitals and Dispensaries and-definitely provides guidlines for the new entrants to the Medical/Health Department and the public utility department. But it is really a sad affair that no serious attempt has ever been made for bringing upto date this important booklet.

Detailed duties of the Medical staff are given in the Punjab Medical Manual but it is felt that these have not been strictly complied with by the Medical personnals. Moreover some addition and alterations are also needed in view of the changed circumstances.

The Standing orders should be clearly laid down and duties of each category of staff/service/activity, should be shown clearly. The duties of Administrators, specialists, Technicians, Para-medical staff and Sanitarians down to the coolie should be clearly and separately shown. This should neither be done hurriedly nor reckoned as something trivial and entrusted to already busy officers.

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In order to streamline the administration of the hospitals/dispensaries and to fulfill people's expectations from these institutions it is essential to have a set of principals/guide lines to govern them.*

I would, therefore, suggest that a Cell may be created in the Health Secretariat to work on the compilation of Manual/instructions Book for Hospitals and Dispensaries which should clearly lay down responsibilities of Doctors/Para-medical Personnel engaged in hospitals.



*Was revised after same 20 years, since it got out of time now twice that period has elapsed and circumstances have radically changed.

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PLANNING AND DESIGNING OF OUT-PATIENT DEPARTMENT IN HOSPITALS

By

Dr. Rahmat Ullah Chowdhary,*

M. B.B.S., D.O.R.C.P.S. (London), F.I.C.S.,

The Out-Patient Department has a special place in the planning and designing of a hospital. It forms a very important section of the hospital. Some of the main reasons being :

- (i) It provides medical care to a much larger proportion of the population than other departments of the hospital.
- (ii) It serves as a gate-way to the hospital.
- (iii) Fate of the serious cases and emergencies mostly depends on how they are tackled in the Out-Patient Department.
- (iv) As much greater number of patients visit the Out-Patient Department than the indoors, hence the efficiency and reputation of the hospital depends, to a greater extent, on the organization and function of the Out-Patient Department.
- (v) The cost of medical care in the Out-Patient Department is much less than the indoor.

On account of the above facts a special consideration has to be given to the Out-patient Department while planning and designing a new hospital.

Before discussing the different aspects of an Out-Patient Department it may be pointed out that Out-Patient Department may be categorised according to the type of the Hospital/Dispensary to which it is attached.

*Joint Secretary (Medical) Government of the Punjab, Health Department, Lahore.

(1) Dispensary Out-door. No indoor facilities exist at the dispensaries. The whole dispensary functions as out-door.

(2) Hospital/Dispensary with few indoor beds. This again functions mainly as out-door.

In both these categories a single doctor functions as a General Practitioner.

(3) Tehsil Hospital : It has separate male and female sections, manned by a male and a female doctor, both working as General Practitioners. Some of the basic investigation facilities are provided at this level.

(4) District Headquarter Hospital has the facilities of medical experts and more advanced investigation facilities.

(5) Hospitals with Teaching Institution, where all types of expert consultations and sophisticated investigation facilities are available.

In the present paper I will discuss the last two categories. The Out-Patient Department may be discussed under the following sub-heads. Only a brief account of each aspect is aimed at in this paper.

1. Location :

Location of the Out-Patient Department, i.e., location of the Out-Patient Department in relation to the other department of the hospital. The following points may be kept in view while planning a new hospital with regard to the location of the Out-patient Department :—

(a) It should be at the nearest site from the main approach road. In other words it should form the gate-way to the main hospital.

(b) It should form a composite block separate from the indoor wards. Of course it should be connected with Indoor Block with easy and covered approaches.

(c) At the same time it should not be too far away from rest of the hospital.

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(d) **Satellite Out-Patient Department :** The question of having smaller Out-Patient Departments, sort of "Satellite Out-Patient Department" functioning under the same Institution, situated away from the main hospital, in the locality which the hospital is supposed to serve, may be given due consideration. The idea of satellite Out Patient Department is to provide basic out-door facilities for the common minor ailments near the home of the patient. It will function just like an out-door dispensary. All cases which require investigation and expert advice could be referred to the main Out-Patient Department. This will also reduce the congestion in the Out-Patient Department of the Hospital. One Hospital may have a number of Satellite Out-Patient Departments in the area around the Hospital.

2. Functions :

Functions of an Out-Patient Department are the same as that of a Hospital. The two functions are :—

- (a) Medical Care ; and
- (b) Training and Research.

(a) Medical care being the major function of the Out-Patient Department, importance and priority has to be given to this aspect while planning an Out-Patient Department. Requirements of each speciality, number of out-patients expected in each section, investigation facilities and ancillary rooms form the basis of planning.

(b) All big hospitals must have provision and involve themselves in some type of training and research. The training could be post-graduate, under-graduate, nurses or para-medical personnel according to the category and status of the hospital. In all these training courses, Out-Patient Department plays an important role.

3. Organization :

An ideal Out-Patient Department must provide both general and specialised facilities to all types of patients, diagnostic as well as therapeutic. The following points are to be kept in view while organizing an Out-Patient Department:

(i) **Reception & Record Office :** This office should be near the entrance gate of the Department. The official incharge of this office should be well versed in the work. A Social welfare Officer with an assistant may be sufficient. The main functions of this office are :—

(1) Receive the patient, make a few enquiries about the type of complaints he has and refer him to the respective section of the Out-Patient Department. He should make few entries, e.g. name, age, sex, etc., on the out-door chit and direct him to the respective section. It is always preferable to have different colour markings on the outdoor chits for different sections of the Out-Patient Department. The same colour should be indicated by coloured lights in that section of the Department. For example Surgical Out-Patient Department may have a red light at the entrance gate and a red line on the outdoor chit. This makes easier for an illiterate patient to reach the required Out-Patient Department. The Reception Office could also function as Record Office. The daily, weekly, monthly statements and other data be collected from the individual Out-Patient Departments, consolidated and forwarded to the main office of the Hospital. It can also function as Enquiry Office.

(ii) The Out-Patient Department should be divided into its various sections, like Medical, Surgical, Gynae and Mid-wifery, Eye, E.N.T., Paediatric, Psychiatric, Venereal Diseases, Dispensary, X-Ray Clinic, Pathology, etc. Each section should have sufficient space and seating arrangements for the waiting patients, rooms for the Medical Officers and the consultant with all the ancillary rooms.

(iii) Surgical Sections, e.g., General Surgery, Eye and E.N.T., will have facilities for minor operations and dressing rooms.

(iv) **Casualty Department :** This is a very important section of the Out-Patient Department. The emergency and serious cases are to be immediately shifted to the Casualty Department where fully equipped and trained staff should be on duty all the 24 hours. It should be equipped with all the life saving drugs including blood and electro-lytes for transfusion and other

facilities for dealing with all types of emergencies and resuscitation of the patient. A well equipped Operation Theatre is very essential for the Casualty Department.

- (v) A Family Planning Clinic adjacent to the Gynae Out-Patient Department will be very useful.
- (vi) The Out-Patient Department should have provision of diagnostic and referral services to the general practitioners.
- (vii) The introduction of day-bed and domiciliary (Home-care) facilities should also be given due consideration. The patients use these beds for pre-admission investigations and for post-discharged supervised care. The Domiciliary treatment under the supervision and advice of the Consultant through home nursing are likely to reduce the cost of medical care.
- (viii) Out-Patient Department can also utilise the services of honorary and part-time Consultants.
- (ix) Transport Section with a suitable number of ambulances is absolutely essential.

4. Records :

- (i) Each Out-Patient Department's section should have an outdoor register where necessary particulars of the patient and disease are recorded.
- (ii) Each Operation Theatre will have its operation register. The details of the patients are worked out every day from the outdoor register and Abstract Register is to be completed with these details. These data from each outdoor are consolidated in outdoor Record Office and then submitted to the Central Record Office of the Hospital.
- (iii) Periodical statements are to be submitted.
- (iv) Notification of infectious diseases has to be done according to the standing orders.

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5. Financial Support/Accounting :

This aspect has to be considered in the overall budget of the Hospital. However the different sources which could provide financial resources for maintenance of a hospital are :—

- (1) Government exchequer
- (2) Contribution by local bodies
- (3) Social Security Institution
- (4) Total or partial insurance of public
- (5) Arrangement to facilitate self-dieting or dieting on payment basis.

MEDICAL SOCIAL SERVICE UNIT

By

*Professor Miss Riffat Rashid, Ph. D.**

1. Introduction.

Medical Social Work came to be recognised as a specialized field of Social Work only recently. Stated in general terms it is the practice of certain methods of social work in a hospital, a clinic, or in any medical setting in order to make it possible for the patient to make most effective use of the available health services. The distinctive feature of Medical Social Work is that it lays emphasis on helping the patient in finding solution of social and emotional problems which confront him during the course of illness and treatment.

In Pakistan first attempt to organise Social Work Programme on scientific lines was made in 1952 with the help of a team of U.N. experts. The U.N. team also included a Medical Social Worker. Experiments were conducted to demonstrate the utility of Medical Social Work in our hospitals as a result of which Medical Social Work was introduced in some of the big hospitals.

2. Need of Social Service Units in Hospitals.

The main reason for the introduction of social service units in Hospitals is that the problems of illness cannot be tackled effectively by medical services only. Taking examples from our own country without mentioning any statistics we would say that illness in most of the cases has a aspect to which attention has to be paid for successful medical treatment.

The Medical specialist of today does not possess personal knowledge of living conditions, income, environment, habits and personality of the patient like family

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doctor of the past. This gap has to be filled by some one. It is here that a Medical Social Worker comes in. Apart from this medical social service towards removal of causes of delayed recovery by lessening the intensity of the consequences of illness, initiating improved or new facilities outside and alongside the hospital care by making the medical care and treatment more efficient in relation to existing social conditions.

3. Having given broad justification for providing Medical Social Work facilities I will now turn to the specific role of Medical Social Work Units.

The basic guiding principles for Medical Social Work in Pakistan to my mind should be.

(1) Assumption of responsibility for sharing with others in social action leading to health security.

(2) Conviction that public medical services should be available for those who need them and the utilization of such services should not bear the stigma of charity.

(3) Concern for reaching and extending services to all persons coming within legislative provision of the programme.

(4) Belief in the freedom of the individual to accept or reject medical treatment in whole or in part when the lives of others are not endangered.

(5) Emphasis upon the necessity of individualization of the sick person in a programme designated to serve large number of people.

4. *Functions.*

Main functions of a medical social worker are :—

(a) Participation in programme-planning and policy formulation of the agency.

(b) Participation in community organization.

(c) Participation in education programmes.

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(d) Participation in Social Research.

(e) Consultation.

(a) Participation in programme-planning and policy formulation of the agency.

From the experience gained in serving the individual patient, and from his professional knowledge, the medical social worker is able to recognize the gaps in the services an agency provides as well as the need for modification of policies and procedures, which are necessary for providing more effective services. This knowledge and experience should be shared by the social worker with other members of the staff of the unit where he works, either at an individual level or if there are opportunities, in staff conferences. He should also formulate his recommendations based on concrete facts and discuss this with the official of the agency and later attend meetings to explain his point of view.

(b) *Participation in Community Organization.*

By collecting and analyzing facts about the needs of the people in the community and utilizing these, the medical social worker should be able to help the agencies in providing comprehensive medical care to people or services necessary for the promotion and maintenance of their health. He should also help the community to make better use of the services offered by the social and health agencies in the community, by coordinating and integrating the available services.

(c) *Participation in Education Programmes.*

The medical social worker has to share responsibility in providing adequate field work experience and in supervision of social work students who might be assigned to the agency where he works. In addition to this, he has to participate in the training programmes of people belonging to other professions like medicine, nursing and public health.

(d) *Participation in Social Research.*

The medical social worker can undertake to study the subjects directly related to medical social work or cooperate with other professional people in a multi-disciplinary study. For example, the medical social worker notices certain problems as he works with the patients and he might decide to make a study of these problems

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either to help the hospital or the agency to provide better medical care. He can also undertake or participate in a study of problems which are of interest and concern to medical social workers or to the field of social work as a whole. In recent years, with the increased awareness of the social, emotional and environmental factors in illness, multidisciplinary studies of certain groups of patients are being undertaken by the medical people. In such studies, the medical social worker can be asked to participate and contribute his understanding of the social and emotional aspects of the particular groups.

(e) Consultation.

The medical social worker has to act as consultant to other professional members on the team of the hospital or health agency by sharing his understanding of the social and personal factors of individual cases in which they might be interested.

5. Inter-Disciplinary Approach.

To discharge the above mentioned functions efficiently and effectively it is essential to establish and encourage a team approach, with a doctor, nurse, health visitor and the Social Worker, each having a specialized knowledge and working together on an agreed unified plan of treatment, determined after careful discussion and consultation of all relevant material and information. This plan of treatment should be reviewed and revised periodically. Case Conferences and Clinical meetings can be very effective to achieve this end.

6. Administration and organization.

There are at present about 20 Medical Social Projects in West Pakistan out of which 8 have come to the share of the Punjab after the dissolution of the one Unit.

A Medical Social Work Unit in a hospital has two medical social workers—one male and the other female. They are Class II Government officers. The over all administrative control of medical social units presently vests in the Directorate-General of Social Welfare but for their day to day work they are responsible to the Medical Superintendent of the hospital. The present set up of medical social work units does not provide for effective technical supervision. In the absence of a proper administrative structure opportunities for promotion do not exist. This is causing frustration. The expansion as visualized in the five-year plans has not taken place. Since the existing projects have amply demonstrated their utility—a fact recognized

by all concerned, this field surely deserves more attention by the concerned authorities. In this connection I would like to make following recommendations :—

7. Recommendations

(1) The Medical Social Service Units should be provided in every District Hospital of the Province. In bigger hospitals the strength of these Units should be in proportion to the number of beneficiaries (indoor as well as outdoor). In my opinion appropriate number of patients to be served by a Unit should be 500.

(2) Only professionally trained social workers should be eligible for appointment against Medical social Work Jobs. However, arrangement for in service training or refresher course could be made and existing opportunities should be utilized for higher training abroad in Medical Social Work.

(3) The structure of this service should be as suggested in Appendix A.

(4) For any programme of future expansion, however, it would perhaps be worthwhile to take into consideration the following :—

(i) As a professional unit of the hospital organization the social service unit should be organized on the same basis as other departments of the hospital. It is essential to maintain centralised control irrespective of the sources of support. The expenditure, however, should be controlled through the general administration of the institution. A defined structure be established so that there are opportunities for promotion of social workers and expansion of programmes as available.

(ii) Supervision.

As hospital social work is new in Pakistan it may take a few years before hospitals can have senior social workers (not only in years but in experience too) who can occupy the posts of Supervisors of social service units within the same hospital. Therefore, a planned programme of supervisory service be developed through which over a period an effective supervisory staff is available. It is better to employ only two social workers when a social service unit is first organized in a hospital. As the work of the department grows, more workers may be taken in. All of them should be directly under the medical superintendent. Eventually the senior-most social worker should be made the Supervisor of the Social Service Unit. The Supervisor should be responsible to the Superintendent and have an equal status with otherheads of various units and join them in the discussion of hospital policies.

(iii) Volunteer Service.

The social service unit should organise a volunteer service and work in close cooperation with it. Such a service is not meant to duplicate the work done by the social service unit but to complement it. It will be helpful to have a volunteer service for getting various types of assistance e.g. enlisting blood donors, collecting gifts for children, building up a library for patients, taking patients home and raising funds for the hospital. But this type of service should not be mixed up with medical social work which requires specialised training.

(iv) Referral to the Social Service Unit.

Definite referral procedures be established which are known to all hospital departments. Ideally the majority of cases referred to the social service unit should come through the doctor. With a limited number of social workers in hospitals, a *via media* has to be framed. However due to the present limitation the social worker should interview all cases of T.B., major cases of surgery and other cases of chronic illness. From the other sections the social worker may take such cases as are referred to him/her by doctors and nurses. In those cases which he/she selects herself/himself in the course of interview, he/she should consult the physician as early as possible. Work on individual cases should always be in association with the physician responsible.

(v) Records.

Facilities be provided for the maintenance of detailed records of the patients referred to the social service units and other activities taken up by the Unit.

8. Conclusion.

There are many problems which effect the future growth of the field of medical social work. These are (a) problems arising out of lack of proper administrative structure and supervision ; (b) problems which arise in actual practice ; (c) problems due to the lack of understanding of the role of medical social workers ; (d) problems in helping the patients because of inadequacy of social welfare agencies to supplement the services of medical social units in hospitals. These problems, however, are not unsurmountable if an effort is made to overcome them. To make a beginning it is suggested that a committee of planners, administrators and specialists be constituted to advise and assist the government in matters related to the expansion and organization of medical social work, in addition to looking into the problems which may retard the growth of this field.

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THE HOSPITAL LIBRARY ORGANIZATION AND USE

By

Dr. A. Hamid Khan, MB., Ph. D. (Edn).

All hospitals are encouraged to provide libraries for their patients as well as for the staff. All new hospitals or new extensions should be planned to include library accommodation, the professional advice of a librarian on equipment and accommodation might assist the architects. The value of a library in a hospital is stressed as a branch of therapy and the position of the hospital librarian as a member of the therapeutic team is recognised. The fact that the patients and the staff enjoy the same service is helpful because when a sister takes the book she will encourage the patients to read. Books rather than symptoms become a source of conversation. A patient can recommend a book to a nurse. The hospital librarian and the other members of the hospital who read and use the library get to know each other. Such informal contacts are most useful for the patient's benefit.

A hospital library should consist of three main sections :—

1. Medical Staff section.
2. Nurses section.
3. Patient's section.

1. *Medical staff section* : The medical section makes available to the members of the staff the best literature, presenting procedures as well as that which is descriptive of the most recent developments in medicine, surgery, and the specialities represented in the services of the hospital. Text books and reference works of the latest edition are essential for ready reference with respect to standard procedures. However since new developments are presented first in current journals, each hospital medical library should be equipped with a broad selection of journals covering the literature of the last

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five years and with the indices which will make the contents of those journals accessible. The size of the collection will depend upon the size of the hospital, the availability and use made of other library facilities and the specific needs of the staff. A hospital having more than 1,00 beds and dependent upon its own resources for filling the immediate needs of the staff should have as its aim a collection of 1,000 volumes.

2. *Nurses Section.* The purpose of the nurses' section is threefold :—

- (a) To furnish suitable surroundings and equipment for inculcation and maintaining good reading habits in the student nurses.
- (b) To provide books and journals which present basic subject matter covering the courses of study offered in the school of nursing education, together with supplementary reading for nurse educators ; and
- (c) To provide additional recreational reading matter for both students and educators that will enrich the cultural background of the individual, broaden the horizon, and assist in the development of a rounded personality.

A library which meets these requirements will aid the students in the evaluation and application of the subject matter presented to them and will lead to an increased appreciation on the part of the educators of the importance of the library in the nursing school programme.

3. *Patient's section :* It is now generally recognised that patients, libraries are an essential part of any hospital service. To the sick the companionship of books is vital. Reading can distract, encourage or help the morale of the patient. There are patients with a poor prognosis and reading can help them through time of difficulty and pain. When a patient enters a ward or is waiting to be admitted the site of a book trolley can have a calming effect. Old people specially with fractures in a hospital unless they have kept their minds occupied by reading literature of their interest will deteriorate and they will become feebler and senile.

Books greatly help the sick child. As with other patients, reading can divert child's attention from pain and weariness. Many a crying child can be calmed with a book. The child who has found interest in reading will be calm, relatively free of

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home sickness, and distracted from concern with his own discomfort or pain. He will consequently be a more cooperative patient and more likely to accept the treatment.

Nature and Planning of Hospital Libraries.

The service has been devised to provide for

1. Patients in the ward.
2. Ambulant patients.
3. Medical and nursing staff.
4. Administrative and technical staff and.
5. General practitioners in the surrounding area.

The library comprises :—

1. A general recreational library.
2. Medical Library.
3. Book store which should also provide for parking space for trolleys.

Location of the Hospital Library.

The library should be located in a place which is easily accessible and should be near the centre of the hospital and near the lifts. It should be positioned to avoid steps and stairways. It should be well placed for patients coming from ward blocks and for the staff to use with ease.

It should be in a quiet location, close to the entrance which the physicians habitually use when entering in the hospital or in some other situation convenient to the major part of their work. The reading room should be cheerful and attractive and equipped with study tables, proper lighting and other facilities that will encourage study.

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Size of the Library.

The size will vary according to the size and type of the hospital. Provision must always be made for a parking space for trolleys and a space for storing reading aids, and book rests etc., It should be adjacent to the library. Space for chairs, tables, typewriting table, water supply and basin should be provided. The minimum accommodation for a library in a 300 bed hospital with the above functions would be approximately 800 square feet including both the staff and the patients. Doors should be wide to admit wheel chairs easily. There should be a cloakroom with in easy distance. The library must have a telephone. It should have a pleasant informal atmosphere. In planning a library service consideration should be given to trolley service which makes regular visits to the ward at frequent intervals. The trolleys may be made of wood or metals and the wheels with pneumatic tyres. There should be a provision for separate reading rooms for the patients and the staff.

Provision of the Reading Material for the Patients.

There should be well balanced collection of books and other reading materials, e.g., fiction, non fiction, travel books, biographies, war stories etc. The choice of books should be representative and chosen for all tastes. The library authorities must take into consideration the personality and education of persons concerned as well as the nature of the illness and duration of stay in the hospital. The books should be clean and attractive and plastic jackets and scenic bindings are an advantage. A considerable demand exists among the patients and hospital staff for books about the hospital life and books written by or about those who have suffered from some disease or physical disability. Obviously those which include much gruesome details or in which the principle character dies should not be available to the patients. But many of the personal narratives tell how the disease has been cured or the disability overcome are of advantage. The most popular stories of hospital life in which the attention is centered more on medical success than on failure are helpful. Books on medical subjects should not be on the shelves of the library and should not be open to all the readers. They are for staff reading only and could be harmful to patients, unless recommended to a patient by his doctor. The book's stock should be changed fairly frequently to prevent staleness and for the benefit of long stay patients and the staff. The types and books and subject in demand in a hospital library are so many and varied that a large central pool is essential. The number of books may depend upon the size of the hospital. Various stands have been recommended. The American Library Association recommends the following ;—

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8 Books per bed upto 300 beds.

7 Books per bed upto 301 to 500 beds.

6 Books per bed upto 501 to 800 beds.

5 Books per bed upto 800 to 1100 beds.

Different types of reading aids and equipment for the handicapped should be provided. Book rests, reading stands, bedside tables, page turner for paralysed (poliomyelitis patients) are essential requisites for the library.

Duties of a Hospital Librarian.

It is almost generally recognised that a trained librarian is essential in any hospital library organization. A librarian with professional training and experience should be appointed in a big teaching hospital. A hospital librarian should have a good knowledge of books, kind understanding of people and liking for the work as well as being physically strong. The librarian must be controlled, tactful, self reliant, resourceful and the reward is a job which never becomes dull and in which there is always something to learn. A hospital librarian can help to direct the patient's thought away from the hospital and the sickness. There should be a head librarian with an assistant for every 60 to 100 beds. The librarian themselves may be full time qualified person or unqualified volunteers or both or people with some training or experience. The size of the staff depends upon the size of the library and the hours during which the service is provided. The hospital library service is however, a useful field in which to employ volunteer workers. The work can easily be picked up so far as it relates to the issue and return of the books. It is good for all new in patients to be visited by the librarian as soon as convenient after they have been admitted.

Library Committee.

The library committee may consist of three to five persons selected from the members of the medical staff including one from the Nursing Staff and one person from the Library Association, and should function as a permanent committee. An interested member of the governing board of the hospital might also be included on this committee. The duties of the committee are to foster and encourage contributions in support of the library and to act with the hospital administrator and the librarian

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Budget.

After the library is established, an adequate budget administered by the librarian should be provided annually in the hospital budget for the books and related materials, supplies and equipment. A definite amount should be set aside to provide for an annual turnover of at least one-fifth of the book collection. The purchasing of the library items should be in accord with the business procedures of the hospital. Often the budget can be supplemented by gift solicitations and donations by voluntary organizations both national and international. The Red Cross organization may be very helpful in this respect.

THE EMERGENCY DEPARTMENT

By

Colonel M. Latif *

Introduction.

Emergency services are complementary to Inpatient care and non-hospital services of the patient. Public expects services in an emergency from most hospitals. Emergency Department, in the vast majority of hospitals, is a vital unit of Out-patient department. Emergency Department is no longer an 'Accident Clinic', but is the first choice for the medical care of any kind as the public looks to emergency clinic for 'Instant Medical Care!.

In United States during 1948¹ there was one out-patient visit per day for each 3.5 occupied beds, as compared to the average of one visit daily for each occupied bed during 1963.

Emergency Cases.

Most of the cases who come into emergency clinic system consist of the following :—

a. Traffic Accidents.

b. Suicides.

c. Catastrophies.

d. Poison Victims.

Public Concept of Emergency Department.

It is a community medical centre where any one may apply with any complaint, at any hour of the day and night, and expects prompt and courteous attention as his due.

*O.C., C.M.H., Cantt Lahore.

This concept must be accepted as a community obligation by governing board, hospital administrators and the professional staff.

Organizing Emergency Services.

It is essential to base the organization of emergency department services on some criteria so that this weak link in the chain of hospital care could improve.

Under the auspices of the governing authority, the medical staff and administration should act through a representative committee on emergency service and formulate policies governing organization, administration, the services and relationship of the emergency department with other hospital departments. Its relationship in a hospital should be that of a major department. Competent professional staff should head this department and be responsible through the Director of Outpatient department to the hospital committee on emergency services. Such professional staff should have sufficient tenure to provide continuity of programme both clinical and administrative.

Personnel.

Medical staff coverage should be sufficient to ensure that an applicant for treatment will be seen by a doctor with the least possible delay—not exceeding 15 minutes under any circumstances.

A doctor on second call should be available for unexpected or unusual contingencies.

There should be a mechanism whereby specialized medical services can be obtained as promptly as possible when needed.

A roster of available specialists should be pasted in the emergency department.

The nursing staff should be adequate to handle the average load with provision for additional nursing help during peak hours or unusual circumstances. A sufficiently long permanent tenure of the senior nursing staff or supervisor is desirable.

Whenever practicable the nursing staff should not be required to carry out administrative duties normally performed by the business office.

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Building, area for Emergency Department.

The Emergency department should be located in an area easily accessible to the emergency patients. It should be away from the main hospital entrance.

The emergency entrance should be well marked and illuminated and easily accessible from the main street/road. The ideal would be a 'DRIVEIN' emergency department where ambulances can get sufficiently covered and enclosed area to protect the casualties from wheather conditions during unloading into various emergency reception booths. Space for stretchers and wheel-chairs should be reserved immediately adjacent to the entrance. Waiting room space with telephone, toilet and drinking water should be provided separate from the working area. The buildings should be of sufficient size to accommodate working personnel, equipment and supplies required for good patient care. According to the programme of the Hospital, the following facilities should be considered for inclusion in the Emergency department building :—

- a. Examining and treatment rooms.
- b. Observation beds.
- c. Doctors Call room.
- d. Security room.
- e. Police, Ambulance Attendant and Reporters room.
- f. Family room.
- g. Utility room.
- h. Nurses Station.
- i. Drug, Supply, Equipment and House keeping Storge-Converient to the emergency department.
- j. Sweepers room.
- k. Admitting and Record office.
- l. Staff Toilet.

X-Ray and laboratary services should be available or easily accesible.

Policies, Procedures and Standing Orders.

Standing Orders for the emergency departments should be properly written and

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made available to the staff and personnel. These orders will be subject to periodical review by the Hospital Committee on Emergency Services.

a. General Policies should cover --

Records and Statistics.

House keeping and maintenance.

Budget and assets.

Fire and Safety.

Traffic and Amb/Non Amb transport.

Public Relations and legal aspects of information.

Professional Education.

General Evaluation.

b. Specific medical, nursing and administrative policies should cover 24 hours operations :—

(1) It should be defined as to what constitutes an 'Emergency'.

(2) Types of patient to be cared for must be established.

(a) General Public.

(b) Private physicians' patients.

(c) Police cases.

(d) Employees and Students.

(3) Consent for treatment— agreement form and procedures are required.

(4) 'Dead on Arrival' - Policies and procedures necessary.

(5) Treatment policies and Procedures should cover Diagnostic - Laboratory, X-Ray care and consultation requirements and Therapeutic to include as follows :—

(a) Major or minor Accidents.

(b) Unconsciousness.

(c) Bites and stings.

- (d) Burns.
 - (e) Fractures.
 - (f) Head Injuries.
 - (g) Poisoning.
 - (h) Shock.
 - (i) Tetanus.
 - (j) Mental Cases.
- (6) Drugs and Narcotics should be subject to written policies, procedures and security regarding administration, dispensing, storage and recording.
- Poison Charts and the name of the nearest Chemical Analysis Laboratory should be displayed at a prominent place.
- (7) Written down policies should be available with the Emergency department as to when can a case be released/discharged ; how the continuity to be maintained as a follow-up of patients.
- (8) Personnel policies as for any other department equipment and supplies, policies and proceeds to make up the efficiency and economy, be laid down.

Records.

Medical records must be maintained of all patients cared for in the emergency department. Such records should contain an accurate description of the condition of the patient on admission, care and treatment given, disposal and condition on disposal. A suitable pattern/proforma 'Patients' Admission Information' should be prepared, standardized and periodically reviewed to ensure adequacy of information. The attending physician should be responsible for the contents and completion of the patient's medical record. In respect of the form, record, maintenance, filing, confidentiality and legal aspects the Emergency Department medical records will be subject to the policies of the hospital and its Medical Records Committee.

Emergency Department and its attached Services.

The emergency department is a vital unit of Outpatient department. How-so-ever complete it may be, it cannot function efficiently unless excellent attd. services exist—

- a. Telephone service.
- b. Ambulance Car Service.
- c. Extensive list of physicians and a referral service.

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Emergency Service.

Individual patients, their families, agencies and other third parties are demanding, receiving and paying for the high quality of care deemed necessary and desirable by the public, patient, physician and hospitals. The hospital prepared to handle the minor emergencies in an expeditious manner will be potentially in a position to cope with major catastrophes. It will be ready to serve the community in the way it expects to be served, to make it possible for the medical profession to render quality care. This does not come about by chance. It requires good planning, organization, programmes and procedures with continuing evaluation—in short good administration. The medical staff is vitally concerned in all these phases. There is a responsibility for both the medical staff and administration to develop an interest in evaluating and improving emergency service in all hospitals. Future hospital will have to cater for the new pattern of diseases and fulfill the need for continued medical education and a high quality medical care for the patients without, of course, losing sight of a high standard of an always—open Emergency/Casualty department. Public dissatisfaction with casualty service is justified. The need for leadership and executive action on the part of authorities to review, reorganize and improve services for the emergencies exist. Generalization about the organizational pattern of hospital emergency department for a community is difficult due to lack of information regarding variations in type and frequency of casualties and the services provided by the general practitioners.

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PLANNING OF THE FUTURE HOSPITALS IN THE PUNJAB

By

Dr. H.M. Mallick

*M S , P.H.S (I).**

Admitting Department.

Admitting Department as a separate entity does not exist in any of our Civil Hospitals in the Punjab at present but while planning for future hospital services it will be worthwhile to consider its usefulness as a separate department. At present I have no such model before me but from the experience of working in various hospitals I feel there is necessity for such a department and we can plan it in accordance with our own conditions.

The existing state of affairs is not praise worthy for the following reasons. A patient coming for admission to a big hospital usually gets lost and lack of simple information often adds to discontentment of the public. Patients reporting at our outdoor departments are examined by a Medical Officer or a Specialist and some of them are advised admission. But in most of the hospitals all such patients do not get admission straightway. Shortage of beds is a problem in all good hospitals and this shortage of beds is likely to persist for quite some time. So the patients try all sort of tactics to get selected for admission. Then the rejected patients are not given a firm date for their admission. They try the next day and then the next. Either they are lucky to get bed or they leave for some other hospital, utterly dejected and cursing the doctors.

Again you will find that once a patient is admitted in a ward without the knowledge of his relatives, it is almost impossible for them to locate him in the hospital untill they come out the whole of hospital themselves. Very few can guide them. So called 'the enquiry Office' is seldom of some help to them as it does not possess the record of admitted patients. Then again if a lonely patient gets serious and dies in hospital, his relatives are usually not timely informed and it plays upon their mind the whole of their life. The ward people are busy on the treatment side and the

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office of the Medical Superintendent or R.M.O. are not open 24 hours to help in locating and intimating the next of kins. Delay in these simple humanitarian issues is usually taken as callousness of the hospital staff. These are some of the existing difficulties that call for the necessity of opening a separate Admitting Department in big hospitals. Hospitals with bed strength under 200 need not have a separate admitting department for the present, as the work load will not justify it.

The experienced among you will agree with me that selection of patients for admission is a tricky business especially where the state of affairs is proverbial "EIK ANNAR AUR SAU BEEMAR"-nay-"EIR DED AUR SAU BEEMAR". Pathological State of the patient, no doubt is of prime importance but certain other considerations also influence the selection; for instance, in teaching institutions a patient of a rare disease is of great value. Again a poor patient who has just managed to reach the hospital from some distance and has no one to give him shelter in the city has priority over a well to do patient who can wait.

The Medical Officer or the Specialist advising admission will categorize the patients according to their Pathological state into three categories :—

1. *Emergencies* :—These cases cannot be refused and will be admitted forthwith.
2. *Semi Urgent Cases* :—They are to be admitted within 2-3 days.
3. *Ordinary Cases* :—They are to wait for longer period, if a vacant bed is not available.

After categorization the case is passed on to admitting Department. The outdoor Medical Officers have no time to go into other details, they may leave it for the admitting Officer to investigate and allocate a bed. The Medical Officer or the Specialist is thus saved the headache of finding a bed for the case or to argue with his attendants if no bed is available.

Functions of the Admitting Department will therefore be as follows :—

1. Maintenance of Central Admission/Discharge Register of the Hospital and consolidation of daily bed statement of the hospital. The department will keep liaison with the wards and maintain an upto date list of vacant beds. Any alternation in the location of an admitted patient i.e. transfer to other ward, discharge or death will be promptly intimated and recorded.

2. Recording of general particulars including financial status of patients at the time of admission. The admitting Department will give a serial number to each patient, allocate the ward and then hand him over to concerned ward Nurse.
3. It will maintain a waiting list of such patients who cannot be allocated a bed straightway. A firm date for admission will be given to them. Any correspondence in this respect will be handled by the Admitting Department.
4. It will keep a check that Ornaments and other valuables that are likely to be lost are not taken to wards. These should preferably be handed over to the relatives or kept in safe custody of the Admitting Officer. He will issue a regular receipt for such items and return to the patient on discharge.
5. It will counsel the attendants and the relatives of the patients regarding hospital routine such as restriction on attendants, visiting hours, Diet etc. and intimate what personal articles the patient should take with him into the ward.
6. It will answer all enquiries regarding admitted patients and convey telephonic messages from their relatives.
7. It will maintain a list of all dangerously ill patients and where the patient is all alone, his next of kins will be promptly intimated ; similarly disposal of an unclaimed body will be arranged through this department.

Location.

Location of the Admitting Department should preferably be in between the outdoor and the Indoor Departments and on the way to the wards so that after getting admission slip from the outdoor Department or the Casualty the cases pass through admitting department before entering the wards.

Equipment.

- (i) Telephone external as well as internal link with each ward.
- (ii) Wall boards showing daily bed statement of the hospital and No. of seriously ill patients.

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- (iii) A safe for keeping valuable articles of the patients.
- (iv) Admission register, necessary stationery, a typewriter and furniture for a small office and waiting place.

Personnel.

The admitting Officer need not be an active Medical Officer, but he should be well versed in Medical terminology and experienced in handling general public. A retired Officer can suit the job. He has to be patient, tactful and considerate towards the sick. The admitting Officer will be assisted by one or two assistants depending upon whether the department is to function in 2 or 3 shifts and this in turn will vary with the bed strength and casualty work load of the hospital. Since the Department will deal with public enquires about the patients, hence usual office hours or Hospital outdoor timings will not be sufficient. In a medium sized hospital the department should remain open for 14-16 hours a day, thus necessitating staff for two shifts. The department may have only one clerk but two class IV servants will be needed for each shift to serve as peon/messenger/stretchers bearer.

Conclusion.

It will be noted that financial implications for setting up a separate Admitting Department are not at all heavy while the benefits are many. So I hope due consideration will be given to it while planning future hospitals.

ADJUNCT DIAGNOSTIC AND THERAPEUTIC FACILITIES

By

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The adjunct diagnostic and therapeutic facilities are diagnostic laboratory services, diagnostic radiology facilities, radiotherapy services, nuclear medicine facilities, blood transfusion service and Physiotherapy facilities.

Adjunct diagnostic services are the backbone of a scientific system of medicine. They not only aid in the correct diagnosis and management of patients but also restrict the wasteful use of costly and dangerous antibiotics. Haphazard treatment is obviated and unnecessary medication diminished.

Hospital Laboratory Services.

These will vary with the bed strength of the hospital.

1. Teaching Hospitals.

Laboratory work is no longer restricted to clinical pathology but has developed into different specialities such as bacteriology, Virology, Mycology, histo-pathology, haematology, biochemistry and parasitology. Justice cannot be done to these different specialities by the appointment of a professor of pathology who cannot be a specialist in all the branches. To cover up this discrepancy assistant professors in the branches of bacteriology, biochemistry and histo-pathology have been appointed. The Sections of Virology and mycology are non-existent. It is proposed that professors in the 4 major branches should be appointed and that virology and mycology sections should be started. A clinical pathologist has been appointed in all the hospitals. He undertakes the investigations of a clinical side-room laboratory. He is aided by a group of semi-educated Laboratory assistants and his working is generally lacking in accuracy of performance so that his reports are not relied upon. It is important that the efficiency of his laboratory and that of the pathology laboratory as a whole be

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improved so as to inculcate a spirit of reliability and respect in the eyes of the clinicians. Two important remedies are suggested.

(1) The Setting up of a Reference Laboratory in the Province.

The rudiments of such a set up is already present in the name of "bacteriologist to, the Punjab Government." It is proposed to reorganize this into a provincial reference laboratory manned by a group of experts with the following duties.

(1) Administration.

All laboratories of the province both hospital laboratory service and public health laboratory service should be placed under the technical guidance of the central reference laboratory.

(2) Reference Work.

All laboratories in the Province should send important isolates to the central laboratory which should categorize them and built up a type culture collection.

(3) Standardization of Laboratory Techniques.

The Central Laboratory will standardize all the procedures to be followed by the laboratories in the Province so as to ensure proper performance and reporting of tests. The Director Public Health Laboratory Service will ensure that the subordinate laboratories follow these techniques by repeated visits to the subordinate laboratories and arranging refresher courses for its workers.

(4) Teaching.

(a) M.Sc. & Ph D. for medical graduates.

(b) Post-graduate courses for graduate laboratory technicians.

(c) Refresher courses for doctors and laboratory technicians.

(5) Research.

To ensure development on modern lines one of the foremost duties of central laboratory will be setting up of reference cells. The function of these cells will be to

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collect literature on all the modern techniques, to carry out research in various branches and to keep the service in touch with all modern developments.

(II) *Paramedical Laboratory Technology Training.*

The backbone of a scientific laboratory service are the trained para-medical personnel. Graduate courses for laboratory technicians should be spelled out, a proper cadre for the service created with balanced career planning, job opportunities, rotation between the teaching institutes and subsidiary hospitals and arrangement for refresher courses etc. should be planned.

2. *500 Bedded Hospital.*

A Pathology Laboratory carrying out bacteriology, histopathology, haematology and bio-chemistry work should be set up. Virology, mycology and other specialized work should be sent to the affiliated teaching hospitals. The following staff should be employed.

1 Pathologist, 3 Assistant Pathologists,

4 Graduate technicians, 4 Laboratory Assistants etc.

3. *100 Bedded Hospital.*

A clinical pathology laboratory to carry out bacteriology, Haematology and bio-chemistry tests should be set up. It should be headed by a clinical pathologist aided by 1 graduate technician, 1 laboratory assistant etc. Histopathology, Virology work should be referred to 500 bedded hospital and the teaching hospital.

4. *25 Bedded Hospital and Rural Health Centre.*

A routine clinical laboratory staffed by graduate technicians and a laboratory assistant should be set up. Work which cannot be performed at these centres will be referred to the laboratories mentioned above.

In order to keep the entire service in a dynamic state it is important that these laboratories should be interlinked and placed under the technical guidance of the central reference laboratory. There should be a rotation of the staff between the various laboratories. Refresher courses should be arranged at the teaching institutions and the central reference laboratory.

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DIAGNOSTIC RADIOLOGY SERVICE**1. Teaching Institutions and 500 Bedded Hospital.**

X-Ray facilities already exist in the various teaching institutions of the Province. They are at the moment inadequate to deal with the needs of the attached hospitals. It is suggested that there should be a qualified medical Radiologist assisted by two medical Radiologists. The need for two assistants arises because one assistant is generally away on medicolegal evidence. Facilities should be available for investigating all types of specialities and medico-legal work. There should be 2 or more plants depending upon the bed strength of the hospital being served. In addition there should be 2 portable plants and one mobile plant. Special Radiology equipment for Tomography and spot radiography should be available. Graduate and F.Sc. technicians with proper training and cadre should be appointed.

A difficult situation arises due to poor availability of service and repair of equipment which should be looked into. There is a normal wear and tear of machines so that new equipment is needed after a certain time. Budget provision every 5 years for purchase of up-to-date new equipment should be provided.

100 Bedded.

X-Ray facilities for all types of investigations should be available at the district level. 2 Modern X-Ray Plants, 2 Portable plants and one mobile plant should be available. The Staff should consist of Medical Radiologist assisted by 1 Radiologist, 2 graduate technicians, 2 F.Sc. technicians, 1 Sister and 1 Clerk.

25 Bedded Hospital and Rural Health Centre.

The Medical Officer at these Centres should be given a 3 months refresher course in the reading of X-Ray. He should be assisted by 1 graduate technicians and be provided with 2 small plants.

Training.

A 2 years training course is already being run at Mayo Hospital for medical post-graduates. Graduate classes for Para-Medicals should be started.

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Radiotherapy Facilities.

No Radiotherapy facilities are required at the Rural Centres or the Tehsil Headquarters or the District Headquarters for the following reasons :

- (1) Radiotherapy is a treatment of a highly specialized nature which requires the collaboration of all other medical specialities.
- (2) The expense involved in the treatment does not justify setting up of small units.
- (3) Inadequate treatment is not desired.

It is hence proposed that facilities should only be available at the 500 Bedded Hospitals for the time being. Although available at these hospitals they are lacking in some aspects and should be improved,

The suggested improvements are :—

- (i) Provision of Equipment and Cyto-toxic drugs.
- (ii) The bed strength should be increased according to the population being catered for.
- (iii) Para-medical staff should be given graduate training in the speciality.
- (iv) If there is a programme for cancer control a cancer surgeon should be attached to each divisional set up.

Training.

A 2 years post graduate training course in Radiotherapy is already available at Mayo Hospital, Lahore. Graduate courses for Para-medicals should be started in the speciality,

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Nuclear - Medicine.

Under the atomic energy commission one Diagnostic cum curative unit has been set up in Lahore and Multan respectively in the teaching institutions. They are well equipped and efficiently run. The Commission is proposing to set up centres at Rawalpindi, Bahawalpur and an Institute of Nuclear Medicine at the proposed new campus medical college and hospital at Lahore.

A unit should be set up in each 500 Bedded Hospital.

Patients treated with radio-active drugs have to be isolated from the general population so that 10 small isolation cubicles should be attached to each centre.

OPERATING THEATRE DESIGN

By

*Prof. Hamid Hussain Mirza.**

The purpose of an operating theatre is to provide a good environment for conducting operations. To achieve this object, there are at least three requirements :—

1. Safety and consideration for the patient.
2. Good Bacteriological Control.
3. Good working conditions for the staff.

The Patient :— The patient is the person principally concerned in the complex ritual daily enacted in the theatres. From this point of view, the ideal would be for the patient to fall asleep in bed and wake there several hours later with the business all over. But the movement of unconscious patients about the hospital is fraught with risks and so this ideal arrangement is not possible. The next best thing would be to move the patients quietly in their beds into a special Reception Ward in the theatre suite. This arrangement has several advantages. First, there would be no urgency in the transfer of patients from the wards and no hurried instructions telephoned from the wards. Secondly, the anaesthetic staff would at first hand, supervise the premedication and other treatment of their patients. Thirdly, the patient would be received in the theatre suit by experienced Nurses and would not have to wait on a trolley in a corridor either too cold and windy or too hot and exhausting surrounded by nervous relations and attendants. From the Reception ward, the patient would in due course be moved into the appropriate anaesthetic room quietly and without fuss.

After the operation is over, most patients will be moved into the recovery ward under care of the anaesthetist and experienced nurses with full facilities for post operative resuscitation. Finally when fully conscious and with the cardio pulmonary functions fully stabilised he will be shifted to the surgical ward.

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This concept of clinical charge for anaesthetists is recent and timely, when so many advances in anaesthesia are being made and when anaesthetists are accepting more and more responsibility for the care of patients.

2. **Bacteriological Control** :— The wound infection rate in British Hospitals is still in the region of 10% of all cases and 2 to 5% for clean cases. It is true that most of the infection is endogenous but the stubborn 2–5% is exogenous and is due to some technical failure.

The infection rate in our hospitals is probably higher for all categories of patients. The known sources of pathogenic organisms in the theatre are :

1. The air
2. The staff
3. The patient
4. The equipment.

Air contamination is discussed in a recent monograph on Hospital Infection by William and his colleagues (1960).

The following points are worth mentioning.

(1) There is a basic though very low bacterial content in the theatre atmosphere. Things begin to go wrong when the theatre staff comes in but after the patient's entry they are even worse. The count settles down during an operation but rises again after the operation when towels and swabs are thrown about. The bacterial count in the theatre with exhaust ventilation is much more than with Plenum ventilation.

It is therefore, essential that a good theatre design must include plenum ventilation at about 12-20 air changes per hour with minimum movement of the staff.

That staff is a major source of wound infection has been proved beyond doubt (Mitchel et al 1959).

Thus in designing an operating theatre we must make it a cul-de-sac in which casual visitors are unwelcome and we must try to ensure that all its occupants are clad in sterile clothing. That the patient himself is a source of infection has also been proved beyond reasonable doubt. Shooter and his colleagues have shown that the

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percentage of patients carrying penicillin resistant staphylococci in the nares rises sharply during the week after admission and that the incidence of wound infection also rises with the length of pre-operative hospital stay. This point must be taken note of and pre-operative investigations should be carried out in the out patients as far as possible. Another investigation has been done about the relationship between the use of theatres and the incidence of wound infection. It has been found that wound infection is least likely in the first case on the list. After three or four operations have been done the infection rate rises steeply and subsequent cases run the risk of wound infection which is seven times greater than the first case. This argument goes in favour of short and frequent operating lists and it goes against long operating lists carried out once or twice weekly. This will also mean that a larger number of operating theatres have to be provided than in the past.

Equipment :— It is now universally realised that boiling is in-effective and so un-acceptable for sterilisation.

At present the favoured method is sterilisation by high-pressure steam in an autoclave. Even this may be superseded by other methods such as gamma radiation. For the present it seems reasonable to plan for high-pressure steam.

Most Surgeons have been brought up on and have continued to use arrangements by which sterilisation is done immediately next to the operating room itself. Often a sterilising room is shared by two or more operating rooms. Such an arrangement carries two disadvantages : —

- i. It encourages cross-infection.
- ii. It produces much undesirable heat and humidity.

It is desirable to take as much sterilising as possible away from the immediate vicinity of the operating room.

All routine sterilisation of instruments, towels, gowns, bowls etc. should be organized elsewhere. This organisation — the central sterile supply department should be situated in immediate vicinity of the Operation Theatre, may be in a floor high or lower than the operating theatre suite and connected to it by hoists. After each operation the instruments should be washed and returned by a separate hoist to C. S. S. D.

It will be readily appreciated how important it is to decide at an early stage of planning exactly what arrangements will be used for sterilisation.

Before leaving the subject of bacteriological control of the operating theatre suit, it must be pointed out that the arrangement of rooms within the operating area is of fundamental importance. This leads us to the modern concept of "Zoning" of the operating area. Four zones are necessary : —

1. A protective zone containing the changing rooms, the reception room and post operative recovery unit.
2. A clean zone containing anaesthetic rooms and scrub-up rooms.
3. A sterile zone containing operating rooms and rooms for preparation of instrument trolleys.
4. A disposal zone containing rooms for receiving used instruments, soiled linen, swabs and dressings.

Air circulation should be from cleanest zone to clean and disposal zone.

To avoid risk of cross-infection from one operating room to another these rooms should not communicate with each other and each operating room should have its own scrub-up and anaesthetising rooms in the clean zone.

All operating rooms should be identical in design but not of mirror-image type.

3. *Good Working Conditions for the Staff.*

An operation room is commonly overheated, too humid and illventilated to such a degree that all who work in it are exposed to undesirably harsh physical conditions.

Surgeons, Anaesthetists and the Nursing staff spend long hours of their working lives there. Apart from the impairment of technical performance that may result, these are not favourable conditions for making important and vital decisions. Excessive sweating increases the risk of infection also.

It is some-what remarkable that intelligent professional men endure, often with little or no complaint, working conditions that no factory worker would tolerate.

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A surgeon has an active operating life of 30-35 years and the accumulative effects of unnecessary extra-fatigue and physical wear and tear must be enormous.

Active measures are needed to obtain a controlled lowering of atmospheric temperature and humidity. A comfortable working temperature (65-75°F) and low humidity must be obtained by properly planned air-conditioning system integrated into the overall design of the theatre.

Number of Operating Theatres.

Stewart and Douglas (1962) suggest that there should be one operating room for every 30 surgical beds. However, it is difficult to equate the number of theatres with the number of beds, as this will depend upon the degree of activity and type of work within the unit. It would be more rational to relate the number of operating rooms to the number of surgeons. The ideal arrangement would be for each surgical team to have the full use of two operating rooms on each day of the week. This may not always be practicable. An acceptable compromise would be that each surgical team should have uninterrupted use of two operating rooms on three days of the week.

In addition to and in close association with main operating theatres, ancillary rooms should be provided for :—

- a. Removing Plasters : This causes heavy dispersal of infected dust.
- b. Endoscopy—A highly infected moist air stream may be disseminated during these procedures. A different type of operating table fully equipped with the provision for irrigation, is often needed.
- c. Septic cases.
- d. Dressing : For dressings of burns and compound fractures.

In any hospital where operating is done there should never be less than two separate operating rooms each with its own ancillary rooms and services.

Size of the Operating Theatre.

Standard size is now regarded as 400-500 Square feet. The increase in recent years of operations in which two teams operate synchronously and or in which exceptional amount of equipment or staff have to be in the theatre calls for at least

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one large theatre of 625 Square feet. With modern air-condition height of the theatre need not be more than 10 feet.

Television.

It must be appreciated that closed-circuit television is being used increasingly for projecting operations on to a viewing screen. In many institutions television viewing has replaced viewing domes or galleries. So it may be necessary to provide viewing rooms outside the operating rooms.

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DETERMINING THE NEED AND PRELIMINARY SURVEY BEFORE BUILDING A HOSPITAL

By

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P.W.R. (Rtd).

Definition of Health.

The World Health Organization has defined health as "a state of complete Physical, mental, and social well-being and not merely the absence of disease or infirmity".

Factors that determine the state of health.

Some of the important factors that affect the health of an individual or health of the community are :—

- a. The geographical conditions of environment.
- b. Age and Sex distribution of the population.
- c. Population growth rate and family planning programmes.
- d. Social customs, beliefs and personal views on health matters.
- e. The standard of general education and knowledge of health.
- f. Economic status of the individuals and the community, and availability of financial resources of the community, local authority or government.
- g. Housing conditions.
- h. Provision of pure water supply.

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Determining the Need & Preliminary Survey Before Building a Hospital

- i. State of nutrition, depending upon the quality and quantity of food available and food habits.
- j. Incidence of diseases of a general or special nature in the community.
- k. Development of community health services, sewerage works, disposal of rubbish and night soil, vector control and health programmes.
- l. Availability of medical services in the community both in regard to volume and quality of service.
- m. Maternity and Child Welfare services.
- n. Means of communication.
- o. Occupational hazards.

It would appear from above that the maintenance of health does not entirely depend on the medical care programmes and availability of medical and health services in the community but on a large number of such factors over which there may possibly be no control. It would be evident that no matter what the expenditure on medical care is, it would be nullified by adverse factors, unless simultaneous remedial measures are applied for their eradication or betterment.

Health Survey.

To assess the health status of a railway employee and his family and to determine the prevalence of chronic sickness among them a personal survey was conducted by me amongst the low paid Railway Staff in the strata of Junior Clerks, Peons and workmen at Lahore Railway station and various workshops, by random sampling, and the results are given below :

- (i) An important feature of this investigation was that only 55.5% of the total population was in good health, 19.79% in fair health, 9.31% in poor health and 15.66% was sick and under-treatment.

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(ii) The wives of the employees were 35.44% in good health as compared to about 60% of employees and their children, 19.4% were in poor health as compared to about 5% of employees and their children and about 29% were undertreatment as compared to about 14% of employees and their children.

(iii) Of the dependents while 46.34% were in good health, 22.44% were in fair health, 20.49% in poor health and 10.73% were under-treatment. This was to be expected presuming that most of this category falls in the old age group.

What is prevalent in the railway community should be equally applicable to any similar community in Pakistan.

These features indicate that the health status of the community was far from satisfactory and that there was more sickness amongst the women-folk.

Prevalence of Chronic Sickness.

In the case of wives of these employees 33% of them were sick over three months. The overall chronic sickness rate was 11.47% and the dependent relatives of the employees were 12 68 in this group which means that this percentage of the population constantly needs medical attendance. So far as the wives are concerned 26 6% were under treatment and 33% were chronically sick. Here again this group needs constant medical attention.

Hospitals.

The Hospital is an integral part of a social and medical organization, the function of which is to provide for the population complete health care, both curative and preventive and whose out-patient services reach out to the family and its home environment. The Hospital is also a centre for the Training of health workers and

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for bio-social research. This modern concept of a hospital goes far beyond the conventional idea of a hospital as a place for the treatment (mainly the in-patient treatment) of the sick. It visualizes the Hospital as one Part of a comprehensive system of preventive and curative medicine and as an institution devoted not only to in-patient treatment, but also to ambulatory and domiciliary care.

Owing to the increasing complexity of the medical sciences, it is very necessary that medical practitioners and specialists should be able to rely on a sound hospital service. Further more, there is general agreement on the active role the modern hospital has to play in health and social welfare programmes, and on its influence on economic development.

Hospitals are very expensive to build and to operate. Their initial capital cost is high : and their running cost year after year, especially for in-patient services, is enormous. It is often said that the medical services are un-remunerative and unproductive but on a closer look it will be found that they pay economic dividends in the form of lessened invalidity, reduced unemployment caused by sickness, and increased industrial production. As hospitals are the most costly part of a health service, it is sound economics, therefore, to do everything feasible to keep patients out of hospital and, by reducing the reasonable demand for in-patient treatment, to lessen the need for further provision of hospitals- It is essential that side by side with a system of comprehensive medicine operating throughout the community, embracing environmental hygiene and personal, occupational and social health services, there should be a provision of a home care service that will enable as many as possible of those who are sick or injured to be nursed at home, with merely supporting help from the Hospital. Although the primary function of a hospital is the provision of medical care to a community, the Hospital has, however, two other important roles to fulfil : viz. act as a centre for the education of all types of

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health workers-doctors, nurses, midwives and technicians-and for the health education of the public, and to be a centre for research.

Hospitals may be divided, very broadly, into two classes :

Special and general. Special Hospitals deal exclusively with specific organs or systems of the body e.g. eye ; ear, nose and throat ; central nervous system ; orthopaedics ; tuberculosis ; infectious diseases ; cancer ; etc. or certain groups of the population e.g. children. General hospitals which contain a range of specialist services, aim to provide treatment for men, women and children suffering from any form of illness except highly infectious and dangerous conditions, such as smallpox.

For the provision of medical care to a community, the general hospital is a more useful institution. In principle, there should be a concentration upon general rather than special hospitals, but there may be one or two exceptions. One of these is the Children's hospital, which is really a general hospital devoted to a limited age group and which needs practically all the supporting services of a general hospital with a few more added. If a country has an unduly high incidence of diseases of childhood, as is the case in Pakistan, that seem unlikely to be brought under control for many years, there may well be a case for establishing children's hospitals. The same may be true in case of certain endemic diseases like tuberculosis of which there is a very high incidence.

One of the first steps to be undertaken in a country contemplating hospital development is an accurate and up-to-date survey of existing facilities of the entire health service in the region, including domiciliary as well as hospital services. An inventory of existing health buildings and major equipment will also be needed. One way to accomplish this is to appoint a number of small teams, mainly or entirely medical, composed of two or three men of high standing with wide experience of what a hospital should provide. These teams should visit every hospital in the

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region or country, and ascertain the "watershed" of each hospital in terms of patients, drawing attention to gaps or overlappings, recommending amalgamation of neighbouring hospitals where appropriate, and indicating in a general way and necessary expansion of existing hospitals—in building, staff or equipment to enable them to play their part in the scheme. The team might also indicate the need for new hospitals in various places. In future planning, the responsible authority should not only take present needs into account, but should also try to forecast future demands in the light of such considerations as population changes, increase or decrease in industrialization, and progress of preventive medicine, including the success or failure of programmes aimed at the elimination of certain endemic diseases. Such a plan, intended to cover a number of years, must be flexible to permit changes that may be necessitated by unforeseen alteration of environmental circumstances. It will involve liaison with town and country planning and economic development authorities.

RAISING FINANCES FOR CAPITAL EXPANSES

By

Prof. Abdul Aziz, F.R.C P.,

During the conference deliberations we have learnt that there are 14,000 hospital beds today for 3 crores of population in the province, that is, one bed for every 200 population. This number is extremely inadequate and cannot accommodate even the seriously ill patients. Again whatever beds we have, these are situated in larger cities. There are only a few beds in smaller towns and almost none in villages where majority of our population lives. Hence there is dire need for building new hospitals both in rural and urban areas.

Two questions arise at this stage :

(a) How many more beds should be provided ?

(b) Where will the funds come from ?

We should not think at present to create ideal conditions existing in advanced countries because of our limited resources but we can certainly take stock of the situation and make efforts to provide as many more hospitals as to meet our minimum basic needs. The treatment facilities can usually be extended through the following agencies :—

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(1) By Provincial and Central Government hospital solely paid out of Provincial/Central budget.

(2) By local bodies —municipal committees and district councils through their hospitals and clinics. Infectious diseases control is the sole responsibility of these local bodies.

(3) By autonomous organizations *e.g.*, WAPDA, Railways, WPIDC, ADC etc.

(4) By social security institutions where the funds are contributed by employee and the employers.

(5) Insurance policy cover.

(6) Private Hospitals:

(i) Nursing homes

(ii) Philanthropists' efforts.

No policy exists as to who is responsible to provide the medical relief to the entire population. This conference has also not been able to decide on this issue. Some talk of social welfare state, and hold this as Government responsibility. Others say that almost no country in the world affords free medical treatment for all and therefore how can our Government do so. The latter further suggest free medical treatment to indigent only. What is the criteria to be called indigent and what is the population of this category, is anybody's guess. However, let us be sure that it is every citizen's right to demand efficient medical relief and it is the duty of the Government to provide it, may be on payment. Private G P. can provide medical relief to bulk of population on payment, in his clinic, provided he is afforded necessary amenities, wherever needed. He cannot build hospitals. Expecting people to be philanthropists in donating for the building of free hospitals for the poor has remained almost a

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dream in this country for the last 20 years and I have no reason to believe that this dream will materialize in the coming future.

Keeping in view the above facts I propose the following suggestions for providing medical relief and raising finances, for new hospitals :

(1) Government/Local Bodies should provide free hospital treatment to indigent—yet to be defined. Government should also provide medical relief in the rural areas through clinics and hospitals. The extent yet remains to be defined.

Money for these hospitals will come through—

(i) normal taxes,

(ii) special health cess on entertainments e.g., cinemas, race clubs, other clubs, meals functions arranged at public places; rail and road traffic; luxury items etc ;

(iii) income from private hospital beds.

(2) Government should also build more private hospitals of various categories to accommodate all income group people.

Government will spend money in building such hospitals but ultimately it will yield substantial income.

(3) Social Security Institutions should provide full medical cover to employees of factories, mills, and all other organizations where large groups of people work. Their families should also be included in this cover.

Cost of hospitals in this category will be set largely by the employer and to a certain extent by the employee.

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4. Insurance Schemes.

All other categories of population should be included under this categories.

Cost of building hospitals in this category will be provided by Insurance schemes and may be initially aided through loans.

THE ROLE OF THE CONSULTING ARCHITECT, ENGINEER AND TOWN PLANNER IN THE PROVISION OF HEALTH FACILITIES

By

*Mr. Zahir-ud-Din Khwaja**
A.R.I.B.A., A.M.T.P.I.

Although the subject of the talk given to me was the Role of the Consulting Architect and Engineer in the building of a new Hospital, I have taken the liberty of enlarging the scope of the subject to cover the role of the Consulting Architect, Engineer and Town Planner in the provision of health facilities in the National, Regional and Metropolitan spheres, because I believe that these professional consultants have a large contribution to make in the planning and implementation of efficient and economical health buildings throughout the country. On the National scale they should be associated with the Central Ministry of Health where a research cell should be created consisting of medical specialists, Architects Engineers, Town Planners and Cost Experts, with a view to the evolution of the most economical standardised plans of health buildings within the frame work of the overall budget allocations of the National Plan. Compared to our real needs in this sector the allocations are inadequate in view of our limited resources. It is therefore imperative that every rupee spent for the provision of health facilities should provide the maximum benefit to the population which needs these facilities so direly. This can only be achieved by the joint efforts of such a team wherein the medical specialist would provide the main frame-work of the brief of requirements and the scale and magnitude of each facility; the Town Planner would advise on the best location of such facilities keeping in mind the overall National and Regional health needs of the country so that each facility provided is a part of a Master Plan; the Architect would use his skill and experience in producing designs which are strictly functional and the Engineer and the Cost Expert would evolve constructional methods which are speedy and at the same time economical.

Although the provision of health services generally is a Provincial subject, such a research cell can be invaluable in providing to the Provincial Government guidelines

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on the scale and manner in which health buildings could be designed and built keeping due regard, of course, of the regional and climatic conditions of each part of the country. The Ministry of Health in the U.K. has always had such Research Cells, and coupled with the vast amount of research carried out by the Nuffield Foundation in the design of hospital buildings, the whole concept of design of these buildings has undergone a revolutionary change.

On the regional scale, the Provincial Governments would have the task of implementing the policies laid down by the Central Health Ministry. The plans prepared by the research cell, for hospital, health centres and dispensaries could be suitably modified and even phased to keep in line with the available resources of each Province at the same time ensuring that every health building constructed, is a part of a Master Plan for the whole region. In this manner, even though we may not have the necessary resources, at the moment, to provide the required health facilities to the bulk of our populations, we would at least ensure that adequate reservation has been made for this purpose for the future. This would also eliminate overlapping and wasted fund. But for the preparation of a realistic Master Plan, it is essential that a survey should be carried out —

- (1) To gather full information about the existing Hospital facilities.
- (2) The adequacy of the facilities available.
- (3) To provide a body of expert advice on the manner in which the existing facilities can be best carried out.

Such a survey should provide useful information not only regarding Government hospitals, but also about the large number of privately run hospitals and the role they are playing today. It should then be possible to co-ordinate all hospital services whether private or Governmental in evaluating the overall needs of the country.

Based on this Survey the Master Plan for hospitals and related facilities should be prepared and should indicate all existing hospitals and institutions for the care of the sick, which may have been determined to be satisfactorily located and which provide adequate facilities and distribution of clinical services for the communities served. It should show also those existing hospitals and institutions which are satisfactorily located but require certain modifications and additions and all proposed

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new facilities. Such a plan should also indicate the recommended location together with sufficient detail of each facility to provide a complete understanding of the services to be established. The Master Plan must also be sufficiently flexible to lend itself to modification in structure or programme, from time to time to meet challenging conditions and advancement in health and hospital procedures. Definite community planning factors which must be taken into consideration are, population distribution, trends of economic and social characteristics, property uses, and land development, transportation and arterial highways. The statistical data concerning the health problems of each district should be brought up to date on a Five Year basis to assist in the development and modification of Regional Plans.

At the Provincial level too, therefore there is utmost need for the setting up of a team of experts consisting of the Architect, the Engineer, the Quantity Surveyor and the Medical Specialist to take stock of the existing health facilities in the Province and keeping in view the recommendations of the Central Research cells to evolve and to implement the most economical designs of health buildings. It is imperative that those who are responsible for the planning and execution of health buildings, and this includes the administrators, the specialists and the consultants both at the Provincial and Metropolitan—should be extremely conscious of the need for utmost economy. It is not enough to call in an Architect to prepare the design of a hospital on a previously selected site. I believe that the collaboration of the Architect and the team of decision-makers must begin at the earliest stage of site selection if we are not to repeat some of the mistakes of the past.

Retaining Architectural and Consulting services early is desirable since Health Authorities are sometime apt to accept sites which may have undesirable location, or which have hidden characteristics which only an Architect or Engineer could evaluate. A site could be difficult of access or too costly to be provided with roads and utilities, fire fighting, water collections etc.

One of the, most difficult problems in hospital planning is the preparation of a programme of requirements. Normally this programme or brief would be prepared by the Medical specialists and then padded on to the Architect for the preparation of plans. But it must be pointed out that the collaboration between the medical specialists or an Architect must be a continuous process beginning with the preparation of the brief.

The planning process must be conceived as a team effort in which the Building Committee, the Administrator, Medical staff and heads of professional and ancillary

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departments collaborate with the Architect. There is to be a continuous process of give and take between the hospital and the professional planners. Once a comprehensive programme of requirements has been prepared in the form of a report by the Building Committee, this would then be entrusted to the Architect for the preparation of schematic drawings which would translate in schematic form the requirements of each part of the hospital keeping in mind their inter-relationship. No attempt is made at this stage to go into the details such as walls, doors and windows as this would detract from the main object of determining the scale of each accommodation and the desirable circulation. At this stage the schematic drawings should be extensively re-studied by all the departmental heads with a view to determining the general arrangements, location, scope and relation between the departments.

The next stage is the Design Development Stage which is one stage earlier than the Construction Stage and is meant to allow all the concerned persons including doctors and Administrators to study the preliminary plans prepared by the Architect including the Outline Specifications. This latter document describes to the client the material which are intended for use in construction, interior finishes, system of plumbing, heating, ventilation electricity, communication, means of travel, conveyance etc. It is important that careful consideration is given by all concerned to the proposals made by the Architect so that the best possible economic solution is arrived at. In this connection preliminary cost estimates are prepared by the Architect and these have also to be studied by the Building Committee to ascertain whether the facilities being provided can be afforded by the community and whether the plans should be modified in accordance with the available resources. To be realistic such estimates must anticipate the type of structural and mechanical systems to be adopted as these are costly and also require a good deal of building space. Constant adjustment may have to be made in the cost estimates in the light of rise of building costs or alterations in specifications.

The third and final stage of the task of the Architect is the preparation of the Final Working Drawings and Construction Documents. 'Working Drawings' as the name implies are technically articulated drawings from which the cost of the buildings can be accurately calculated and from which it can be built. While the Design Development stage drawings are meant to be visually expressive the Working Drawings are meant to be technically expressive. Here things are dimensioned, materials indicated, doors and windows and finished scheduled and in short everything detailed to such an extent as to leave no doubt what is expected from the builder. These Architectural drawings are supplemented by a set of Structural Drawings, heating and

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ventilation drawings, plumbing and drainage drawings, electrical drawings and others like planting and landscaping. Working Drawings and Specifications are jointly known as Contract Documents and the contractor's price is based on these and they are a part of the contract which the Hospital signs with the Builder. The next stage, of course, is the calling of the Tenders from the Contractors. Here it must be emphasized that the complex nature of the construction work of a hospital requires that only the top most contractors must be considered for building purposes. The integration of complicated services required in a hospital, is a difficult task far beyond the scope of a small or medium contractor. That is why pre-qualification of Contractors is generally resorted to as this eliminated those who technically, financially and by experience are not equal to the project in question. One problem that normally confronts a hospital is that the contractor is frequently and imperfectly organised for the work he undertakes. He fails to think ahead to order materials in time and to actively co-ordinate the trades. The result is that the building process lags, the sick are deprived of facilities, and the doctors are deprived of a place to treat their patients.

Now-a-days it is possible to use the 'Critical Path' services which employ computerised methods of laying out a plan of building operation so that a builder knows exactly in advance what men and materials he will need various stages to finish the construction work on time.

During the construction phase, the Architect's and the Engineer's task is to supervise the building in great deal detail and it would be necessary for him to have supervising personnel on the job which could look into the work of various utilities such as water supply, electricity, drainage, gas, telephones, etc. The degree of supervisions required in a hospital is infinitely more than that required in any other form of building. Finally the Architect is responsible for not only the design of the building but also of the fixed or attached to the building equipment. He is also responsible for the forms, colours and texture of every-thing inside and outside the building. These alone are however not sufficient to ensure the hospital's success as an institution with a distinctive environment. Ultimately it is furniture, furnishings, equipment and people that make a building become that which was intended from the outset. Specialized technical and scientific moveable equipment is generally purchased by the hospital to meet requirements of the heads of the departments. It is the Architect's responsibility to see that not only proper space for the equipment is provided, but also electric, gas and other utility connections where needed for attaching the equipment.

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These and many others are the task of a Consulting Architect responsible for the design of a modern hospital. But for the successful completion of hospital projects in Pakistan the architectural consultant expects the considered advice and guidance of the Medical specialist in concrete terms on subjects such as these with special reference to Pakistan :—

- (i) What is the optimum size of hospitals from the point of maintenance and running costs.
- (ii) The suitability or otherwise of the vertical type of hospital for conditions peculiar to Pakistan.
- (iii) Special provisions to be made for hospitals in Pakistan in view of our peculiar conditions. For example, expensive and somewhat unreliable electric supply ; the convention and custom of each patient being visited and sometimes even cared for by a large number of relations.
- (iv) Should all our hospitals be fully air-conditioned or is this a luxury at the present stage of our development.

There is therefore a great need for utilising certain specialists exclusively on the developmental side. It is not every doctor who has a flair or interest in this field but those who have an aptitude should be able to closely work with architectural and engineering consultants over a long period of years so as to build on the experience thus gained. Hence, I would like to strike a note of caution to all concerned that in the construction of hospitals, function and function alone should be the only prime consideration. Any attempt on the part of Architects and Medical specialists to build traditional monuments can only lead to the creation of archaeological relics, and we have no dearth of these in our country.

SELECTION OF SITE AND PLANNING FOR HOSPITAL BUILDINGS

By

Abdul Qayum

T. Pk., M S, (Illinois)

Selection of Site.

1. The first thing that would determine the siting of a hospital would be its utility for the patients it is to serve. A fairly central site which is easily approachable would be the ideal for most hospitals. This of course would not hold good in the case of infectious diseases hospital or for hospitals for which a certain type of climate is desirable. Another important factor that would decide the siting would be the climate of the place where the hospital is to be located. In one town it may be necessary to avoid the sun whereas in a station in the hills the reverse may be true. Similarly the prevailing wind direction would be of importance and if possible it should not be on the windward direction of such places as factories from which obnoxious smells and gases can emanate.

2. If the plot is too narrow the building will be too close to the road which is undesirable from the point of view of noise and congestion. A corner plot or one having more than two roads is to be preferred as it provides a diversity of entrances. There should be one main entrance properly guarded and another for emergency, casualty, and other functions such as delivery of stores etc.

3. It would be preferable to have the site in a less congested area of the town so that it can be easily reached and the main commercial centres should, therefore, be avoided. It is of course necessary that the location of the hospital should be, if possible, in a clean part of the town where drainage and sewerage would present no difficulty and good water supply is always available. There should be adequate parking available near the entrance of the hospital.

Proximity of a railway track is completely undesirable nor should airports, graveyards, ponds or dumping grounds so that both noise and dirt are avoided.

The cleaner the area and the more it is free of noise, the more comfortable hospital will be for the patients and the doctors.

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4. It would be desirable to have a reasonable area for the hospital as not only the institution itself is to be located but there would be other necessary buildings such as staff quarters, and in our country a hostel for the patients' relatives, mechanical service yard and if possible a long term rehabilitation centre. Designers put down the best proportions of length to breadth of the site as 5 : 3. or 4 : 3.

5. Where possible the area should be divided into several parts. The ideal arrangement would be to allocate 50% to gardens and to trees which isolate the various blocks from one another. 10% of the area would be allocated for internal roads and 15% for the main hospital building. The remaining 25% would go for the auxiliary buildings and supply yards etc. The hospital building should be at least a hundred feet from the residential buildings and 150 feet from garages, shops etc. If the infectious diseases section is located within the total area of the hospital, then the same should be segregated from the rest of the hospital by an adequate belt of trees preferably about a hundred feet.

Planning :

The main functions of a hospital are treatment and nursing. In addition the hospital may also be used for teaching and scientific and medical research so that we can classify hospitals into two groups. First the hospitals which are used exclusively for treatment and nursing can be called as non teaching hospitals. Secondly we have a scientific hospital primarily for treatment and scientific research and the teaching hospital which serves the above two functions in addition to teaching medical students of under-graduate and of post-graduate studies. In these the ultimate client is the patient whose requirements decide the planning of diagnostic and therapeutic facilities, provision of single bedded rooms and general wards. The economic level of the people served by the hospital will also control the provision of such facilities.

A scientific or teaching hospital in addition to caring for the patients should also provide for a physical relationship between the hospital and the teaching staff and students. It becomes essential that the hospital should become an integrated part of the teaching institution so that the staff and the students do not lose much time and energy in shuttling back and forth between the school and the hospital. A detailed study of the facilities for teaching at the planning stage of the hospital can save some cost and talent available which would be duplicated if the hospital and the teaching school are not planned properly.

The main functions of the hospital can be classified into the following groups.

First the nursing group, secondly the diagnostic and treatment group which looks after the emergency and outdoor patients. Thirdly the supplementary group which carry out the scientific and teaching activities. Fourthly the administration and management group and finally the services group which comprise of the kitchen, the laundry, disinfection, delivery, transport, maintenance and mechanical services and so on.

A well planned hospital should combine in a most economical manner the main function of the hospital *i.e.*, treatment, nursing and teaching with administration and management and the technical group responsible for the maintenance. Good and proper planning in the initial stages of hospital construction, would result in better control of the hospital and the effort thus saved in the maintenance cannot be over emphasised.

The traffic of patients in a hospital is confined only to diagnostic treatment section and the nursing sections. The traffic of visitors should be directed only to the nursing units. The main medical staff should preferably have a separate entrance to the hospital where cloak room and wash room facilities are located. The administrative and technical group should have separate and direct entrances to their departments. A controlled traffic within the hospital building can eventually result in a better administrative control of the hospital and transmission of infection.

The analysis of inner communication in the hospital building and the hospital complex should aim at minimising the length of roads, the areas of congestion of traffic of different sorts, segregating the traffic of patients and hospital staff within the hospital building, separating infected instruments and linen from sterilised ones, separating the traffic of people who may be suffering from infectious diseases from the rest, and finally minimising the distance which a doctor has to walk in a day while performing his duties.

The intensity of staff traffic among the various functional groups mentioned earlier has been investigated by the Central Organization and Methods Unit, Ministry of Health, Great Britain. According to this research, the biggest intensity of traffic is between the diagnostic treatment part and the supplementary group which carry out the scientific and teaching activities and are responsible for administration and management. This accounts for 29.7% of the total traffic. The next lower intensity is between the diagnostic and treatment part and the nursing part and accounts for 27.6% of the total traffic. The next is between the nursing part and the technical

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part i.e. kitchen, laundry, central sterilisation, pharmacy etc., and accounts for 12.5%. The traffic between the nursing part and the supplementary group i.e., scientific and teaching activities, administration and management etc., accounts for 10.7%. The rest of the traffic is not of any important nature. While planning a new hospital, due consideration should be given to the intensity and type of staff traffic according to the percentages mentioned here.

To design a new hospital, the plan must also provide for future extension not only in the area but in the buildings as well. The architectural and structural design should provide for sufficient elasticity so that the hospital could be changed according to varying functional demands either as a whole or in part. The various rooms should be interchangeable as far as possible. In order to be able to design in this elastic fashion the designer should select a suitable functional layout for each part of the hospital and then these functional plans should be integrated into the final working unit.

Some of the earlier hospitals, built in this country, were strung out hospitals implying a long thin building consisting of central wards with verandahs on either side or on the sunny side. This layout was physically adopted to use maximum exposure to sunlight for control of infection, while keeping it cool. With the number of hospital beds increasing in each hospital, the non-availability of land and the high cost of construction has completely excluded this conception from the planning of a modern hospital.

Now-a-days the general layout of a hospital can be classified into two systems—the half compact and the compact system and the Pavilion system.

The advantages of the compact and half compact system is that the main parts of the diagnostic and treatment and nursing are close to each other. The outer roads are completely eliminated and the inner roads are much shorter thereby saving the time of the hospital personnel. The area required is much less and is of particular importance in rapidly expanding cities. The volume of building for a compact hospital is less but at the same time the upper stories and the mechanical services cost much more.

The disadvantages of a compact vertical hospital are the provision of mechanical installations such as lifts, hoists dumb waiters, laundry chutes and their

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proper maintenance, proper artificial illumination, mechanical ventilation, control of infection from one floor to another through lift shafts which acts as chimneys.

The pavilion type hospital has a central core which provides for all the diagnostic and treatment services for in-patients and outpatients. Mechanical services and the nursing beds are provided in the form of pavilions to accommodate people of one sex or the same disease, connected to each other for ease of operation by corridors intended as an aseptic brake, to prevent the carrying of infection from one pavilion to another. The circulation and inter-communication in this type of planning can be made as direct as possible, with a minimum of the kind of interruption involved in elevator travel, which in a developing country like ours can hold up many things at the worst times.

The pavilion system is simpler to build. The construction work can progress at a faster rate and the building can be finished progressively and hence the funds and the buildings can be exploited as required.

For developing countries where availability of space is not always the governing factor and the mode of construction is required to be simple, availability of funds is not easy and the mechanical ventilation is not justifiable due to the cost, the pavilion system of construction gives the right conditions for circulation and ease of construction and operation. In a large hospital it is preferable that the nursing units should be provided in two or more storeyed pavilions along the central core *i.e.*, diagnostic and treatment block in order to cut down the walking distance. In pavilion type planning the patients on the ground floor are less isolated from the world outside the walls than they would be on the upper floors. It is particularly important for invalids or for children wards since it gives them the opportunity to feel that they were outdoors than if they were located on the upper floors.

Horizontal and Vertical Communication :

It is important from the operational point of view to connect the diagnostic areas and nursing units either in horizontal or vertical directions, where these units are grouped in the same building or separate blocks. The walking distances can be reduced in a horizontal arrangement by placing the units in a radial manner from the central diagnostic care.

For the vertical system parts of nursing units are placed in blocks one above the other and these parts have no direct connection with diagnostic treatment part

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except through elevators. It has the advantage of staff walk being interrupted by elevator ride which takes more time but gives a feeling of less walking distance as compared to the horizontal system. Though it appears to give an easy and efficient communication but the hazards of the mechanical age in our country are to be reckoned with. Another disadvantage of the vertical system is that since the nursing units and the diagnostic and treatment units are placed on different floors of the hospital, they have the tendency to function independently of each other. This is particularly harmful in maternity and surgical cases. In a horizontal layout the hospital personnel and the patients are connected very closely with each other which results in ease of surveillance and a better psychological effect on the patient.

In addition to the doctor patient relationship, it must be kept in mind that a hospital is also a hotel and this part of it is just as important as the other.

The patients' food, laundry and other facilities have to be looked after and these must move with the same ease as they do in the best hotel. In case this is not so the best hospital can be a complete failure. It is for this reason that great emphasis is laid in modern hospitals on the kitchen, the laundry, the wastage disposal system etc. Preferably these services are located in such a manner that they do not interfere with the diagnostic and nursing part of the hospital.

In conclusion, whatever system of hospital is adopted, it is to be kept in view that the institution is to be treated as a factory whose product is a satisfied patient with least financial burden on the national exchequer and the patient himself with easy administrative control and full utilisation of human resources and equipment. To achieve this end a close cooperation between the consultant, the doctor and the management will produce the desired effect.

Just as the most economical way to run a factory is to work it in a number of shifts to fully utilise the equipment, similarly to get maximum benefit from the space and equipment, it is necessary that the hospital's out-patient should also work in more than one shift. In a country like ours where there is a great shortage of these facilities this cannot be over emphasised.

HOSPITAL PLANNING

By

Mr. A. R. Hye*

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The most difficult point confronting the Architect in the designing of Hospital Planning is the need — despite long period of Project design such as Nishtar Hospital Complex. Hyderabad Medical College Project which have taken almost five to ten years between the inception and completion over such a long time, there have been radical changes demanding architectural attention not only in the medicine, the operating room, its lighting, equipments, diagnostic suites rehabilitation devices etc., but also in the very nature of arrangements of spaces; within recent years nursing unit itself. The list of areas affected by new ideas and technology, such as intensive care, cardiac units etc., in fact hospital planning has registered more advancement in the last few years than in the past.

This is one of the reasons why architects are not happy to come forward with "Standard Plans" pointing to the obvious danger of blocking advances. Plans are continuously being revised to cope with the rapid evolution in medical technology. A properly designed and well constructed hospital is one of the most complex of modern buildings.

Hospital planning has become a very specialized subject. Very few architects will acknowledge themselves as specialist. A competent and experienced architect should be able to design with equal efficiency, a museum, a school and a hospital. The hospital planning in detail continues to be the most challenging design problem before architectural profession. An architect without hospital experience is not expected to plan major medical project, unless he makes intensive preparation for this highly specialized task.

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It is necessary to improve hospital services along its three major fronts—preventive, diagnostic, therapeutic. A teaching hospital, Tehsil and the Rural Health Centre of minimum size.

Pakistan is rapidly developing country. The major building is inevitably a symbol of Nation's power and maturity. However, in keeping with the general character the aim should be to provide a hospital which not only functions well, it must have the power of efficiency which can only be proper planning. The increasing recognition of occupational therapy as an integral part of a medical rehabilitation programme has resulted in becoming an important element in hospital planning.

Many factors involve in determining the need of a hospital, medical college and other Health Institutions. The hospital site and contour do have important influence on the planning of the structure. It is important that the site is selected without prejudice and in accordance with the certain elements and usually conceded requirements of a general hospital. It has to cater certain sector of a city and the population in its neighbourhood. From the planning point of view the site for a 1000 beds say for teaching hospital should not be less than 75 to 100 acres considering 10 to 15 beds per acre, compared to 20 beds for a District Hospital without Teaching Institute. The area would, of course, take care of Hospital Block, Out Patient, Medical College and Hostel for Students. Nurses Teaching Institute and Nurses Hostel and the essential staff of the Institute and the Hospital in the College.

It is again governed by the size of population. The minimum number of beds recommended in Developing Country should not be less than three hundred per lac of population; probably considering the economic factor and ever increasing population. Lahore with a population of about twenty four million obviously warrants 72000 beds. Unfortunately we have not got even one fourth number including all the private hospitals and clinics. So is the position with other big cities of Pakistan.

The area covered in verandahs, corridors etc., including thickness of wall at times goes 100 to 150% of the working area considering our climatology and environments. It is unfortunate that some of the plans dealt by the Architects and Consultants under various restrictions have proved useless, adding to the inconvenience of horizontal and vertical staff. In designing a hospital an Architect must have free hand in preparing healthy layout. Incidentally some of the best plans prepared by the Consultants have been dropped for one reason or the other.

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Before any planning is done, it is imperative that a programme according to the requirements of the hospital be developed. It is advantageous to establish a Planning Committee consisting of Architect, Engineer and Experts from the Health Department. It is unfortunate that we do not have any kind of Development Research Cell in the Health Department. In the States and U.K., Public Health Departments, a Development Cell consisting of Specialists from various fields headed by an Architect is attached to the Health Department, whose main job is to provide experience in the field of Architecture besides to help in selecting proper Consultants for major projects. Its task is to provide advice and consultative assistance to Health Department besides to carry out research programme on the functions and design of various hospitals. It is high time for the Health Department to think of Development Cell at least on a small scale to start with.

In a final plan of a general hospital, public would expect outstanding representative of medical profession in its various specialities. Approved internship, residences for Doctors and a school of Nursing facilities. The staff and clinical facilities should be adequate to handle competently all types of major and minor surgery obstetric internal medicines, pediatrics, eye, ear, nose and throat communicable diseases including remedial, should also be cared for at least the primary diagnosis and initial treatment of tuberculosis and neuro-psychiatric conditions. For discharging the above functions an approved X-Ray Unit, Pathology, Bacterial and Chemical Laboratories would be required. It is also necessary to segregate various types of patients in the Nursing wing. Teaching facilities and dormitories of School of Nursing should be separate units and should be separate from hospital building.

A teaching hospital will provide advanced and specialized equipment and procedures not available in an average non-teaching hospital. It will have larger number of difficult cases involving heavier use of diagnostic, therapeutic facilities in proportion to number of beds. A Teaching Hospital requires 35 to 40% more space than a general hospital according to state Health Department Research Study since it has to cater circulation pattern, college activity. Students would be using almost all the facilities of the hospital. They would be using treatment rooms and bed side besides going on rounds chart work etc.

Thoughtless copying the planning ideas from foreign countries do not actually respond to the needs of the public and staff here. We have to consider environment

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and climatology of the place. Punjab with reputation of hot dry climate would obviously warrant different type of approach in planning. We have to consider extra area for verandahs and corridors to keep the building cool and comfortable for its maximum use.

We have been hearing quite lot of complaints about the working of the old and new hospitals recently completed. We should admit that we are far behind even with the other Developing Countries in hospital planning. In planning a new hospital or a teaching hospital, Health Department is facing difficulties in getting adequate technical assistance in both planning and construction. It would be advisable to establish a Development Cell in Health Department already mentioned in the foregoing paragraphs. The Development Cell would contribute a lot towards the improvement of hospital planning. The concerned Architect could help in solving the major differences of each hospital if that hospital is to reach its potential usefulness to public besides advising the Health Department to keep the plans up-to-date in keeping with the advances of scientific medicines.

CONTRACT FOR HOSPITAL CONSTRUCTION

By

Akhtar Ali Chohan*

T. Pk., PSE-I

Introduction.

The Buildings Department of the Punjab Government is responsible for the construction and maintenance of all buildings for various Government Departments including Hospitals and other buildings of the Health Department. These works are carried out on contract basis through contractors who possess necessary experience and know-how of the building trade and for this purpose approved lists are maintained by the Buildings Department. Normally the contracts are similar for all types of buildings and no distinction is made for entering into a contract for a hospital project. In this paper, apart from explaining the usual requirements and procedures for establishing a contract for building construction, an effort has been made to bring out special considerations, which need to be kept in view while entering into a contract for hospital construction. To understand the importance of these considerations, a mention has been made of certain planning and designing requirements also though they are not directed to the contract for construction.

Before awarding a contract for the construction of a building, the following stages have to be completed :

1. *Administrative Approval.*

The scheme must have the administrative approval of the competent authority indicating the scope of work and total amount sanctioned for the purpose. The administrative approval is usually obtained on the basis of a rough cost estimate or P.C.I. Scheme depending upon the amount of the work.

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2. *Preparation of Detailed Drawings and Designs.*

After the scheme is administratively approved, it is necessary to prepare detailed drawings showing the general dimensions of the proposed work and complete details of various components. It is also necessary to prepare complete and detailed specifications of the work to be done and the materials to be used unless reference can be made to some standard specification.

Similarly detailed structural designs of the building including the layout and designs of the services like Water supply, Sanitation, Electrification, Gas Installation, Central Heating or Central Air-Conditioning, and Lift Installation etc., should be prepared along with the detailed specifications in each case.

3. *Detailed Estimate and Technical Sanction.*

Based on the detailed drawings, designs and specifications of various components of the project, a detailed estimate including a schedule of quantities of all items of work should be prepared for obtaining technical sanction of the competent authority. The purpose of technical sanction is that the design adopted is economical and structurally safe.

Contract Documents.

After completing the codal form of administrative approval and technical sanction, the next stage towards establishing a contract is the preparation of contract documents. The contract documents consist of the following :

1. A complete set of detailed drawings and designs together with the detailed specifications of the work to be done and the materials to be used.
2. A schedule of all items indicating the description and quantity in each case.
3. A set of "conditions of contract" to be complied with by the contractor whose tender may be accepted.

The contract documents are prepared by the Divisional Engineer but are approved by the authority who is competent to award the contract.

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Tenders.

After the contract documents are approved by the competent authority, the next step is to invite tenders. Tenders are invited in the most open and public manner possible, whether by advertisement in the Government Gazette or local news papers or by notice in English and Urdu pasted at public places. The tenderers should have free access to the contract documents. To make sure that the intending bidders are earnestly interested in the execution of the work, they are required to submit Earnest Money at the rate of 2% of the amount put to tender along with their tender. The Earnest Money is liable to be forfeited if the contractor fails to commence the work in case his tender is accepted. Usually the lowest tender is accepted unless there be some objection to the capability of the lowest contractor, the security offered by him or his past performance. The tender other than the lowest can be accepted only after obtaining the approval of the officer immediately superior to the one who normally under the rules would be competent to accept the tender.

Security for the Performance of Contract.

Security is taken in all cases for due fulfilment of a contract. A deduction of 10% is made from all running bills paid to the contractor. The Earnest Money deposited by the contractor at the time of submitting his tender is accounted for towards security when the work is actually awarded. The amount of security deducted from all payments at the rate of 10% is refunded to the contractor after three months of successful completion of the work and final payment to the contractor. The contractor is required to rectify any defects which may appear within three months and if he fails to do so, the amount available with the Department on account of security deductions can be utilized for this purpose. There are different contractors who have specialized in various trades connected with a building project and normally separate contracts are established for civil works, water supply and sanitation, electrification, gas installation, central heating or air-conditioning and lift installation etc.

Forms of Contract.

Contracts are of three kinds viz : Lump sum, Scheduled and a combination of these two.

In a lump sum contract the contractor undertakes to execute the work with all its contingencies for a fixed sum.

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Scheduled contracts are those in which the contractor is to execute the work at fixed rates. Percentage rate contracts are also similar to scheduled contracts and the contractor undertakes to do the work at a fixed percentage above or below the rates exhibited. The amount due to the contractor in each case will depend upon the quantities and the kind of work done by him.

The third kind of contract is a combination of the lump sum and scheduled contract. Thus a fixed sum is proposed for the completion of the work as specified and a schedule of rate is agreed upon by which to regulate the price to be paid or to be deducted for any variations in actual construction.

Normally all contracts are left out on percentage rate basis for which the Government has prescribed a printed form which includes general rules and directions for the guidance of the contractors, a tender form, conditions of contract and schedule for materials to be issued by the Department and rates thereof.

Hospital Construction.

The position so far explained with regard to the contracts applies to all building projects including Hospitals. As already stated no distinction is usually made between a contract for Hospital building or any other building. It is, however, to be recognized that a Hospital is not like any other building. It is a special type of building and certain special measures are needed not only for its planning and designing but also for entering into a contract for its construction.

Special Requirements.

With the advancement in medical science a Hospital is no longer a place merely for the patients, doctors and medicines alone. Lot of medical equipment has now to be fitted in a modern hospital such as X-Ray Plant, E.C.G. equipment, Physiotherapy, Surgical, Oxygen Supply, Eye Testing and Dental Surgical equipment etc. For satisfactory working of the entire equipment and other facilities available in a modern hospital, it is also necessary to provide electric, gas and water connections etc., of adequate size wherever required. The requirements of a modern hospital are known to the medical experts only and the success of the hospital will depend on how well the requirements have been conceived by the Doctors and provided by the Architects and the Engineers. These requirements have to be worked out and listed in full details at the planning and designing stage of the hospital.

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Thus the medical experts are required to do a great deal of thinking on their part to list their requirements in fullest details and co-operate with the Architect and the Engineer at all stages of planning, designing and construction. In emergency and serious cases, time factor is of greatest importance and if timely medical aid is not made available to a patient it may cost his life. All facilities and various functions have, therefore, to be so located that even the slightest delays are cut out. The medical experts are thus required to apply their mind in deciding and placing of various functions and equipment keeping in view the urgency and importance of each and their inter-relationship. In other words, the medical experts have to play an equally important role in the planning and designing of a modern hospital.

Instances are not lacking where, though the plans had the prior approval of the users, requests were made for drastic changes in the project when the structures were already up. Such a situation arises, when the users do not associate themselves fully with the Architect and the Engineers at the planning and designing stage. This tendency on the part of the users has to be guarded against, if ideal results are to be expected without any waste of time and money. The users have, therefore, to work hard at the planning stage and if they do not understand any particular aspect of the project they should not feel shy of asking for further clarifications, if necessary. Where they are unable to understand any details from the plans, they should be free to ask for small scale models to clear their conception of the project. Once the plans are approved by the users they should not blame the Architect and the Engineers if any short comings are noticed in the completed project. To achieve best results in the case of a hospital project, it is suggested that one or more medical experts should be nominated to work with the Architect and the Engineers during the planning and designing of the project. These medical experts should have sufficient experience and knowledge of a modern hospital. They may also consult their other colleagues who are experts in different branches of medical science.

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Selection of Contractors.

In the case of a hospital building, apart from the building itself the services like electrification, water supply and sanitation, central heating or central air-conditioning, gas and Lift installations etc., are of considerable importance. The efficiency and the quality of the services will ultimately determine the quality and efficiency of the hospital service. It is, therefore, of paramount importance that all services are properly designed and incorporated in the building. While awarding contract for the hospital construction it must be ensured that the selected contractors have sufficient experience, necessary skill and technical know-how in respect of various services. Before calling tenders and awarding contract it is, therefore, necessary that the bidders are pre-selected and pre-qualified keeping in view their experience, financial position, construction equipment, and technical personnel available with them.

Co-ordination Amongst Various Contractors.

The other aspect, which needs to be taken care of is that there should be adequate and fool-proof co-ordination amongst the various contractors, so that all services are incorporated in the building at proper time to avoid subsequent cutting of holes and damages to walls and floors. The lack of co-ordination in the work of various contractors may result in considerable delay and infructuous expenditure. Apart from these difficulties the quality of the completed project is also bound to suffer.

In view of the special nature of hospital building and the difficulties explained regarding lack of co-ordination amongst the various contractors, it is suggested that preferably there should be one contractor for the whole project including all services. The contractor should be permitted to appoint sub-contractors for various services who are properly qualified and experienced to handle these services. The sub-contractors proposed by the main-contractor should also have the prior approval

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of the Buildings Department. The payments to the sub-contractors will also be made by the main contractor. In that case the main contractor will be responsible for proper co-ordination and timely provision of all services in the building works. He will also be responsible for satisfactory completion of the entire project. This suggestion is being made on the basis of actual experience gained from the construction of important buildings including eight multi-storeyed Secretariat Blocks at Islamabad. For the construction of these buildings there were separate contractors for civil works, water supply and sanitation, electrification, gas installation, air-conditioning and lift installation etc. The presence of a large number of contractors on one job did cause considerable difficulties in co-ordination and site meetings had to be held very frequently to settle various disputes and problems amongst different contractors because the work of all contractors was inter-related and any delay on the part of one contractor could adversely affect the progress of other contractors. After having gone through these difficulties in the case of Islamabad Secretariat buildings, it was decided to have one contractor for a building project and this system was accepted not only for the construction of the President House but also for other important buildings in Islamabad.

Provision of Special Fittings.

In the case of a Hospital building, special type of fittings for water supply, sanitation and electrification are required which are not readily available in the market. The contractors are thus unable to make timely arrangements which delays completion of the Hospital building. It is, therefore, suggested that while inviting tenders and awarding contract, a specific provision should be made for the procurement of special fittings. There can be two methods for the procurement of these fittings :

1. The fittings are imported by the Building Department and supplied to contractor.

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2. The contractor is authorized to import these fittings himself either against cash allocation of foreign exchange or cash-cum-bonus scheme or on Bonus voucher. In either case the Government will have to assist the contractor by way of providing import licence etc.

The draw back in alternative No. 1 is that the responsibility for supplying of these fittings will rest with the Department and in case of any delay on this account, the contractor will be free to come up with claims. The Government may also lose financially if these fittings are damaged or broken during transportation and storage etc. It would, therefore, be better to let the contractor import these fittings himself in which case he will not have any excuse for claims and any delay in the completion of the project will be to his account.

The following further suggestions are made for achieving best results :

Better Specifications.

The maintenance of cleanliness and hygienic conditions in a Hospital is very important and to achieve these objectives the specifications for Hospital construction have to be superior to those of other buildings. Glazed Ceramic Tiles should be used for cladding of walls of Toilets, Operation Theatres and Delivery Rooms etc. Greater use should be made of emulsion paint instead of ordinary white-wash or colour wash. The entire flooring should be in Terrazo instead of ordinary conglomerate. Fly-proofing should be provided throughout the Hospital building. Running hot and cold water, Central heating or air-conditioning should be provided in important areas. The provision of better specifications will naturally increase the cost per Sft. and we should be mentally prepared to accept this. Sometimes the rough cost estimates for obtaining administrative approval of the Government are prepared by the Health Department without consulting the Building Department which results in provision of non-workable rates. The Buildings Department should

invariably be consulted before submitting a P.C.I. Scheme or rough cost estimate to the Government.

Programme Chart of Construction.

Although the completion period is specified in the tender documents, the contractors are not required to submit a programme of construction alongwith their tenders. To ensure timely completion of the project, the intending bidders should be asked to submit a tentative programme chart for the completion of various stages of work alongwith their tenders. The programme given by the contractor should be carefully examined before accepting his tender and modifications agreed upon where necessary. The detailed programme of construction should be exhibited at the site of work to watch day to day progress. Similarly a set of contract documents including detailed drawings and specifications should be available at the site of work at all times for reference by the Engineers or their representatives or any other authorized person. This will help to avoid any discrepancies in the completed project. Timely provision of funds is also a must for timely completion of the project.

Visits of Architect.

Normally the Architects pay very visits during actual execution of the building project. In case of hospital building it is very important that the Architect who has designed the project visits the site of work at reasonable intervals to ensure that the drawings are correctly interpreted and modifications are made where necessary.

Security Period.

Ordinarily the contractor is responsible for removing any construction defects for a period of three months from the date of completion. The security of the contractor is thus refunded after three months of the completion of the work. This

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period is not sufficient because the defects in the buildings appear due to change of weather and temperature variations. It is, therefore, suggested that the contractor should be made responsible for a period of atleast six months and the security deposit should be refunded in two equal instalments after three months and six months respectively. It may be mentioned that in the case of Islamabad works, the contractors are bound to remove construction defects which may appear within one year of completion.

The construction of a modern hospital is a challenge for Architects, Engineers and Doctors and the challenge can be met squarely only if all of them work whole heartedly, diligently and in close collaboration.

EQUIPING THE HOSPITALS

By

*Dr. M. Aslam Chughtai,**

Purchase of equipment in the hospitals already functioning is not a difficult problem, provided the funds are available and needs are properly determined, specifications adequately prepared and the purchasing is done by efficient methods. This can be done by an experienced administrator.

Before an order is placed for the purchase of the equipment the heads of the departments, and the staff members who will properly utilize it and maintain it be consulted and the equipment so procured must satisfy them with the type and quality of items. The expenditure of an equipment is no doubt costly but if a proper consideration is given to savings through a centralized purchasing the cost will be reasonable.

Whosoever, in the new hospitals equipment cost and budgets improperly handled have created serious situation. The costs were often estimated on a totally inadequate rule of thumb basis. As a rule 10% of the amount is kept at the total construction cost of the building. Inevitably these estimates of ten proved to be seriously inadequate when the time came to purchase the equipment. If the construction cost exceeds the estimate, as often happens, the excess has been taken from the total budget sanction for the scheme and leaving little or nothing for the equipment. In such a situation a fresh demand is to be placed to Finance Department with all the justifications and if the Finance Department agrees well and good otherwise there is no way left except to go for phases and to complete the project within the next few years resulting in to the sufferings to the patients. An interesting example is of the laundry project in B. V. Hospital, Bahawalpur. The project is incomplete inspite of the facts that it started in 1964. If the equipment was ordered and procured it was difficult to put it in the laundry rooms and the wall of the room was dismantled and reconstructed. When the equipment was checked the boiler was missing. Again all the formalities, channels and demand was placed and the case is yet incomplete.

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Further to reduce the financial burden the quality and quantity of the equipment is to be reduced in such cases. Only for these reasons we can define the equipment as follows :

With the exception of the items of the current operating expenses such as food, fuel, drugs, dressings, stationery, and other contingency items, the term equipment means all the items necessary for the functioning of all services of the clinical side and relative departments.

The useful classification of equipment is done in three groups depending on the depreciation.

Group No. 1.

Built in equipment usual included in the construction contract. Examples are hospital cabinets and counters laboratory and pharmacy cabinets, built in dark room equipment, cubicle curtain equipment, shades, fixed kitchen equipment, laundry chutes, elevators or electric lifts, boilers, incinerators, refrigeration equipment, fixed sterilizing equipment and surgical lightings.

Group No. 2.

Depreciable equipment of five years life or more not normally purchased through construction contracts, large items of furniture and equipment having a reasonable fixed location in the building but capable of being moved. Examples are furniture, surgical equipment, diagnostic and therapeutic equipment, dental equipment, laboratory and pharmacy equipment and wheeled equipment.

Group No. 3.

Non-depreciable equipment of less than five years life normally purchased through other than construction contract, small items of low unit cost and suited to store rooms examples are crockery, cutlery, kitchen utensiles, bed side lockers, bed pans, dressing jar, catheters, surgical instruments and linen articles.

The selection of the technical equipment for hospital is a task requiring careful analysis of the need of each department and conscientious study and selection of equipment that will best meet these needs. Early consultation with the architect planning the building is required. In order that the facilities planning will be of sufficient size to accommodate the equipment and render the necessary service. It is

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imperative become familiar with the details of the building plans as any attempt to visualize the equipment needs of the hospital could not be successful.

The steps to be taken in the preparation of the equipment lists are to note the strength of the beds in a certain hospital which may be 50 bedded, 100 bedded, 200 bedded or more.

The first step is to consider each room in the plan separately to list group two and three items, from the various schematic drawing together with such additional items as experience and knowledge indicate are necessary for the proper functioning of the service. Equipment finish should blend with the interior building trim and colour scheme.

Item cards are prepared by listing each item on a separate card. Each card indicates the quantity, together with the department and sub-department in which the article would be used. The advantage of such record is that it shows the total number of items of a given commodity and their location in the hospital. These cards provide sufficient space to enter purchasing detail, such as purchase order, number and date, manufacturer name and price. These are grouped by types of equipment, such as office furniture, machines, laboratory equipment, X-Ray equipment, etc., to facilitate purchasing of the items.

Finally for a hospital attached with a teaching institution, the following departments for equipment may be kept in mind :

(1) Administrative Department.

(2) Medical Department with the following sections :

(i) Allergy (ii) Cardiology (iii) Communicable diseases (iv) Dermatology and V.D. (v) Endocrinology (vi) Gastroenterology (vii) Geriatric (viii) Pediatrics (ix) Psychiatry and Neurology (x) Pulmonary disease.

(3) Surgical Department with the following sections, General Surgery, Neurological surgery, Orthopedics surgery, Plastic surgery, Urology, Proctology, Thoracic, and Cancer Programme.

(4) Gynaecology and Obstetric Department with nurseries, Isolation nurseries, Premature infants, and Artificial feeding.

(5) Ophthalmology Department.

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- (6) Ear, Nose and Throat Department.
 - (7) Physical medicine and rehabilitation department, with physiotherapy, and occupation therapy.
 - (8) Pathology Department.
 - (9) Electro Cardiography Department.
 - (10) Pharmacy Department.
 - (11) Dental Department.
 - (12) Radiology with Radio Therapy.
 - (13) Nursing Department, with Nursing School.
 - (14) Dietary Department.
 - (15) Out-patient Department.
 - (16) Medical Social Service Department.
 - (17) Medical Record Department.
 - (18) Hospital Library.
 - (19) Services Department with the following sub-heads :
 - (a) *Mechanical* :
Fuel, Boiler, Electric power, Gas Refrigeration.
 - (b) *Maintenance Department* :
Carpenter, Painter, Wall washer, Plumber, Electrician, Gardener, Workshop.
 - (c) *Laundry*.
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COMMISSIONING OF THE NEW HOSPITAL

By

*Mr. Abdul Rashid**

B.A., LL.B., D.C.D.P. (Beirut) PSS-I

The topic of my talk is the commissioning of a new hospital. I must admit that I have not been able to prepare a comprehensive paper on the subject. These are just some of the stray thoughts which I venture to present before this august gathering.

2. The inauguration ceremony of a new hospital can be likened to the celebration of a marriage, and this inauguration is necessary in order to notify the concerned population the factum of the new arrangements coming to existence. For an ordinary observer who comes and participates in such a celebration, it is difficult to realize that this is the culmination of a great effort. He is not aware of the labour and resources which have gone into the entire project before it reached the stage of commissioning.

3. In Government as well as in private sector, the planning of a hospital and studying its feasibility is essential. The PC I proforma devised by the Planning Commission, Government of Pakistan is used in Government Departments for detailed planning of a scheme and ascertaining its reasonableness and feasibility. If the details are properly worked out and action is taken in accordance with the phased schedule laid down therein, only a few difficulties will have to be faced in the scheduled completion and efficient running of the project. In fact half of the work is done if the project is well planned.

4. Once the buildings are nearing completion that a whole time Medical Superintendent is appointed alongwith necessary nucleus staff. This action should

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preferably be taken six months before the commissioning of the new hospital. The officer so appointed has to make necessary arrangements in many important matters. The most important among his tasks is the equipping of the hospital. In a Government Department, the scheme on the PC I form specifies the time schedule for the completion of the buildings and also that of purchase of major equipment. Action is taken by the Administrative Department for arranging the import of machinery and equipment from cash foreign exchange resources or loans etc. For this purpose a number of formalities like the placing of indents with the Supplies Wing of the Industries Department etc., have to be fulfilled and the various agencies connected therewith have to be vigorously pursued to achieve the target. Apart from this, many items are available with the Government Medical Stores Depot. The Medical Superintendent has to obtain these according to the needs of the Hospital which will of course be limited to the provision of funds available in the financial year's budget. He has also to make arrangements for the purchase of furniture after following the necessary formalities and obtaining financial sanctions. He has to ensure that the supply of water, electricity and gas, wherever it is available, is arranged before the date on which the hospital is to be commissioned. Contracts for the supply of diet and medicines have also to be finalized which should be effective from the D-Day. He has to prepare the budget of the Institution for the next fiscal year. All these actions entail lot of thought and labour. He has to run about various Offices and Departments in order to get things done by the due date.

5. The need for proper and adequate planning is not being emphasized unconsciously. Instances of bad planning and ill-conceived projects are not lacking. For instance a teaching hospital was located at a great distance from the Medical College. Similarly some hospitals are located far away from the population they are intended to serve. Instances are also not wanting where due to lack of coordinated effort, machinery arrived and rotted but the buildings to house this were not ready. Some of these difficulties arise due to paucity of funds but still I feel if due care is taken by all concerned, a lot of wastage of resources could be avoided.

6. The purpose of stating these problems is partly to stress the need for a careful selection in the matter of appointment of the Medical Superintendent of the new Hospital. This officer should be capable of minimising the difficulties and

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removing, to the possible extent, the gaps which may have occurred in various fields in the original scheme and during its actual establishment. He must have a lot of initiative, drive and an eye for detail. He should be sufficiently experienced and comparatively young. He should have a pioneering spirit so that he is able to overcome the difficulties small or big, which are bound to arise in the commissioning of a new Hospital and its initial running. I must point out that even an ongoing and efficient running hospital can go to dogs if the administration is unimaginative, disinterested or callous towards the needs of the public.

7. I have just mentioned that the Medical Superintendent should have an eye for details. I remember having attended an inauguration ceremony where all the arrangements had been meticulously made. However, when the Chief Guest went near the tape to cut it, it was found that the scissors for the purpose was not available. However, in the opening ceremony of a hospital this difficulty should never arise as one or two doctors would be present in the gathering who have scissors in their pockets.

8. Now I come to the most important factor in the successful running of the Project. This is the appointment of Specialists, para-medical and other staff. Selection of various categories of staff is done at various levels. Broadly speaking, Class I appointments are made by the Government Class II and Special Gazetted by the Director Health Services and non-gazetted by the Deputy Directors of the Divisions and the Medical Superintendent. In the case of Class I and II, the Public Service Commission has to be consulted and for the staff of Class III, the respective Selection Boards have to be consulted. Class IV staff can be appointed straightaway but is generally recruited through the Employment Exchange. Action in these matters have to be taken well before the date of commissioning so that the selections are completed a month or so before that date. The staff sanctioned for the Hospital should be on the ground atleast 15 days before the date of commissioning of the Hospital so that the duties are distributed and the patterns of formal relationship become clear.

9. The stage is now set for the formal opening ceremony of the Hospital. However, there is still one big deficiency which by the very nature of things has to

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be present at this stage. That is the absence of traditions, the absence of good reputation and the absence of implicit faith in the efficiency and good standard of the Institution. The acquisition of this goodwill is essential if the institution has to prosper. Rome was not built in a day and similarly Mayo Hospital was not that glorious on the day it was commissioned.

PEOPLE RESPONSIBILITY TOWARDS HOSPITALS

By

Dr. Capt. Muhammad Umar Chaudhry
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It is presumed and taken for granted that a hospital already exists amongst a group of people or is proposed to be provided. A number of questions then arise as far as PEOPLE'S RESPONSIBILITY TOWARDS SUCH A HOSPITAL, is concerned ; these are :—

- (i) Do the people have any responsibility at all towards hospitals ?
- (ii) If so at what level the people can be considered to be responsible that is NATIONAL, PROVINCIAL, DISTRICT, TEHSIL or RURAL community level ?
- (iii) Whether people's responsibility towards hospitals is in their capacity as individuals or as a collective group ?
- (iv) What role the people are expected to play and in what sphere their activities are likely to be channeled ?

As far as the first question is concerned the answer is definitely, YES. The people are responsible for their own welfare and a hospital is one of the means, and a very important one, for the welfare of those amongst whom the hospital exists. The answers to other questions are so interlinked that they can be discussed collectively.

Individual responsibility is usually exercised by the people at National and Provincial levels and major contributions at such levels come from the rich and

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highly placed persons. I do not propose to discuss this level of responsibility any further and shall restrict my talk on the subject of peoples help towards hospitals at District, Tehsil and Rural group levels. Having accepted the principle that the people do have a responsibility towards hospitals the question then arises as to how and in what manner the people usually give help to the hospitals. Having worked for about 25 years in Rural, Tehsil and District Hospitals, it is my experience that the people always come forward for development and improvement of the hospitals **AT LOCAL LEVELS** for the provision of following types of services :—

- (i) **BUILDINGS** :—Repair of old buildings and construction of additional accommodation for patients.
- (ii) **EQUIPMENT** :—For Laboratory e.g. Blood Urea, Blood Sugar examinations and blood Transfusion Service, Theatre equipment instruments and Refrigerators.
- (iii) Air-Conditioning of operation Theatre and heat Stroke Room.
- (iv) **FANS** :— For waiting halls and additional beds in the hospital verandas and exhaust fans for X-Ray Department and Operation Theatre.
- (v) Supply of Hot Water Equipments in the Operation Theatre.
- (vi) Provision of amenities for patients in the form of Radios, Loud Speaker, Garden benches and Books and Magazine etc.
- (vii) Construction of Canteen, Cycle-Stand income from these goes to the hospital welfare fund.
- (viii) **AMBULANCE CAR** :—Purchased by the people and donated to the hospital which then runs and maintains it.
- (ix) Medicines for the poor.
- (x) Diet for the poor.
- (xi) Construction of accommodation for the patient's attendants.
- (xii) **CONSTRUCTION OF A MOSQUE** :—In addition to some of the ways narrated above in which people help a hospital there may be a number

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of other requirements of a hospital for which help can be sought for and obtained. Help from the people is always available for a local hospital. All that is required is personal contact by the Doctor and pointing out the deficiencies to the people.

PATIENTS WELFARE SOCIETIES/HOSPITAL COMMITTEES: In my experience if proper approach is made to local people and deficiencies in, and, requirements of a hospital are explained to them people are always keen to improve the conditions on self help basis. To my mind the best way to achieve results is the organization of Patients Welfare Societies/Hospital Committees for individual hospitals. The Societies can be organized for District Hospitals and Hospital Committees for Tehsil and lower level hospitals. Assurance to the people that whatever they contribute shall be used and spent on their own hospitals through them is absolutely essential. Until and unless the people see the benefits coming from their efforts at local hospital level they are reluctant to offer substantial help to the hospital. One of the major reasons of failure of Government sponsored "*District Hospital Amenities Fund*" has been the reluctance on the part of people to contribute to a fund, Expenditure of which is tied down by red tape and long waiting periods by the people to see any benefit coming out of it to their own local institutions.

CONCLUSIONS : Every body agrees that the Government is keen to render medical aid to every citizen of Pakistan. In this respect the Provincial Government is doing its best to provide hospital relief but such a relief has its limitations. People have to come to the rescue of the Government and in my view every group of people has a direct responsibility towards a hospital located amongst them. It is my firm belief, based on my personal experience, that by proper motivation, and getting the people involved in the development and improvement of a hospital by personal contact one will not find the people wanting in feeling their responsibility and extending their help in certain particular directions. People are always there to help by cash, kind and by their sweat and labour. All that is required is arousing their living interest and enlisting their practical co-operation. A vast potential source of help is waiting to be tapped in the form of peoples responsibility towards hospitals. It will not be out of place if I take this opportunity to point out that this aspect is completely ignored during the training period of our basic doctor, that is, a *Medical Graduate*. The Doctors are being taught, and trained in surroundings which are completely different from the conditions in which they are placed later

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on to work. No body tells them what they are likely to face when they go out in the field Hospitals and how they are to come over the difficulties and to make up the deficiencies they come across by involving the people. It will be a wise step, and a most beneficial one, if our basic doctor is given some sort of training by lectures, and Tours of such Hospitals where people have made improvements/development on self help basis through patients Welfare Societies/Hospital Committees.

PEOPLE'S EXPECTATIONS FROM HOSPITALS

By

Dr. Mahmood Abbas Bokhari

M.N.A. (Elect)

Hospital is a place where people part their pain and panic and instead get health and pleasure. Naturally the expectations of the people are from that angle. The motivating factors which move a person towards a hospital are somewhat over and about the facilities and advantages hunt at their premises. Why people skip over from the treatment available at their door-step by a Private Practitioner of every category capable of every symptomatic treatment. Certainly it is something over and above; than the ready sympathy and salesmanship of the Local Practitioner. What that something is ?

It is the Specialists life saving fine technology and practical knowledge that attracts the common patient to the doors of the hospital. When a common man enters as a patient in the Cure Centre he expects the following :

1. *Reception.*

Which is a dream in the current system of administration, rather instead the poor patient is greeted with apathy, kicks and pushes, coldness and repulsion. I must say that due to lack of check-up in the out turn of the hospital and staff, the unconscious effort of the staff at every level is to decrease the rush of work to find an easy escape out to their happy home as early as possible

2. *Undue Formalities to be avoided.*

Often the illiterate and ignorant patients are made simply ping pong balls in the hospitals and most of them have to behave like untraced polo balls. This sort of cruel and inhuman practice must be curtailed at the earliest, The Reception must be a highly trained, skilled, polished and well organized department. It should curtail all the unnecessary wastage of time of the public, it can certainly bring a healthy impression and win the good will of the patients.

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3. *Callus Attitude of the Doctors.*

I must confess that many of the hospital doctors are blamed by the public that they behave in a very indifferent way with the public. Some doctors pose like administrative lords which tantamounts to their disconcern with the common pain and panic. The public expect that the doctor in the hospital should be a friend and embodiment of kindness and generosity.

4. *Lower Staff.*

The unconcerned attitude of lower staff is certainly heart breaking to many patients, often the fine sense of selfless service is only provoked by the petrol of tainted dollars. The untamed ruthlessness needs much harness.

5. *Round the Clock Supervision.*

It is strange that in my Town of gallants and lively spirits the precious stuff known as specialist disappears like light in blackout, the grew-some night is at the sweet discretion of the fair sex known commonly as nurses who know every good art of service except sometimes nursing. It is not very uncommon to find the daughters of eve in the uniform of Florence Night-ingle speedily busy in the joy of competition winning by finishing a woollen jersey in the music of patients cries. I must bear out that a sick man has little appreciation of fine arts.

6. *Free Treatment.*

Often the Consultants in hospital prescribe luxurious prescriptions to the poor patients who are in a charity institute for the only reason of expiry of their financial stamina. In addition often you have to bait properly even a sweeper to prompt cleanliness of your patient to the tune of a change of bed sheet. In free wards the patients and their attendants are often made to exhibit a cross country race to explore a bottle of matched blood or salines of different types or rare medicines to certify the galleic knowledge of the prescriber. This hurdle race in no way fit in the National desire of appreciation of ends.

7. *Categorisation.*

Like the ill slave age remnant of Railway journey classes in every Hospital more or less we have got the compartmental division standing as a contradiction of constitutional provision of fundamental rights and dissolution of disparity. It is strongly suggested that in the same hospital specification of classes should be abandon-

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ed as it is nothing but an indication that a majority of Pakistanis should feel indignant and insulted at the cost of a small class of privileged gang. If at all we have to breed this luxury in Hospitals we should have separate Hospitals for this particular purpose. In this way at least the poor majority of Pakistanis wont feel that much insult.

8. *Up-to-date Record.*

The case history should be prepared very elaborately and the record of the patient should be handed over to the patient at the time of his discharge from the hospital in the form of a duplicate copy, so that the patient even when shifted to another station may be benefitted in time and efficiency of treatment.

9. *Education of the Patient.*

Printed matter and otherwise teaching so as to adopt preventive measures in future is very paramount in the National interest. It would not only safeguard the particular patient for a relapse or re-attack of the same disease but also shall impart him a sense of protective genius for other ailments as well as his own family and known circles he would be promoting the same preventive sense.

10. *Private Practice of the Consultants.*

It is the easiest diversion to distract the attention of the hospital doctor from his legitimate duties. He has to conserve his extra energies to stage an impressive show to his dollar-laying, tidy attractive and gorgeous looking private patients. In such premises the hospital becomes a secondary and less important place due to its permanent nature of a fixed salary, in addition hospital serves as a fishing pond to allure the golden fishes to the net of private chamber, it is just alike as if a judge or a prosecuting officer has to play the role of a private defence council. Naturally if the ends of justice are going to be distorted in that particular case why not then the integrity of a hospital doctor in the manifestation of his treatmental efficacy and justice for all equally. Do hospital doctors devote time and interest equally for the poor class as they do in the privileged cases? Despite they draw their emoluments from the public funds mainly contributed by the poor class directly or indirectly. Doctors incharge of wards must be put by rotation on night duties and in the close premises of the hospital subject to the ready call of emergency.

11. *Food and Conveyance.*

Contractors should not be assigned this job, because in the nibbling process of

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profiteering the patient gets nothing but the soup of the chick. Similarly conveyance for the emergency cases should be absolutely free. So many cases cannot avail the hospital facilities because they cannot afford to juggle out a 4 dollar note at the ready call of an unexpected accident or emergency.

12. *Alternative hospitals.*

Nation cannot immediately afford the construction of new buildings for hospitals, it may require 2 decades because Alladin is dead and lamp is somewhere in the Atlantic. No one stops us by acquiring aqesing public and private palacials buildings for utility as hospitals. Many Alfalabs and WAPDA Houses can be sacrificed by the patriotic Pakistanis including the in majority devoted engineers and it solves the on salught problem of the internal enemy worst than any outer aggressor.

13. *Cat and Dog Farms.*

Can the people expect to lay a net for the catch of every thing stray for export to India to less medicines, irregular staff, untidy wards, yellow brown lawns and stray dogs and cats into more than a ten multiplication is the most constant statistical quotient exhibited by any hospital and very few departments can break this hard earned record.

DOCTORS RESPONSIBILITIES TOWARDS COMMUNITY AND HOSPITALS

By
Dr. Bashir A. Malik*

This subject will be described under different headings :-

A. Responsibilities Towards the Community.

1. *Constant Study.*

As a physician one is committed to a lifetime of study. The present rate of progress in various departments of medical science makes this necessary. It is utterly impossible for one person to learn more than a small fraction of what he needs to know to be a good physician and yet when the first patient walks into his office he is expected and morally bound to know everything there is to be known about medicine in order to give that patient the best medical care possible.

2. *Practice of medicine requires missionary spirit.*

As the scientific system of medicine has made breath-taking progress the present day doctor is rendering the quality of service that his predecessor of a couple of decades ago could never imagine. In spite of it his prestige continues to fall. In order to call a halt to this situation and to restore the doctor to his rightful place the physician should view himself not just as an elevated artisan but should also revert to his traditional role of a beneficent guide, a reformer and a social worker deeply and genuinely concerned about the physical and moral health and well-being of the individuals and the society.

3. *Emergencies.*

We should be ready at all times to lend our services to any emergency. It would be irresponsible on humanitarian grounds to deny emergency services to an individual simply because he cannot pay or is inconvenient to us.

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4. *Proper Records of the Patients.*

Proper records/files and patients cards and the results of their follow ups should be maintained as far as possible. This data can be utilized in research and planning for the future medical care of the community.

5. *Notifiable Diseases.*

As required under law the notifiable diseases should be notified. The list of such diseases however requires re-examination, and the procedure of notification to be made simpler and more workable. However, while diseases like cholera and small-pox should be immediately notified, one fails to find the justification for keeping measles, and chicken-pox in the list of notifiable diseases.

6. *Treatment/Investigations.*

Disease itself is largely self-limiting. People who are ill, even seriously ill, will generally get well without the active intervention of a physician. It is just possible that with regard to a wide range of conditions those who were treated least made the best progress. It is imperative therefore that whenever we have to intervene we should prescribe as few drugs as possible and in our poor and developing country we should use cheaper drugs if the costlier ones can be avoided. Prescriptions containing a long list of drugs many of these in various combinations must be strongly discouraged. Investigations should be requested when absolutely necessary. For instance, X-Rays of the chest for a clear case of Bronchial Asthma and series of X-Ray after Barium Meal for a case of abdominal neurosis are superfluous.

7. *Health Education.*

(i) Prevention.

We all know, though we tend to forget, that clean water, clean food and other environmental defences have made the greatest contributions to raising the level of health and decreasing the death rate. Therapeutic medicine is not always quite relevant and effective preventive measures remain to be designed. The public must be made aware of simple principles of health through vigorous health education campaign.

Children must be protected against communicable diseases according to the approved schedules of immunization.

Due attention must be given to regular exercise, sleep and recreation. Hazards of smoking and alcohol must be publicised.

All the eatables which remain accessible to the flies and contaminants must be avoided. It is said that vegetables sold in Lahore are washed in sewerage water. Uncovered trucks of Lahore Municipal Corporation moving in the streets carrying all sorts of rubbish and disposable material are a common sight. Some one should convince the Lahore Municipal Corporation of the hazards these are posing towards the health of the citizens.

Doctors, should keep a check on the conditions of public health and should, individually or through their organisations, bring the harmful factors to the notice of concerned authorities as forcefully and as frequently as is necessary.

(ii) Diet.

The public is to be informed that there is not much difference between an apple and turnip regarding their vitamin contents. There is hardly any difference between beef, mutton or chickens regarding their food value; the caloric value of wheat, maize and rice is about the same weight for weight. There is no difference between animal fats and 'sarson oil' as regards their fat contents. On the other hand the latter contains mostly unsaturated fatty acids which do not increase cholesterol contents of the blood and thus do not contribute towards ailments of the cardiovascular system. In villages where the oils are used more frequently heart troubles are relatively less perhaps owing to the above reason. This knowledge about the relative values of different food items can help the poor to have more calories at lesser price.

iii) Hereditary Diseases.

Those suffering from hereditary diseases like Diabetes, Asthma, Epilepsy Haemophilia and Achondroplasia should not intermarry. They should not produce children. In case they decide to do so they should restrict the number of their members to the minimum possible. Greater attention should be paid to ordinary diseases like Tonsillitis, Chronic Otitis media and Traucoma because these are the commonest causes of rheumatic hearts diseases, deafness and blindness respectively.

8. Medical Ethics.

A question of ethical import often raised is: Should the doctor tell the patients the truth? It will appear appropriate to tell a patient the full truth if he is

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suffering from a communicable disease like Tuberculosis, since if he does not know it he might infect others. Anyone in fact whose end is approaching should be thoughtfully and tactfully informed of his danger so that he may arrange his affairs properly. The next question is, in what circumstances is a doctor justified in suppressing the full truth? If he knows the patient's psychology and is convinced that a knowledge of the height of his blood pressure would depress him he is warranted withhold the full truth. The doctor is sometimes justified in telling a white lie, but for his own protection as well as on the score of truth, he should inform some member of the family of the true situation whenever he conceals it from the patient himself. However, the doctor must not destroy hope if he can avoid so.

9. *Research.*

There are certain diseases or certain aspects of health which are more or less peculiar to our conditions. Doctors owe it to the community to devote a part of their time to some original work. There are great limitations of course, but it is still possible to do something that can be of great value.

B. *Responsibilities Towards the Hospitals.*

Patients should be referred to the hospitals at proper time such as in cases of a woman in difficult labour, and strangulated hernia. They must be handed a note giving details of their history and the treatment carried out and be followed up in the hospitals.

The patients on their discharge from the hospitals must be given a brief summary of their treatment and investigations for making their follow up easier. Lastly doctors should avoid passing unwarranted remarks against the medical attendants who looked after the patients earlier in case their diagnosis or line of treatment do not tally with each other.

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EXPECTATION FROM THE HOSPITALS AND COMMUNITY

By

*Dr. S. Amjad Riaz Shah, MRCP**

A fresh medical graduate is like a freshly germinated seed and needs very careful nurturing for a number of years before it attains a full bloom and is able to judge accurately and give full protection to the lives of others.

I suppose that in a country, in our country, where apart from the doctors, more than 80,000 quacks of all sorts are given a free hand, this very precise statement does not matter very much but in those technologically advanced welfare societies of the world where human lives and values are placed above every thing else, every possible care is taken to ensure that when interns and House Physicians attain position of responsibility they are completely fit for that position.

1. *Duty of the Interns & House Physicians and Registrars towards Community and the Country.*

I must point out categorically right here at the beginning that the duties of the above category of doctors is a very hard, devoted and a laborious job, and with which is attached unparalleled dedication towards amelioration of human suffering, pain, disease, poverty and mal-nutrition. Only those who can withstand the grueling ordeal of working day and night and even then many of these junior staff do not progress beyond a certain stage. In advanced countries of the world like USA and Russia, this category of junior staff does its duty humbly, modestly and with unassuming grace. It is a great pleasure to mingle with them and to be a part of the sense of devotion and dedication that prevails during the working hours. But as it is mentioned later, the rewards that this sense of service brings to these young doctors from their hospitals and societies are very satisfying, not always in turn of

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money and material but more so in turns of dignity, respect and everlasting gratitude for whom they have devoted their days and nights.

2. *Expectations from the Hospitals—Societies Towards Intern House Physicians Registrars etc.*

I am afraid I have to repeatedly go back to the example of the advanced countries of the world in outlining the minimum duties of a hospital towards their junior staff and how adequately it is met with. In the USA Federal regulations ensure that every recognized hospital fulfils the following norms of duties towards the junior staff:

(i) *Teaching Programme.*

Top most on the list an up-to-date teaching programme for interns and residents which enables them to keep abreast of the latest development in all the fields, of their own interest. This includes conferences, lectures, rounds and visits by eminent teachers from other hospitals. Full time allowance is given to the junior staff for attending these teaching sessions. In addition they are also given the duty of teaching to the medical students.

(ii) *Accommodation.*

Adequate and well furnished accommodation is provided in which there are no restriction of any kind. This accommodation must conform to minimum standards of comfort hygiene, ventilation and reading facilities because the hospital administration believes that the better they look after the junior staff the more loyal willing, and efficiently they will perform towards dealing with the patients. It can be safely said from experience that the average house staff accommodation in Northern America today is in some ways much better than the big spacious bungalows that only a very small percentage of our population have built.

(iii) *Adequate Boarding Arrangements.*

Some hospitals lay very special emphasis on the provision of best possible food for the house staff. This is either given free or at a very nominal cost so that every doctor of the house staff can easily part-take of the abundant and highly nutritious food at the proper times. In addition to this there is invariably the

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provision of a deep Freeze and a Refrigerator in the intern lounge, where the interns can have their snacks at night after their ordeal with acute cases.

(iv) *Uniforms.*

The number of proper uniform is also the duty of the hospital administration towards their house staff. The cost of laundering of these uniforms should also be borne by the hospital.

(v) *Remunerations.*

All over the world the devotion and hard work of the medical profession, especially of the junior staff is being recognized and is being given due respect and appreciation. In lieu of this the junior staff is being paid more and more. For example when we interned in USA in 1959, we used to get 100 dollars plus of the above mentioned facilities. When I visited USA last year, the same University hospital was paying their interns 450 dollars and a lot of other facilities than 1959. Of course more pay to the doctors means more financial strain either on the Government or the Hospital Governing Body, but in progressive societies this increase is easily taking care of.

This is a very brief outline of the duties of hospital and the administration towards their house staff. One really has to work in these environments to fully appreciate the meanings of the above facts. But if these few steps outlined above are only partially implemented in our own hospitals it will go a long way towards increasing the efficiency and satisfaction of the junior staff.

3. *Expectations from the Community.*

The duties of the society are not so well defined as those of the hospitals. It would be a mistake to expect anything from the society for which a doctor lives and works, specially in Pakistan. But one does find a lot of small things when moves about that community which make you feel proud of the medical profession and also increase the good will towards that community. Going back to USA again, a lot of protection and regard is given to a doctor in a rural community. Municipalities after long terms leases of land for buildings and residences-cum-clinics.

The Journalistic community is more kind and understanding towards medical profession than in this country, even though the doctors in advanced countries charge a lot more than in Pakistan.

It is through these small considerations that one gets attached to the community and wishes to contribute even more towards its well-being.

CONSULTANT'S EXPECTATION FROM THE HOSPITAL COMMUNITY

By
Dr. A. Rauf Yusuf *

The consultant expects from the hospital :

I. The best possible working conditions. This covers :

(a) Adequate junior staff. The consultant is the head and brain, the Registrars the backbone and the houseman the limbs of the unit.

There should be at least two Registrars. The senior Registrar should have a post-graduate degree and proper training and experience. These are the people who would be primarily responsible for carrying out the orders of the consultant and attend to the routine. Some units may also require more staff for their specialised work.

The minimum number of housemen would be two.

(b) Good and adequate nursing staff.

(c) A well trained and patient orientated menial staff. A lot of the complaints about the hospital are due to the paucity, and therefore the irritability, of this class of staff.

(d) Good laboratory and other investigative facilities so that all relevant investigations can be quickly and expeditiously carried out.

(e) All types of medicines and in any quantity. Again shortage of medicines is not made the hospital's responsibility but the consultants get blamed for it.

(f) Pleasant working environment in outpatient and wards and well appointed offices.

(g) Secretarial facilities.

(h) A properly assessed work load to enable the consultant to study cases properly and to give him time for reading and research.

II. The consultant should have a say in the hospital administration and in choosing his staff.

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III. The hospital should also protect the consultant from baseless and slanderous accusations especially in the press. This will be referred to later.

From the community he expects :

I. TRUST :

It should be realised that the consultants are well qualified responsible and dedicated people - they have shown this in their effort to get post-graduate qualification. Their own reputation depends on these factors, and they cannot afford to be negligent.

It must be understood that some patients must die because of the nature and extent of their illness. It is not necessary or possible that the consultant must be present throughout the illness to the time of death. He certainly must assess the case and chalk out the line of treatment, which the junior staff will carry out.

Any case of alleged negligence should be brought to the notice of the hospital authorities - that is the proper form for complaints. The press should not be used for ventilating such grievances. This only needs to a sense of frustration in the medical staff, who feel slandered and that the case is decided *ex parte*, and also the public gets doubts as to the efficiency and honesty of the hospital and its staff. The grievances give only one side of the picture - any person whose patient dies has cause for wondering whether the proper treatment was given, but he cannot assess the nature of illness, the limits of treatment. The logistic difficulties like availability of certain facilities and medicine, whether there are enough doctor and nurses, etc. etc. Often it is not that wrong or insufficient treatment was given, but that doctors and nurses were not in continuous attendance at the bedside to satisfy the patient's attendance. What is not realised is that these cases have been given the necessary treatment, but the result is either foregone, or that one can only wait for the outcome - and there are other patients to attend to.

The frontiers of medicine are vast and ever increasing—the amount of available knowledge is immense but nowhere near perfect or non controversial lines of treatment are being recommended for the same illness. As such a layman can have no idea of the intricacies of the problem. It is only people with the necessary professional background who could assess whether the proper thing was being done. There must be a clear distinction between the doctors responsibility and that of the hospital. The shortcomings of the hospitals, (due mainly to financial stringency which restricts the amount of care and medicine that can be given) must be clearly realised.

II. PROPER REMUNERATION.

In our society one of the greatest incentives is remuneration for work performed. To get the best people to specialized remuneration and prospects have to be adequate regard must be given to the amount of time, labour and self denial a consultant has put in to achieve his present professional status. At the same time his contemporary in general practice has been working and earning well and building up a solid clientele from the time of graduation. This could be due by either planning a well paid wholetime career ; or by allowing the right of private practice.

And by well paid I do not mean the C. S. P. scale - it must be much more.

PARA-MEDICAL PERSONNEL—THEIR EXPECTATIONS AND RESPONSIBILITIES

By

*Dr. Shamim Raza Bokhari**

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The definition of Para-medical Personnel varies from country to country. The W.H.O. expert committee meeting on medical and auxiliary personnel held in Geneva in 1967 defined para-medicals as "personnel below the professional level who assist a fully qualified person". They may be engaged in :

(a) Curative work such as Operation Theatre Assistants, Physiotherapy Assistants, Anaesthesia Assistants, Dispensers, Dental Assistants, Nurses etc.

(b) Preventive work such as Sanitary Inspectors, Public Health Nurses, Lady Health Visitors etc.

(c) Diagnostic work such as X-Ray Assistants and Laboratory Assistants etc.

The responsibilities and duties of para-medical personnel vary from country to country. In the USSR where the para-medical service is highly developed medical care is mainly under para-medical personnel known as "Feldshers". They run medical units more or less independently, the control by a team of medical specialists being remote. Their duties however are spelled out and all difficult cases (which have been categorized) are referred to the medical team. The scheme is well-organized and removes the burden of routine work from the medical personnel. A good para-medical service is not only more economical but also results in providing more time to the medical personnel to indulge in the study and scientific treatment of difficult cases.

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Primary Rural Unit.

It is proposed that one curative para-medical, equivalent to the general feldsher rural of the USSR alongwith one Lady Health Visitor equivalent to the mid-wife feldsher of the USSR be appointed at the primary rural sub-centre. They should both be graduates in their subjects. The population covered by them should be 700 to 1000. They should take care of routine medical cases, normal deliveries and refer difficult cases and clinical investigations to the rural health centre.

Rural Health Centre.

This is a 10 bedded unit with a male and female medical officer, 1 graduate laboratory technician should be appointed to perform routine clinical pathology work. He should be assisted by one lab-assistant. 1 graduate X-Ray technician assisted by an X-Ray assistant should be employed for X-Ray diagnostic work. Similar facilities should be made available for 25 bedded Tehsil Hospitals and 100 bedded hospital, with corresponding increase in number of para-medicals employed. A graduate curative and graduate Mid-wife para-medical should be employed in both these units to deal with routine patients. Routine work to be dealt by the para-medicals will have to be defined. This will include first aid emergency pending the arrival of a doctor, minor surgical procedures such as extraction of foreign bodies, lancing abscesses, and venepuncture, maintenance of out patients cards and records, performances of vaccinations, management of ambulance teams, carrying out of basic technical diagnostic and therapeutic procedures, giving of blood transfusion, antinatal care, and performance of normal deliveries etc.

500 Bedded Hospital.

This is a hospital where different specialities are present. Para-medical personnel will be assisting in these specialities. The demand of all the specialities is that of graduate technicians capable of understanding the scientific basis of the highly technical work they are performing. The heavy pressure of routine work in the various out-door, laboratories, casualty units, dispensaries etc., demand that this load should be borne by a well organized para-medical service. Their duties, responsibilities and training can be worked out by sub-committees.

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Teaching Institutions.

In these institutions there is an added load of teaching work. Para-medical personnel may be required to assist in teaching in the form of setting up of practical classes, handling and preservation of teaching material etc. Where specialized work is occurring para-medicals with post-graduate training will head teams of graduate para-medical staff. Examples of these will be the chief laboratory technicians in laboratories, Nursing Matrons in the nursing service etc.

Para-medical Personnels Their Expectations :

In order to ascertain expectations of para-medicals a survey was carried out in Lahore amongst Sanitary Inspectors employed in the Municipal Corporation, Nurses in various hospitals, Lady Health Visitors of the Public Health Nursing School, and Laboratory assistants working at the Institute of Hygiene & Preventive Medicine. Results of this Study are summarized as follows :

1. Pay Scales.

Without proper remuneration one cannot attract the right type of person for the job required nor keep him satisfied with his lot. The majority of the technicians wish to start with a pay scale of Rs. 220-15-450 with a qualification of Matric with Science. They expect a rise in grade after 5-7 years and look forward to promotions to Class II, Junior Class I and Senior Class I, after obtaining F. Sc. graduation, and post-graduate training. A few technicians have demanded technical pay, privilege of private practice or non-practising allowance in lieu thereof.

Other facilities expected with pay etc.

(1) Provision of residential accommodation—A four to five roomed house has been demanded by the majority of para-medicals.

(2) Most of the para-medicals have depreciated free medical aid as is being given at present and desire a fixed allowance instead.

(3) The majority of the para-medicals have demanded free education facilities for children.

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Training Facilities.

A scheme of training was proposed to the para-medicals. The majority of the technicians agreed to this training and desired it to be carried out on Government expense. Majority of para-medicals are prepared to sign a bond of 5 years but not 10 years.

Promotions.

The length of the service in between the training periods mentioned above is depreciated by all. It has been desired that the period be reduced to 5-7 years.

ORGANIZATION ROLE OF HONORARY CONSULTANTS

By

Dr. Amir-ud-Din,

S.I., T.Pk., S.Pk., F.C.P.S. (Pak.), F.R.C.S., F.I.C.S.,

Time and again, question is raised for appointment of honorary consultants in the hospitals. Is it worthwhile to do so? This problem needs a thorough study for a final conclusion. It is an established fact that we need many more hospitals with indoor beds as well as provision for out patients treatment of the patients. There has been lot of criticism in the press about the working of the hospitals.

Criticism, unless it is constructive, is merely useless grouching. We must try to find out the real cause of the complaint. The public has been taught that the hospital is the place to go when one is ill or injured. To the public way of thinking any illness is an emergency and the patient must be admitted for indoor treatment. This is not possible because of lack of sufficient bed accommodation in hospitals. This is the chief cause of the complaint.

In the out patient department of teaching hospitals the number of attending patients has increased considerably. The whole-time consultants are teachers who can only see a few patients in the out patient department because their chief duty is to teach. A good number of patients do not require the advice of senior consultants. They insist on seeking the advice of the consultant because they believe in getting something for nothing. Thus depriving the poor patients who really need skilled advice. Enough money is not available for cure and prevention of disease on account of more urgent problems of the country. Apparently this difficulty can be solved by appointing honorary consultants with necessary post-graduate qualification and experience who are keen to serve the country and have no financial worries. If we appoint honorary consultants to some or all of these hospitals, we have to weigh the gain, against the drawbacks with such a policy.

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Usually in patients and out patients form the part of the same hospital. With our present practice it is estimated that one consultant can look after 50 beds besides attending the out patients. This consultant not only works whole time but is also available on call round the clock. He is responsible to the employer for all purposes. He is the captain of the ship: supervises the entire work including the personnel working under him e.g. nurses, technicians etc. Thus he feels his responsibility and is answerable to the authorities. He has his service and career at stake therefore fully realises his duties and responsibilities and is not likely to indulge in wrong practice.

If the consultant is in honorary capacity, he has nothing at stake. He feels no responsibility. He is incharge of nothing. He may be considered answerable to the employers theoretically but in practice it is not possible. He may do whatever he likes right or wrong, without any fear. At best he will stop working instead of offering explanations for the wrong done. He expects no pension or gratuity. You cannot expect him to be on call round the clock. He may be able in rare cases to devote a few hours a week but most of the time he would be concentrating on private practice. There is the yearly outflow of medical men to wealthiest countries inspite of the great demand at home. The cost of living has gone up many-fold and it is humanly impossible for a young consultant to serve in any institution honorarily and honestly. Consultants with long and necessary experience would not care to work as a whole time consultants in a purely honorary capacity.

During the last forty years honorary consultants have been appointed at various times. Of course with exception they have not worked according to the terms and conditions offered to them. No substantial benefit has come out of their appointment. They have deserted the hospital whenever they felt like doing so. They have observed no discipline. This system has been abolished in most of the western countries even.

Therefore I arrived at the final conclusion that whenever we need consultants, of course we need many of them with building of new hospitals. We must employ them and give them full responsibility to work and pay them adequate remuneration.



INDOOR CLINICAL DEPARTMENT AND THEIR SPECIALITY-WISE ALLOCATION*

By

K. Sadiq Hussain, M. R. C. P.**

THE INDOOR CLINICAL DEPARTMENT

Definition :

The indoor clinical department is the basic Unit of a hospital.

Staff :

The staff should be divided into (1) Tenure staff (2) Trainee staff (3) Nursing Staff (4) Bearers and Sweepers (5) Laboratory Staff depending on size and status of the hospital.

*Paper read at the Provincial Health Conference on Hospital Planning, Designing and Management, held on 22nd to 25th April, 1971, at L. M. C. Hall, Lahore. (Pakistan)

**Professor of Medicine, King Edward Medical College, Lahore.

Size :

To be manageable a unit should be between 40-50 bedded divided between male and female according to requirement.

Number :

Size of Hospital determines the Number of units.

Nature :

(1) General Units : till recently Medicine and Surgery.

NOW :

(2) Speciality Units : in addition to above.

Function :

1. Diagnosis.
2. Treatment : (a) Nourishment (2) Nursing Care
(c) Drugs and other therapy
(d) Operations
3. Under-graduate education.
4. Post-graduate training.
5. Research.
6. Training patients in looking after themselves e.g. diabetics.

ALLOCATION OF SPECIALITIES

Teaching Institutions : 1. At the moment specialities exist only at the major teaching institutions and that too not in all. The immediate plan in the foreseeable

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future requires, that each division of the Province have one teaching institution, and all teaching institutions have a full range of specialities. These will cater for integrated teaching, training young doctors, running Post-graduate diplomas, and encourage intra institutional education among follow *units*.

Presuming that a teaching hospital should have a minimum of 1,200 teaching beds with a provision of 300 bed extension a suggested break-up would be :—

1. General Surgical	3 Units	10. Chest Surgery	1 Unit
2. General Medical	3 Units	11. Eye	1 Unit
3. Midwifery & Gynae.	2 Units	12. E.N.T.	1 Unit
4. Paediatrics	2 Units	13. Urology	1 Unit
5. Neurology	1 Unit	14. Orthopaedics	1 Unit
6. Neuro Surgery	1 Unit	15. Plastic Surgery & Burns	1 Unit
7. Cardiology	1 Unit	16. Psychiatry	1 Unit
8. Cardiac Surgery	1 Unit	17. Dermatology	1 Unit
9. Respiratory diseases	1 Unit	18. Radiotherapy	1 Unit
24 x 50 = 1200 beds.			

2. District Headquarters.

Since all specialities require very close collaboration (particularly Surgical ones) with advanced radiology, Path : Lab ; isotope centres and biochemistry, it is not possible nor desirable at the moment to have them represented at the district level with two exceptions :

(I) Gynae. and Midwifery

(II) Accident service

Therefore at the District level, there should be 3 teams with equal beds i.e. Surgeon, Physician, Gynaecologist, assisted by Radiologist, Pathologist and Anaesthetist.

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ACCIDENT SERVICE

For numerous avoidable reasons road accidents have assumed epidemic proportions with an extremely high toll in life and economic disruption both at the individual and National level. A first rate accident service therefore must be provided at the district hospital level on all the major highways particularly where the accident rate is highest so that correct surgical and orthopaedic help is immediately available.

ROVING CONSULTANT

This does not imply that an Orthopaedic Surgeon leaves his parent institution and becomes a Roving Consultant but that doctors who have had training in Orthopaedic and Surgical Units at teaching institutions must be posted as members of teams at the D.H.Q. Where Accident Centres exist as suggested. The experiment of Roving Consultant has been tried and has utterly failed to serve the purpose whatever that was! A mere look at register of attendance is adequate proof. A few patients at Gujranwala are seen at the cost of work loss, loss of teaching, and monetary loss to Government, at risk of Consultants life in the death trap between Lahore and Gujranwala. In the absence of proper investigatory facilities even those seen are not benefited to any significant degree either.

RESEARCH

Indeed "research" is one of the legitimate functions of every indoor department of a teaching hospital. It is also one of the most hackneyed words, used to intimidate the staff of teaching hospitals by all and sundry. But mostly by those about whose scholastic and clinical achievements the less said the better. Irrespective of what any one says RESEARCH REQUIRES a great deal of thought, money and facilities. where the verandahs are choked with extra beds: talking of research is morbid humour!

We have heard repeatedly how Col. Shortt did, whatever he did, under a pipal tree! For myself I would be quite satisfied if I was merely provided literature containing the research of others.

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I wonder if it is generally known who supplies even the stationery to the hospital — and how where one gets papers typed for on the Spur-of-the moment Conferences Hospitals which run out of Cotton wool and surgical spirit should not be expected to produce research — and yet the surprising thing is that they do !

COMMODITY SALE

In this working paper Col. Ataulah, formerly Chairman of the Health Study Group suggests that the commodity called medical care should be sold at the official rate of Rs. 25/— for the first night and Rs. 12/— per 24 hours thereafter ! Leaving aside the economic absurdity of the suggestion (as the annual per capita income is Rs. 400/— it would be downright immoral to charge a poor patient for delays in diagnosis (and hence treatment) for which neither he nor the hospital staff may be responsible — the real causes may well be in the M.S.D. Office of C.I.E ; Secretariate and in a hundred different places This commodity sale business cannot work here till everyone is health insured as in U.S.A. from where no doubt the idea has been borrowed.

DIET

A very important part of treatment in an indoor department is Nutrition. Special, high protein, low cholesterol, sugar free, salt free diet etc., are frequently prescribed. The fantastic suggestion by the same authority that patients should be self dieted from home, beats comprehension. Presuming that only normal full diets are to be brought from home for say 1000 patients at 7-8 a.m., 12-1 p.m., and 7-8 p.m., and add 4-6 p.m., for visitors; it staggers the imagination to figure out what would happen in an institution like Mayo Hospital in the way of crowding, litter, noise, thefts and anti social behaviour what to talk of bother & expense to concerned families even if all patients belong to Lahore Even if a small charge is made, food will have to be provided by hospital and will have to be heavily subsidised.

FAMILY NURSING

Whereas it is true that a few intelligent attendants may be able to help nurses in looking after their patients, one can not fall in with the suggestion that all or even most attendant can be thus trusted.

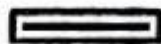
I regret to have to say that suggestions, like 'Commodity sale'; 'Self dieting from home' and 'family nursing' from the Health Study Group make pathetic

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reading and betrays the fact that contact between this August Body and an indoor clinical department has been infinitesimal, and therefore of no consequence.

CONCLUSION

While looking forward to see the achievements of this Conference, its about time we planned another one on "How to run our present hospitals with existing funds" instead of chasing rainbows in the sky.



FINANCING OF FUTURE HOSPITALS

By

*Prof. A.H. Awan, M.D.**

It is quite apparent that administration of hospitals is a very complex and costly affair, and, as has been stated by various workers, it involves the provision of highly trained medical, nursing and para-medical personnel, besides costly appliances and equipment. It also involves the application of the principles of public administration for purpose of dealing with questions concerning recruitment, supervision, compensation, personnel management, maintenance of ethical standards and good public relations, and last but the most important, financial management.

Keeping in mind the thinking of public administrators and policy makers, I would venture to make some humble suggestions for consideration regarding the financial management of future hospitals in the Punjab.

It is quite clear that we are very short of hospital beds, and, as spotlighted by Professor Aziz, "admit one patient but refuse ninety-nine" out of each hundred who come to us. It is also clear that for meeting the increasing case load adequately we need more technical staff. It is only then that we can mostly satisfy the people

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during the present revolutionary days of rising expectations. The latter social attitude is related with the greater perception and recognition of the dignity and worth of man. It is true that people have a right to demand hospital beds which are needed by them, but they have to pay for it, directly or indirectly.

I think we should separate administration of technical services from rendering of non-technical hoteling services etc. Even now, hospital budgets are too small and get exhausted in a period of 2—3 months, thus compelling people to buy drugs and even surgical cotton. Then why not make hospital Dispensary a non-profit independent unit, which supplies drugs to all patients at cost price? Thus richer but influential people will no more press us for free drugs. Of course in case of an emergency, hospital will first use drugs needed than find out who will pay for it.

Further, why should we consider a hospital as a pauper house. We doctors have the responsibility for early diagnosis and prompt corrective treatment. Why not open cafeterias as independent hospital units, who charge the patient for the food which is supplied at cost price. In case of indigent patients, the Welfare Ministry can pay directly to the cafeteria according to a tariff mutually agreed upon by parties concerned.

Hoteling is not the business of medical profession. Let each patient be charged the cost of maintenance of the bed and of provision of nursing care. Let the administrative section of the hospital control this side of hospital management. And we should let the Health Insurance Companies or welfare wing of the government pay for the indigent.

Thus most hospitals can be made self sufficient. Little deficits can be balanced by a small proportion out of the present financial allocation given by the Provincial Government; the rest, which would be the major portion, being used for further development and expansion. Of course existing allocations for medical care, and if

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possible more, should continue to be allocated by Government to different hospitals for expansion.

More hospitals and more hospital-beds require more money. Government cannot give us, out of the tax money, all what we need for the vitally need development. Then why adhere to the concept of direct public expenditure on medical care. After-all some way has to be found for getting the money. Under the scheme outlined above, even without increasing our present medical care developmental and recurring allocations by the Government, we can have great expansion and improvement.

Indigency is a community problem. It is the responsibility of our political leaders and the Government constituted by them. Who is indigent and who is not indigent is a political question. The gradation of indigency and the type of public assistance to be given is also a political issue and is the responsibility of local Governments. Each community is responsible for its indigent sector. Let the municipal committees and the district boards determine who is indigent amongst people domiciled in their area of jurisdiction, and then let them pay for the welfare services for such indigent patients, out of taxes levied on more affluent part of their populations.

The local bodies can certify their indigent people and the type of assistance which hospitals may give them, but charge the local bodies. Local bodies can support construction of new blocks of hospitals and give pre-paid recurring grants for meeting the recurring expenditure. In such blocks indigent patients of the local body concerned can be admitted without any further charges.

Thus, if there are indigent patients, who cannot get a hospital bed, the responsibility and blame will be, and rightly so, with the local Government; and we doctors will not be unjustifiably blamed and harassed.

Further, special organizations like WAPDA, or State Bank, or industrial concerns, can similarly construct and maintain hospital beds or blocks for their employees in the existing or new hospitals.

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Of course my suggestions also imply that the entire money so collected will be exclusively given to hospital authority for meeting the hospitals recurring expenditures. It also implies that we will need expert administrators to take charge of the business, financial and hoteling side of the hospitals. We doctors can then concern ourselves with professional work and supervision, and with over-all direction and coordination of the technical services with the non-technical services.

This scheme will also help in the evolution of pre-paid hospital insurance scheme for upper and middle classes and also in the emergence of group practice and private hospitals run by private physicians. It was due to medical needs, like our's at this time, that such new concepts developed in many developed countries. Now most of medical care services in many countries are offered through group-practice, private hospitals and pre-paid insurance scheme.

PROVINCIAL CONFERENCE ON FUTURE HOSPITALS IN PUNJAB SUMMARY REPORT

By

*Prof. Nazir Ahmad**

M.Sc., M.A., D.P.H.

The Conference started on 22.4.1971 at 3.30 p.m. by the recitation from the Holy Quran. The address of Welcome was read by Professor Nazir Ahmad, Secretary Health, Punjab. In this address the Secretary Health emphasized that Health was purchaseable and the expenditure on health and medical care was an investment and justifiable. The problems of rural health and medical care and the need for special medical facilities for women and children, which constituted the large majority of our population, were mentioned and hope expressed that future hospital will provide beds in accordance with needs of various population groups.

The Conference was inaugurated by Mr. I. A. Imtiaz, S.Q.A., C.S.P., Additional Chief Secretary, Planning & Development Department, Punjab. He stressed the increasing responsibilities of the Government in the Social Sector, the economic status of the country and consequent limitation of tax funds and the rising cost of medical care. He, therefore, suggested the necessity of converting one hospital into efficient business units with the object of making themselves supporting. This approach, he pointed out, necessitated a fresh thinking on the plane of hospitals in our community. Welcoming the holding of the Conference by the Health Department he expressed the hope that its proceedings will guide the Government towards making available the best medical care at the lowest feasible cost and in accordance with our intellectual and cultural environment.

The opening speakers, Prof. Awan and Dr. Faiz Ali Shah spelled out the major health problems and the paucity of existing medical care facilities. Dr. Amjad Riaz Shah spoke on the three functions of medical care, teaching and research in a modern hospital and stressed that it need not necessarily be in a modern building; even U.K. and Japan had hospitals in barracks. It was the concept, the organisation and service that had to be modern and efficient. He divided the cases into two categories—

*Secretary Health, Punjab.

The acutely ill and those not so acutely ill and stressed the importance of time factor in rendering assistance to the acutely ill. He stressed the importance of research orientated towards our problems of preventable diseases.

It was stated that the Government may give elementary care to the indigent and poor; the middle class and the affluent must bear to pay, whether directly or through insurance mechanic.

On 23rd, the 1st Session started with Prof. Nazir Ahmad as Chairman and with Dr. A. S. Chaudhary, reading his paper. He stressed that both the pattern of medical care and medical education in the country were imported and needed substantial changes to suit our needs and in the context of our economic conditions. He emphasized the impossibility of the Government paying all the cost of our health services and desired payment for the services rendered, except by the indigent. He emphasized the need for providing simple basic facilities, of greater reliance on our own resources and providing services where most needed, assigning priorities.

Dr. Iqbal's paper indicated clearly the fragmentation of resources and everybody trying to do every thing without a clear cut policy. He mentioned provincialization of local body hospitals. This was opposed and decentralization was recommended by the participants.

Prof. N.A. Seyal's paper supported the need for fresh thinking on our medical teaching and was based largely on the proceedings of the WHO Conference in Tehran last December, wherein the integrated teaching approach was examined in which the students learnt mainly through visiting hospital patients from the 1st year. He felt that in this way we could produce doctors quickly and economically and meet the needs of our rural areas. The consultant added that the doctor so produced should also be internationally acceptable.

Dr. S. G.M. Shah mentioned the neglect of facilities for the rural area and advised levy of special 'Health Tax' on each individual, rich or poor, for providing medical care facilities to all, irrespective of financial status. He also recommended establishing intensive care units in each large hospital. His proposal for tax supported free facilities was considered an impossibility.

The recommendations for an elaborate medical care system proposed by Dr. Naseer Mahmood Khan, in his paper, made recommendations for an elaborate medical care system which was not considered favourable feasible.

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Dr. Ramzan Ali Syed also desired the Government to look after only the poor. He emphasized the development of private sector do not only look after the affluent but also cater to needs of the poor. This will reduce the work load of specialists in the public hospitals enabling them to undertake research. This will also generate competition, thereby improving standards.

Dr. Safdar Bokhari's paper raised serious controversial issues and high lighted the gulf between the private practitioners and the consultants in Government service and the need for effective co-ordination between these two. He emphasized the need for provision of immunization facilities at all hospitals and clinics.

Dr. Mrs. A.K. Awan also emphasized co-ordination between the private and the public sector in her paper. She advocated the development of group practice and provision of diagnostic facilities for the private sector.

Dr. Tabibzadeh's paper referred to the tendency in other countries towards building bigger and bigger hospitals, as more economic units, and closing down of smaller units and dispensaries.

Dr. G.N. Bajwa emphasized the increasing gap between supply and demand by the state accepting responsibility to provide medical care, thus resulting in unjustified adverse criticism against the doctors.

Col. Rashid's contention that hospital committees had shown no result and can be replaced by an administrator was emphatically rejected by both the consultant and the chairman who additionally remarked that collective wisdom could not be replaced by any single individual both had their respective spheres of functions. His reasoning on causes of brain drain was also not acceptable as the reasons were not of higher remuneration alone.

Prof. Alamgir in his paper pointed out limitless needs and the extremely limited resources. He therefore, considered that comparisons with advanced countries were not possible. He emphasized the impossibility of the Government providing free treatment to all and advocated payment by all except the very destitute. Diet and drugs may be subsidized but should not be completely free. He advocated continuation of private practice by Government doctors and was emphatically against institutional private practice. For research, he advised creation of highly paid posts

of Research Directors in teaching institutions, in his view this is the only way to improve research work in the country. In this he was supported by the Consultant who stated that whole-time professors in Iran were paid thrice the salary of consultants/professors permitted private practice. But the consultant emphasized that the economic status of the countries referred to by Prof. Alamgir was much higher than that of Pakistan. The chairman in his review, mentioned that in Pakistan he would be happy if they could give the higher pay mentioned but there should be a rule on the highest pay beyond which no government servant may be paid. He also wished that somebody had spoken on the other side of institutional practice which had been opposed by Dr. Alamgir. In subsequent discussion Prof. Gulzar supported the plea of no free treatment and advocated at least cost charges for X-Rays and laboratory investigation from all but the income to go to the hospital for increasing its budget. The idea of payment for diet and drugs was however, vehemently opposed the next day by Prof. K. Sadiq Hassain.

Mian Asghar Ali, Commissioner Social Security gave the philosophy behind social security and the history of its enforcement and development so far in the Punjab. He emphasized provision of medical care as a corner stone of the scheme and the difficulties he was facing in discharging this responsibility because of shortage of medical personnel. He hoped that, with cooperation of all sections of our society, the scope of this institution will be gradually extended to cover all our citizens.

Prof. Wasti spelled out the dismal picture of prevailing conditions in the Punjab, when compared to other countries. He advocated increased allocation for health and support to the private sector and philanthropy so that these later may play fruitful role in promoting health cover to our people. This was supported by Prof. Gulzar who also advocated increasing emphasis on prevention thereby reducing demand for beds by eliminating communicable diseases cases. Commenting on the paper, the chairman emphasized the need for comparing also such other variables as G.N.P., the percentage of this G.N.P. that was available for taxes; the percentage of taxes spent on health and the role of private sector and philanthropy when comparing basic health data between Pakistan and other countries. In the case of Pakistan the indirect inputs on health also need be accounted for in the total calculation. The chairman suggested that a solution for problems should also be spelled out in detail as that these can be helpful to the planning and finances Departments.

Dr. Z.A. Khan, strongly advocated operating hospitals on sound financial basis. He advocated following in the foot steps of other countries in the introduction of

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some types of health insurance, compulsory voluntary, for meeting the cost of medical care programmes. However, he emphasized the rural area medical care must be tax supported. The Chairman mentioned the inadequacy of resources and desired that problem may solved through discussion between doctors, the finance people, the planners, the patients and public which ultimately has to bear the cost.

The 1st session on 24.4.1971 was presided over by Dr. M.H. Toosi, former Secretary Health. Dr. M.M. Hussainee was the first speaker. He dealt with medical staff pattern for our hospitals. He divided hospitals into four categories and advocated a 500 beds hospital as an economic urban hospital unit. His opinion was that the consultant staff and medical superintendent should not be transferable as only then the hospital will run efficiently and develop its reputation as a dependable unit. Commenting the Consultant and the Chairman did not agree with it. Prof. Seyal, recommended the institutions of special courses in hospital administration as in vague in other countries. He also wished greater emphasis to be placed on paediatrics which speciality should be available in all districts hospitals.

Miss. Raisa Zahoor and Mrs. Painsa Khan spoke on nursing and school of nursing respectively. Miss. Zahoor recommended that passing special courses should be rewarded and before a staff nurse is promoted as a sister she must pass course in ward administration. Scale of nursing staff was given and independent family accommodation recommended for married nursing staff. Mrs. Painsa Khan emphasized need for proper building for nursing school and living accommodation for staff and students. She also advocated the appointment of clinical teachers and ward sisters in the clinical field in consultation with the Principal of the school. Part-time teachers in general education, sociology, psychology, medical social work and general education were recommended. She emphasized that a nursing school should not be established unless it can be adequately supported. The consultant supported the plea for more scholarships for training of nurses and advocated utilizing all the available facilities to improve the present bad situation.

Dr. M.A. Cheema emphasized the need for continued education of medical staff for the fact that a medical man remains a student till he either loses his physical mental faculties or dies. He, however, felt that formal education in this respect is non-existent in our hospitals and advocated the introduction of formal programmes on the lines presently being done in U.S.A., with formal ward rounds by the visiting staff, clinical conferences, mortality and morbidity conferences, formal lectures etc.

etc. He emphasized that it was a doctors responsibility to advance his knowledge through his career as a doctor and must be enabled to do so through organized programmes. In this, he was strongly supported by the consultant who lamented the rarity of pathological post-mortoms in the country and desired a review of relevant law on the subject so that the relative of the deceased may not be able to deny it. Participating in the discussion Dr. Chohan emphasized the need to extend inservice further training and education facilities to doctors in the mufassil.

Dr. M. Rashid Chaudhry spoke on medical ethics and public relations and emphasized the moral duty of every doctor to follow medical ethics. He, however, felt that the code adopted by the Pakistan Medical Council, being essentially a copy of the British Code, was in-adequate and out dated and needed revision. Dr. Rashid felt that medical men have poor public reaction, especially by those in government service where it is grossly neglected in the hospitals, thus resulting in adverse comments. He felt that medical social workers in the hospitals could perform this duty. He also advocated government help to the private sector to set up more hospitals and clinics, to relieve pressure on government hospitals. Commenting, the consultant felt that Pakistan Medical Council rarely dealt with the ethical lapses. The consultant emphasized that medicine was a profession and not a trade. He was sure that the causes for complaints lay outside the hospitals and the doctors got the blame undeservedly. Participating in the discussion Prof. A.H. Awan emphasized that public relations was a special assignment, needing special training which a medical social worker did not possess.

Dr. A.R. Jaffary of the Department of Administrative Sciences, Punjab University spoke on Personnel Administration in Hospital and emphasized that this field was neglected in our hospitals. He emphasized that co-ordination and good supervision are the two most important ingredients of administration and, therefore, voluntary collaborative performance was essential for success. He also emphasized the need for career opportunities for hospital administrators.

Capt. Dr. Muhammad Hanif Ahmad develled at length on the need for an upto date manual for the Health Department and lamented the repeated half hearted attempts to revise the old manual. He recommended establishing a cell in the Health Secretariat to perform and complete this vital task.

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Dr. M.A. Chohan spoke on Business Department of the Hospital. He regretted that the 'Report' by the Health Study Group was still secret document. He advocated special assignments of Quarter master medical officer in bigger hospitals and of properly qualified accountants in all major institutions. He also advocated in-service training courses for various types of ministerial staff, also training in techniques of financial matters before any doctor was made a drawing disbursing officer. The raise finances for the Hospital, whose contingency budgets were very inadequate, he advocated levy of a special cess on cinema tickets. He also advocated drastic changes in procurement procedures and urged that the recommendation of the working group headed by Add. Finance Secretary, West Pakistan and Dr. Chohan as one of the member and accepted by the Secretaries Committee of Government of West Pakistan be enforced if drug supply in the hospitals was to be improved. He advocated improvement in equipment repair, maintenance and replacements.

Prof. A.H. Awan stated that the hospitals are not pauper or poor homes and must not be used as such. They must be run as non-profit self financing institutions with cafeteria arrangement for diet and payment for the hotel keeping portion and nursing as advocated by the Health Study Group. The 'indigent' should be defined by law and be paid for by the local bodies who may raise taxes or levy cess for the purpose. Employers should pay for their employees.

He emphasized distinction between a teaching hospital, a general hospital and a special hospital and of the need to treat a teaching hospital as such. Work load, building, equipment, staff and bed population ratio must be standardized and the staff properly trained. The taxation for raising funds for hospital must be on some defined criteria.

Taking part in general discussion, Prof. Alamgir suggested examination of the place for a part-time but paid consultant for our outdoor work in teaching institutions and in general and district hospitals. Dr. Subhan Chaudhary pointed out poor utilization of funds by the Health Department particularly in West Pakistan during 3rd plan. He reiterated neglect of rural areas. He pleaded for micro-planning from the rural areas upwards. Dr. M. Masood Ather advocated setting of self-denial and sacrifice from above downwards. The Chairman of the session raised blame on repeated re-organization of the health department which has resulted in its complete

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disorganization. There was plenty amidst poverty. The rich must be made to pay. He advocated his scheme of THEPRO for rural areas in barracks or mud house of junior specialist at Tehsil Headquarters and the district hospitals around medical colleges serving as satellites of the teaching hospitals after proper development. He also advocated whole-time basic sciences teachers who were Ph.D's who did research and teaching and part-time professors who were doctors and were permitted clinical work as measures to resolve shortages of teachers in these subjects. He also supported diagnostic facilities for private practitioners to improve diagnosis and treatment and prevent poly-pharmacy.

The 2nd session was held under the chairmanship of Prof. M. Akhtar Khan. The 1st speaker was Dr. Rehmatullah Chaudhry, Joint Secretary (Medical) who spoke on the planning and designing of the out-door department. He highlighted the importance of this department in building the reputation of any hospital and spelled out criteria on its location, functions and organization. He pleaded for a "Reception and Record office to receive and guide patients and function as an enquiry office and the introduction of cards of different colours for indicating to the illiterate patients, the department, they may have to go. He emphasized the importance of a casualty department. The importance of records and its financing were also discussed. The advisability of using the services of part-time and honorary consultants in the out-door was advocated as also of day bed domiciliary treatment of family planning and diagnostic and referred services to the general practitioners. Commenting the consultant advised separate medical officer in the outdoor for medico-legal work and staff on the basis of 5-7 minutes of a physician for each patient ; also using medical readents in the respective reception room.

Mian Mahmood Ahmad spoke on the importance of proper housed, equipped and staffed medical record Department. He advocated be adoption of WHO classification of diseases and deaths at least in the teaching hospitals.

Dr. Miss Riffat Rashid, Head of the Department of Social Work in the Punjab University spoke on the role of Medical Social Workers in modern hospitals. She spoke against the present set up where these workers belonged to the social welfare department but were responsible to medical superintendents for their day to day work. She pleaded for a proper career structure and cadre for this category of workers. The consultant considered these workers and their contribution very valuable.

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Prof. A. Hamid Khan spoke on hospital library. He emphasized its division into medical section, nurses section and patient section and its size to be related to hospital size. Its location and the type of material available in it was spelled out as also the scale of books for hospitals of different strength. It must also have its own budget for annual additions with an annual turn over of 1/5th of the total collection. During remarks by the chairman and discussion, the importance of the library and its woeful absence at present even in teaching hospitals were high lighted. It was recommended that besides the book proposed by Professor Hamid, the library should contain books on religious topics, in accordance with the ideology on which this country was created.

Col. M. Latif, O.C., C.M.H., Lahore, spoke in detail on the emergency department which, he emphasized, worked 365 days a year and 24 hours a day. It was the department to which the community may apply for any complaint at any time. He emphasized the need to spell out clearly the medical nursing and administrative policies which should cover its 24 hours operations. The need for telephone, ambulance and extensive list of consultant and referred service was spelled out. Commenting, the consultant advised the use of medical students also in emergency units, to familiarize them with emergency work.

Prof. K. Sadiq Hassain spoke on indoor clinical departments and their speciality-wise allocation. He divided the medical staff into tenure staff and trainees staff and considered 40 to 50 beds as a manageable unit. Detailed break down of unit wise allocations in different specialities and sub-specialities for a 1200 bedded hospital, considered to be a minimum for a teaching hospital, were given as also to probable use of an additional 300 beds. A district level hospital with 3 units was proposed for such towns as had population of two lacs. In view of increasing accidents, a first rate accident service was proposed for district level. The ideas, put forward by Health Study Group, to provide medical care on payment as a community, to self diet the patient and to involve patients relatives in nursing was condemned as fantastic and impractical suggestion. The consultant commented that provision of diet was very important for poor patients, particularly in teaching hospitals; they must all be dieted free. The consultant recommended that in view of the break up of West Pakistan the Report by the Health Study Group be reviewed again.

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Dr. M. H. Malik pleaded for establishing admitting department in all big hospitals, these departments to be located between the outdoor and indoor. The need for this department was elaborated and its function defined as also its staff and working hours. The consultant supported the proposal.

Dr. S. R. Bokhari spoke on adjunct diagnostic and therapeutic facilities and pleaded for improvement of clinical laboratory facilities and staff in hospitals and setting up of reference laboratories. The function of reference laboratory were spelled out and staff recommended for hospitals of different bed strength. Similarly for the Radiology (Diagnosis and Therapy) service and Nuclear medicine.

Dr. H.H. Mirza spoke on operation theatre designs and gave the criteria, that an efficient operation theatre should meet. He advocated plenum ventilation in operation theatres, against exhaust ventilation with 10 to 12 air changes per hour. He pleaded for special 'Reception' wards and recovery ward in the theatre suite with proper staff under the Anaesthetist. The need and means for bacteriological control, the number and sizes of operation theatres and their equipment and the place for closed circuit T.V. in the operation theatre of teaching hospitals were laid down. The consultant pleaded for better working conditions for the Anaesthetist.

In the general discussion that followed Dr. M.S. Cheema Assistant Professor at College of Dentistry deplored the exclusion of dentistry from the conference and in particular relating to foscio-maxillary surgery Dr. Lateef lamented the exclusion of rehabilitation and emphasized its importance and Dr. A. A. Aziz about psychiatry. Professor R. A. Nabi mentioned the overworked Anaesthetists who was not being given any help. Professor Gulzar advocated wider corridors in the out-door than presently and the waiting rooms should be for each department facing the departments.

Nearly all speakers were for the restoration of right of private practice to the staff of the basic sciences departments and conversion of N.P.A. into teaching pay as in the old days. This was particularly so when the loss of private practice cannot be adequately compensated. They were against making the clinical posts non-practising as this will lead to the same impossible situation with regard to clinical staff as in the basic Sciences Department at present.

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Professor Aziz again pleaded for doctors in the rural areas, for proper medical care there and lamented that all reports and conferences start with rural health and end up with research and medical colleges. Dr. M. A. Cheema also pleaded for rural health. Professor Bashir Ahmad pleaded that before we change the existing pattern we should do research in :—

- (1) Why shortages of staff in Basic Departments ?
- (2) Why doctors are leaving the country ? They are not doing so for emoluments only. He recommended that the new medical college at Bahawalpur may be used as pilot project for 5 years to undertake and evaluate research with full time non-practising, practising and part-time teachers.

The Chairman, in his concluding remarks, emphasized the impossibility of providing free medical care to every body and pleaded for not diluting further the existing poor services. He was sure, strengthening the teaching hospitals, with whole time and part-time consultants will not reduce the work lead of teaching hospitals ; it is the district hospitals that must be strengthened.

The 1st session on 25-4-1971 started with Dr. Ali Mohammad Khan on Chair Dr. Z.A. Khan Retd. Chief Medical Officer P.W.R. was the 1st Speaker. He stated the factors that determined the state of Health of any people of community and advocated integrated multidisciplinary approach to improve the health of the nation. He emphasized the necessity of role of domiciliary and ambulatory care in reducing cost of Medical Care. The need to survey the existing institutions and their state, in any study for assessing additional need was emphasized as also the hospital being an integral part of social organization of a community, and advocated concentration on general hospitals rather than special hospitals.

Professor Abdul Aziz spoke on subject of raising finances for capital expenditure. He pointed out the paucity of beds, particularly in the mofussil areas. He described demand for medical relief as every body's right and advocated help to the private sector to develop. He mentioned normal taxes, special health cess on various forms of entertainment and income from private beds as sources of funds

for capital construction and suggested Government build more private bedded hospitals to accommodate all income groups with charges ranging from Rs. one or two a day to rupees hundred a day. Other sources were social security and various other insurance schemes. In discussion Dr. Chohan advised categorization according to disease for their paying capacity.

Mr. Zahir-ud-Din Khawaja, Architect and Town Planner strongly advocated the setting up of Research Cells at National level, with doctors having special aptitude for planning, Engineers, and Architects and Town Planners on staff to design standard functional and economic hospitals. As suggested by Dr. Z.A. Khan, he recommended hospital planning to be preceded by survey leading to preparation of Master Plan. This Master Plan should be feasible, to be changed as changed socio-economic circumstances may demand. Similar cells may be set up also at the provincial level. Hospital building should involve consultation between the Medical Specialist and the Architect etc. from the beginning to the execution level, i.e. at all stages. He emphasized the need for continued supervision by the architect as the hospital building comes up.

Mr. Abdul Qayyum of Noon Qayyum and Company spoke on selection of site for hospitals. He gave criteria for this and definitely ruled out neighbourhood of airports, grave-yards, ponds and dumping grounds and railway lines. He mentioned the need for hostel for the patients relatives. While calculating land requirements he stressed that only 40% of the land was to be covered of which 15% was to be for the hospital purposes. He wanted division of the hospital functions from the engineer's point of view for proper orientation and inter relationship between different parts and the floor arrangements. He advocated the pavilion system of hospital in one country and emphasized proper development of the hotel portion of the hospital. In discussion, Dr. Rashid emphasized site selection by specialists and not by Administrators. Mr. I.A. Shah stressed on the need for proper approach with the administrators to have their agreement to the proposal by the specialist.

Mr. A.R. Hye, Chief Consulting Architect spoke on hospital planning. He was against standard plans as hospital architecture development was progressing rapidly and plans become out of date: Certainly in our country with long delays in completion of projects, before the building was completed; standard plans blocked

advances in hospital architecture. He advocated 75 to 100 acres of land for a 1000 bedded hospital, at the rate of 15 beds per acre. He urged the establishment of planning committee, as advocated by Khawaja Zahir-ud-din in the Provincial Health Department. He mentioned that for space per bed, requirements were 35 to 40% higher in teaching hospitals than in a general hospital and need for verandahs in the hot climate of the Punjab. Commenting, Mr. Nazir Ahmad Giabaji wanted evaluation of all plans after every 10 years for advances and improvements.

Mr. Akhtar Ali Chohan spoke on contact for hospital construction. He was in agreement with the previous speaker in the need for planning cells in the health department on the lines proposed by them. He considered complete fly proofing of hospitals a must, central heating and air-conditioning in the important areas only. Timely provision of funds and visits for the architect at reasonable intervals were stated to be essential for timely and proper completion of the project. He preferred having only one contractor for the project who may have sub-contractors at his own risk.

Dr. M. Aslam Chughtai spoke on equipping the hospital. He pleaded for coordination between building construction and equipment procurement and proper utilization of funds provided, in particular in the foreign exchange. He advised division of hospital into different specialities to facilitate their proper equipment. Professor Sayal felt that the remedy towards proper utilization of available funds lay in autonomy of medical institutions by which he meant freedom from present controls.

Mr. Abdul Rashid spoke on commissioning of a new hospital and emphasized that the Medical Superintendent be in a position at least six months before the hospital is to be commissioned and the other staff at least 15 days before that date to complete the proper equipping of the hospital and fulfil other requirements.

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In the general discussion, Professor Habibur Rehman spoke against the old institutions, being allowed to die down and emphasized the need of the architects and engineers listening to the medical specialists with a view to removing past defects. All consultants emphasized the necessity of properly staffed planning cell in the Health Department and Dr. Mohammad Jamal Bhutta advocated assistance by Civil, Electrical and Sanitary Engineers to the architect. He agreed with suggestion of another consultant that it was only a medical specialist with special aptitude on planning who could assist the architect and engineers in proper planning. He advocated another services with representative of doctors from all levels of the Health Department to work out detailed requirements of various specialities and various types of hospitals. Professor Burni suggested that a sociologist should also be involved in the planning committee.

Concluding, the chairman explained the planning procedure from various levels to the provincial level and dealt with need to examine and learn from the experience of others in solving various problems being feared by us.

The sixth session of the Conference was presided by Dr. Masood Ahmad.

The First paper was presented by Dr. Capt. Mohammad Umar Chaudhry in which he brought out that if the local population of an area could be motivated to take active part in solving their health problem by raising funds and the funds were exclusively placed in the hands of the public, a lot of development by way of building as well as other hospital facilities can be acquired. His experience was very much lauded by the house, consultants and the chairman. Next Speaker was Dr. Mahmood Abbas Bokhari who stated that people do not hold good opinion about the attitude of the hospital staff towards the community in general. These were the views expressed to him by some sectors of the public. It was generally felt in the House that it is a biased view.

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He was followed by Dr. Bashir A Mallick. He stressed that in our developing country, cheaper and fewer drugs should be prescribed by the doctors. On the role of the hospital, he also stressed the importance of immunization against the communicable diseases to the children. He pointed out that the vegetables in Lahore are washed with sewage water and the quality of drinking water supplied to the people is highly contaminated. He stressed the need that the Government should instruct the municipal authorities for providing the necessary improvements in general sanitation.

The next speaker was Dr. Amjad Riaz, Shah who spoke on the expectations of the doctors from the hospital and the community. He emphasized on the basic facilities like provision for up-to-date teaching programmes for the interns and residents which should include conferences, lectures, and seminars etc. also they should be given suitable accommodation and adequate boarding arrangements, uniform and remuneration. The next speaker was Dr. A. Rauf Yousaf who spoke on the consultants expectation from the hospital.

He stressed that the consultant should have the best possible working conditions, in addition, adequate junior staff for this assistance. With regard to the community, full trust and proper remunerations were expected by the doctors.

The last speaker of the session was Dr. Mrs. Shamim Raza Bokhari. She stressed that a good para-medical service would relieve a lot of work load from the medical personnel. She drew up a scheme for introducing a system parallel so that of Feldshers in Russia. She recommended duration of training, pay scales and residential accommodation as laid down by para-medical sub-committee No. 1, on its reorganization. Dr. M. Jamal Bhutta on discussion, remarked that the salary structure should fit in with the salary structure of other services in the country.

Professor A. Aziz, commented that the patients expect all sorts of medicine facilities which a doctor cannot cope with the latter being due to lack of funds. He further said that categorization of general and private wards is unavoidable. Besides it, there is no categorization as regards medicine and treatment, needed for patients of the same illness, whatever the status of the person.