SEVENTH FIVE YEAR PLAN
(1988–93)
AND
PERSPECTIVE PLAN
(1988–2003)

REPORT
OF THE
WORKING GROUP
ON
Health and Nutrition

PLANNING COMMISSION
GOVERNMENT OF PAKISTAN
ISLAMABAD
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PRELUDE

The Seventh Plan exercise for health sector was started in the second half of calendar year 1985 and the initial working paper was prepared and circulated to the Federal Health Ministry and Provincial Health Departments in December 1985. A separate paper was prepared on the Health Manpower Development for the Seventh Five year Plan which was also circulated to the Federal Health Ministry and Provincial Health Departments in first week of January 1986. The initial discussions with the Federal Health Ministry and Provincial Health Departments were held in the second week of January 1986.

2. To facilitate the working of the panels constituted for the health and nutrition sector, one main panel was constituted to look into all aspects of the health sector development and this was supported by 10 speciality panels on the following subjects :

(*i*) Oral and dental health ;

(*ii*) Traditional Medicine ;

(*iii*) Narcotics Control ;

(*iv*) Disabled ;

(*v*) Senior Citizens ;

(*vi*) Nutrition ;

(*vii*) Medical Education ;

(*viii*) Nursing services and Nursing Education ;

(*ix*) Pharmaceuticals ;

(*x*) Health Financing.

3. The following documents were sent to all members of the main panel and speciality panels :

(*i*) Sixth Five Year Plan—Chapter on Health Sector.

(*ii*) Annual Plan 1986-87—Chapter on Health Sector.

(*iii*) Working paper on Health Sector on the Seventh Five year Plan—December 1985.

(*iv*) Health Manpower Paper—A case study of Pakistan by Dr. Siraj-ul-Haq Mahmud.

(v) Rural Health Programme of Pakistan 1986—90.

(vi) Mid-Plan review of Sixth Five Yaear Plan as it related to Health Sector.

4. The main conclusions of the panels are summarized as follows :

(i) Allocations for the health sector will have to be further increased so that the total national spending on health systems (public and private) is not less than 5 per cent of GNP by the year 2000 and is 6 per cent of GNP by year 2006.

(ii) The importance on preventive and promotive aspects of health care should be more than curative aspects and the foundation laid down in the Sixth Plan should be more on primary health care than on referral care.

(iii) The care of the vulnerable groups was considered to be of high priority. Vulnerable groups include : expectant and lactating mothers, young children, unemployed youth, drug abusers, disabled of all categories and senior citizens. Special programmes need to be developed for these vulnerable groups and adequate safety nets need to be provided for such groups during Seventh and Perspective Plans.

(iv) A nation-wide school health service needs to be created urgently to give importance to preventive health aspects, preventive oral and dental health, detection of impairments and appropriate health promotion activities.

(v) The present approach of development of an integrated nation-wide health care system, in the public sector, should be pursued in the Seventh and Perspective Plans so that all the un-and under-served areas are provided proper facilities.

(vi) Primary health care facilities should be set up in urban areas and hospitals should limit themselves to referral care.

(vii) The main emphasis during the Seventh and Perspective Plans should be on the quality of care. This will require a massive effort in upgradation of the existing facilities.

(viii) Potable water supply and sanitation, though strictly not belonging to the health sector, was considered as a priority requirement which should be provided as quickly as possible to control effectively the water-borne diseases.

(ix) The quality and quantity of health manpower was not considered satisfactory. There are at present many imbalances in the health manpower production. Their deployment and management will require special attention during the Seventh and Perspective Plans.

(*x*) The health manpower should be given proper career structure. Professionals should be given time scale promotion while para-professionals should be given better starting salaries alongwith proper career structure for each category.

(*xi*) The manufacture, import and sale of drugs and medicines need to be streamlined with a greater degree of self-reliance on domestic manufacture of raw material which must start in the Seventh Five Year Plan and the nation should become self-sufficient as quickly as possible.

(*xii*) Financing of health systems was considered as a matter of concern which needs to be resolved properly during the Seventh and Perspective Plans. Employees' Social Security System needs to be extended to non-industrial sectors and to employers employing as low as two persons. Employees' Social Security Institutions (ESSI) system needs to be applied to the employees of the public sector in Basic Pay scales 1 to 16. Health insurance should be introduced. Gradually most of the urban population and literate families be insured for health care. Int-roduction of users' charges should be persued to supplement maintenance budget.

(*xiii*) Private sector needs additional relief to help meet the targets of Seventh and Perspective Plans. Appropriate regularity measures need to be introduced to ensure quality care by the private sector.

(*xiv*) Finally, reasrch should be given due emphasis in finding various alternates to meet the desired objectives and targets of the Seventh and Perspective Plans. It should be problem solving and action oriented applied research.

(*xv*) In the Perspective Plan the target should be to achieve better targets than laid down by the Health for All by the year 2000 as Perspective Plan goes beyond year 2000. All the global targets by the year 2000 must be achieved, as well, a few years ahead of the year 2000 for which the nation has the capability.

REPORT OF THE WORKING GROUP ON HEALTH SECTOR FOR SEVENTH AND PERSPECTIVE PLANS

5—6

REPORT OF THE WORKING GROUP ON HEALTH SECTOR FOR SEVENTH AND PERSPECTIVE PLANS

The Working Group on Health Sector held its meetings under its Chairman Mr. Fazal-ur-Rehman Khan, Secretary, Ministry of Health, Special Education and Social Welfare, Islamabad. The first meeting was held on 21-22 October, 1986, the second meeting was held on 10th November, 1986 and the third meeting was held on 1-2 December, 1986. The list of participants is annexed.

2. In between the meetings of the Working Group, the speciality panels held their meetings and their reports were considered by the main Working Group. First of all, the Group reviewed the performance of the Sixth Five Year Plan.

SIXTH PLAN REVIEW

Physical

3. It was observed that during the first three years, the Plan has successfully changed the direction by giving importance to preventive and promotive aspects. The allocation for preventive programmes for the entire Plan has already been exceeded during the first three years of the Plan. During this period, 68 per cent of the Union Councils have been provided either a Basic Health Unit or a Rural Health Centre. Some Union Councils have more than one facility. Addition of hospital beds, in the public sector, is progressing as per schedule. The training of health personnel except for paramedics is not according to the Plan. Paramedics schools were slow to pick up during the Plan, therefore, their target is unlikely to be met. There will be a short-fall in the desired number of paramedics.

4. The immunization programme of pre-schoolers has achieved good results and 75 per cent of the children of 0—5 years age are estimated to be fully immunized. With this achievement, the emphasis has already been shifted from 0—5 years old children to 0—2 years old children. It is estimated that immunization is saving about 100,000 children from dying due to six preventable diseases of childhood and another 45,000 from getting disabled. Immunization of expectant mothers with tetanus toxoid has lagged behind and it is difficult to achieve the Plan target of 60 per cent coverage by the end of the Plan period.

5. The training of birth attendants has been satisfactory and 18,950 TBAs have been trained during the first three years of the Plan. This raises their total number to 33,950 and it is expected that almost all the villages will be covered during the remaining two years of the Plan and targets will be fully met. Treatment of diarrhoea by oral rehydration therapy has also progressed satisfactorily and 29 million Oral Rehydration Salt packets have already been distributed against the Plan target of 24 million. Mortality due to diarrhoea has been substantially reduced.

6. The above mentioned programmes have reduced the infant mortality and it is now estimated to be less than 90 per 1000 live births. Due to this, life expectency at birth has also increased but all this information will be available after the studies in hand are completed, which is likely to take about a year's time.

7. The private sector has not done well and has not progressed as planned. The achievement is estimated to be around 30--40 per cent of the Plan targets. The main reasons for the private sector not doing well are that there were not enough incentives for people to establish hospitals and clinics.

Employment of Doctors

8. During the first three years of the Plan, 11,550 doctors have been produced and another 8,000 will be produced during the remaining two years of the Plan. At the beginning of the Plan, there were less than 5,000 general duty doctors in the public health system. This number has increased to 12,511 on July 1, 1986. An additional 1,500 posts for doctors alongwith supporting staff have been created in September 1986, raising the number of posts of general duty doctors to 14,011. Thus the public sector alone has provided more than 9,000 posts for doctors so far during the Sixth Plan period.

9. To allow doctors to establish their own clinics, a line of credit, at softer terms, of Rs. 200 million has been allowed during 1986-87. Out of this, those doctors who are desirous to settle in urban areas can get loan upto Rs. 75,000 while those who wish to move to rural areas are allowed Rs.100,000 on two personal sureties.

10. Keeping in view the attrition, employment of doctors in private hospitals and those establishing their own clinics, the unemployment problem of doctors did not aggravate any further than what it was at the beginning of the Plan. However, the unemployment problem of doctors is much more in Sind than in Punjab and other provinces due to larger intake and comparitively slower expansion of health facilities than in other provinces particularly during the Fifth Five Year Plan.

Admission in Medical Colleges

11. For subsequent Plans, the unemployment problem of doctors will not be of the same magnitude as the intake in various medical colleges has been reduced. The seats in Medical Colleges in the Punjab have been reduced from 1700 in 1983 to 1085 in 1986. The admission seats in Sind have experienced a decrease of 10 per cent and this will continue till a reasonable level is achieved. The present intake in Sind is 1600. NWFP has reduced seats from 406 in 1983 to 320 in 1986 and Baluchistan has reduced from 180 to 147. The total number of seats in 17 Medical Colleges in 1986 are 3365. These include Army Medical College, Rawalpindi and Agha Khan Medical College, Karachi.

12. Another factor which requires corrective action is the admission of girls in Medical Colleges. Currently girls obtaining higher marks are denied admission while boys with lower merits are admitted, due to sex bondage of seats.

Financial aspects

13. The Sixth Plan made a gross allocation of Rs. 13 billion for Health Sector. On net basis, each sector was to face a cut of 12.5 per cent as Plans are built on short--falls. This reduced the allocation of Health Sector to Rs. 11.3 billion. During the first three years of the Plan, Rs. 5098 million have already been spent. During 1986-87, there is an allocation of Rs. 2615 million and during the last year of the Plan the allocation is likely to be Rs. 3.5 billion. Thus, on net basis, the financial allocations of the Health Sector will be fully met.

14. The Sixth Plan aimed at allowing 6 per cent of ADP for Health Sector towards the end of the Plan. The allocation in 1982-83 was 3.7 per cent of ADP. This has gradually moved to 5.56 per cent of ADP in the fourth year of the Plan and is expected to be 6 per cent of ADP in the last year of the Plan.

15. The revenue budget was projected to increase at a rate of 20 per cent per annum. During the first three years of the Plan, this target has already been exceeded as the average increase of revenue budget has been 23 per cent per annum, which means that the revenue budget has been doubled in the first three years of the Plan.

Problems and Issues

16. Certain areas did not make the progress as was targetted. These specifically include traditional medicine and nutrition. Both these areas lacked expertise to prepare viable projects for implementation while the latter also suffered due to non-existence of infrastructure.

17. There are many other areas where progress has been below satisfactory levels. One such area, particularly, to be mentioned is the training of health professionals in management and creation of a cadre of health managers.

18. No progress so far can be reported in the desired change in the training content of doctors to make them oriented in primary health care and community needs. School age population has not been provided dental services ; only a modest beginning has been made of school health service. Pharmacists have not been employed to manage hospital pharmacies and the improvements proposed in nursing services and education have not been implemented. Little progress can be reported on accident management, cancer control and integrating mental health as a component of primary health care programme. The number of drugs has not been rationalised and problem of basic manufacture still remains to be addressed properly. User's charges did not find favour with people and were able to collect 5 per cent of the revenue expenditure.

19. More details on review of the Sixth Plan may be seen in the relevant section titled 'Mid-Plan review'.

CURRENT HEALTH SCENE

Disease pattern :

20. The disease pattern indicates an increase in hypertension, heart diseases, metabolic disorders, accidents, and cancer. The morbidity of cancer is estimated at 40—50 per 100,000 or higher. Mental diseases are encountered in, atleast, one percent of the population of all ages. Most of the children and adults are suffering from periodental diseases. Among the infectious and communicable diseases, gastrointestinal diseases and pulmonary tuberculosis still remain major public health problems.

21. The problem of the aged is emerging as a public health problem with better life expectancy. The problem of disabled is getting more acute as able-bodied and able-minded are enjoying better health.

Mortality

22. The crude death rate is estimated to be around 10 per thousand. The maternal mortality is about 4 per thousand live births. Infant mortality is around 90 per thousand live births. The leading causes of death are diarrhoea, tuberculosis, road accidents, cardiovascular diseases, malignancy and deaths of mothers and their babies during the period from 28 weeks of pregnancy to the end of first month after birth.

Population growth

23. The crude birth rate in Pakistan, at present, is about 40 per thousand population compared to 16 for developed countries, 32 for developing countries and 28 for Asian countries. At present, seven children are born alive per minute against a total death of two, with a net increase of 5 persons every minute.

Health and medical services

24. At present (Mid 1986) there are 8481 primary health care facilities in the country. The number of hospital beds in the primary, secondary and tertiary medical facilities is 61,690. The number of the population per primary health care facility is 11,500 and 1,580 for a hospital bed. Thus the level of medical care provision is still far from satisfactory. More details appear in the table below :—

HEALTH FACILITIES AND MANPOWER STATISTICS IN PAKISTAN

Category	Number
1	2
Health Facilities	
Primary Health Care facilities	8,481
Rural Health Centres	488
Basic Health Units	2,500

1	2
Maternity Child Health Centres	867
Dispensaries	3,994
Sub-centres	632
Hospital beds	61,690
Health Manpower	
Doctors..	28,650
Nurses	7,900
Auxiliaries	48,920
TBA/dais (trained)	33,950

Situation of 1986

25. The health scene, as of mid-1986, is summarised as follows :—

Demographic

Total population	97.57 million.
Percentage of population below 5 years ..	15.4
Percentage of population 15—44 years ..	56.26
Percentage of population 65 years and over ..	4.2
Natural increase (%)	3.0
Urban (%)	29.5
Rural (%)	70.5

Health

Infant mortality	90 per thousand live births.
Life expectancy (years)	57
Immunization (% of children fully protected) :	
DPT	75
Measles	80
Polio	75
Tuberculosis	80
Percentage of pregnant women attended by trained personnel	50

Rural Urban distribution

26. While the majority of the population (70.5%) lives in rural areas, most of the facilities are located in the urban areas. The following table illustrates the rural/urban distribution as of June 1986 :—

Rural/Urban Distribution of Facilities

Facility	Total	Urban	Rural
1. Percentage of population with access to drinking water	44	84	28
2. Percentage of population with adequate sanitary facilities	19	56	5
3. Percentage of doctors		83	17
4. Percentage of hospital beds		82	18
5. Literacy rate (1981) :			
Total	26.2	47.1	17.3
Male	35.1	55.3	26-2
Female..	16.0	37.3	
6. Villages situated on all weather roads ..			16%
7. Villages electrified			49%
8. Annual *per capita* income (Rs.) (1979) ..	2,030	2,524	1,671

NATIONAL PRIORITIES, TARGETS AND STRATEGIES FOR SEVENTH AND PERSPECTIVE PLANS

Goal

27. In order to attain the level of health for all the citizens of Pakistan, particularly the vulnerable groups, that will permit them to lead a socially and economically productive life by the year 2006, the global targets of Health for All by the year 2000 (HFA 2000) will have to be surpassed as these targets are considered minimal for developing countries. The following list of 12 global indicators, was adopted by Thirty-fourth World Health Assembly in 1981.

28. " The number of countries in which :

(*i*) Health for all has received endorsement as policy at the highest official level *e.g.*, in the form of a declaration of commitment by the head of state ; allocation of adequate resources equitably distributed ; a high degree of community involvement ; and the establishment of a suitable organizational framework and managerial process for national health development ;

(*ii*) Mechanisms for involving people in the implementation of strategies have been formed or strengthened and are actually functioning *i.e.* active and effective mechanisms exist for people to express demands and needs ; representatives of political parties and organized groups such as trade unions, women's organizations, farmers' or other occupational groups are participating actively ; and decision-making on health matters is adequately decentralized to the various administrative levels.

(*iii*) At least 5 percent of the gross national product is spent on health.

(*iv*) A reasonable percentage of the national health expenditure is devoted to local health care, *i.e.,* first level contact, including community health care, health centre care, dispensary care and the like, excluding hospitals. The percentage considered " reasonable " will be arrived at through country studies.

(*v*) Resources are equitably distributed, in that the *per capita* expenditure as well as the staff and facilities devoted to primary health care are similar for various population groups or geographical areas, such as urban and rural areas.

(*vi*) The number of developing countries with well defined strategies for health for all, accompanied by explicit resource allocations, whose needs for external resources are receiving sustained support from more affluent countries.

(*vii*) Primary health care is available to the whole population with at least the following :

— safe water in the home or within 15 minutes ' walking distance, and adequate sanitary facilities in the home or immediate vicinity ;

— immunization against diphtheria, tetanus, whooping-cough, measles, poliomyelitis, and tuberculosis ;

— local health care, including availability of at least 20 essential drugs, within one hour's walk or travel ;

— trained personnel for attending pregnancy and childbirth, and caring for children upto at least one year of age.

(*viii*) The nutritional status of children is adequate, in that ;

— at least 90 percent of newborn infants have a birth weight of at least 2500 g ;

— at least 90 percent of children have a weight for age that corresponds to the reference values ;

(*ix*) The infant mortality rate for all identifiable subgroups is below 50 per 1000 live-births.

(*x*) Life expectancy at birth is over 60 years.

(*xi*) The adult literacy rate for both men and women exceeds 70 percent.

(*xii*) The gross national product per head exceeds US $ 500".

Priorities and Strategies

29. A well defined national health policy, based on proper information, is considered essential. However, a properly developed Perspective Plan would be a proper substitute of this. The Perspective Plan (1988—2003) will have the following priorities. These priorities are punctuated, here and there, by some strategies as applicable :

1. Proper emphasis to be given to primary health care which should include all its components and must be backed by proper referral care at secondary and tertiary levels. Referral care would, as well, be made available to all those who need it.

2. Care of the vulnerable groups be given the highest priority. This will include expectant and lactating mothers and children, adolescents, disabled, drug abusers and senior citizens.

3. Preventive and promotive aspects of health care to get more importance than ever before because of new challenges and changing pattern of diseases. Keeping this in view all children below the age of two years will be fully protected against the six preventable diseases of childhood. All female population of child bearing age will be protected against tetanus by giving tetanus toxoid every five years. This will protect their off-springs from neo-natal tetanus. Immunization will be expanded to provide protection against more diseases depending on scientific and technological developments.

4. Specific nutrient deficiency diseases like goitre, anaemia, osteomalacia will be prevented by suitable programmes which will include dietary and non-dietary measures. Priority will be given to the proper nutritional aspects of vulnerable groups and to minimize the low birth weight babies. Nutrition education will have to be carried out on priority basis to educate masses.

5. A proper health information system will be developed which should be capable of providing age, sex and disease specific mortality data. The population based morbidity data will also be developed. Census of health manpower, their deployment and information regarding private sector will also be collected. A yearly document on health statistics will be published.

6. Emphasis will be to educate masses on healthful living and how to remain healthy by improving habits and environments. An invasive health education campaign will have to be the main-stay for achieving the targets of the Seventh and Perspective Plans.

7. To adequately treat persons suffering from pulmonary tuberculosis till they are no longer a public health problem. The incidence will be brought to 10 per 100,000 persons in a period of five years.

8. To minimize drug abuse, particularly herion addiction, till it is no longer a public health problem. This must be achieved not later than the Seventh Plan.

9. Establishment of a comprehensive school health service to include all schools. This should, at least, make a proper assessment of the school going children, detect diseases and disabilities, maintain good orodental health and provide necessary aids and appliances to those who would be in need, besides primary health care.

10. Development of an efficient and effective accident and emergency services accessible to everyone.

11. Development of infrastructure in un-and underserved areas.

12. To minimize urban/rural and regional disparities.

13. Potable water supply and sanitation will have to be ensured as quickly as possible. This will minimize water-borne diseases and reintroduction of infection.

14. Child spacing will have to be the central theme of the Seventh and Perspective Plans to improve the health of the mothers and their offsprings.

15. Mental health needs to be introduced as a component of primary health care immediately and all its facets will make part of the Seventh and Perspective Plans.

16. Private sector will have to be given better incentives than the Sixth Plan. Hospitals should be treated at par with industry, investment in asset formation should be free from tax. Present loaning facilities to individual doctors and dentists need to be improved and there should be a package deal to be developed by Pakistan Medical and Dental Council, Pakistan Medical Association or a private firm. The private sector will have to be regulated for quality care.

17. The quality of care in the public health system will have to be improved drastically. To achieve this, health manpower will have to be adequately trained in management and facilities will have to be properly equipped and modernized. This entails provision of laboratory services and other diagnostic procedures, a net-work of public health laboratory services, modernization of tehsil/taluka and district headquarters hospitals, provision of voluntary blood bank services and creation of specialised services and centres of excellence.

18. Emphasis will have to be placed on removal of imbalances existing in present health manpower. They will have to be trained in numbers required by the Plans but adequately trained so that they could provide quality care. Their job descriptions will have to be developed, training contents reviewed and training modified in the light of job requirements. This will also require review of functioning of various councils dealing with medical education and to make them more effective by modifying their funtions and composition.

19. A proper career structure will have to be given to all professionals of health system as it is the staff morale which counts in effectively running any system. The professional categories *viz.* doctors, dentists, pharmacists and university graduate nurses should be given, at least, the following career structure which is currently being enjoyed by non-professionals :

(*i*) Starting scale in Government Service .. BPS—17

— Promotion prospects :

BPS 17 to 18	.. ..	100% in 5 years.
BPS 18 to 19	.. ..	50% in 7 years.
BPS 19 to 20	.. ..	50% in 5 years.
BPS 20 to 21	.. ..	25% after 5 years in BPS 20.
BPS 21 to 22	.. ..	50 per cent.

(*ii*) Para-professionals should be given better starting pay scales than currently in vogue. These require special considerations as without them, professionals cannot perform their functions efficiently and effectively. They will have to be considered equally important like stenotypists and stenographers in the secretariat without whom very little can be achieved even by the senior most functionaries of the Government. Such a special deal its required for paramedics/ auxiliaries to allow, at least, four different levels for promotional avenues to these categories.

20. A proper drug policy with a proper drug delivery system manned by qualified pharmacists is an urgent need of the nation. The vast array of drugs available needs to be rationalized with proper quality control and storing conditions. The retail pharmacies which deal with the consumers require a total over-haul of their system. Basic manufacture of drugs will be given due priority and incentives to be self-reliant as soon as possible.

21. The total national spending on the health sector will have to be increased from the present around 4 per cent of GNP, in the public and private sector, to around 6 per cent of GNP by the year 2006. The development expenditure in the public sector should not be less than 6 per cent of ADP while the non-development expenditure should be 5 per cent of the current budget. Without this the public health system will remain ineffective and inefficient.

22. For cost sharing the most important activity which needs to extension is the Employees' Social Security System to non-industrial sectors and to employers employing as low as two persons. This should also be applied to Government servants in BPS 1—16 as the present arrangements are inadequate. According to this a family including parents will require on an average a contribution of Rs. 75 per month by the employer. Another alternate to share the cost of provision of health care which must be explored is the potential of local bodies. Preventive aspects are already the functions of the local bodies which need to be exploited fully. In addition, they should be asked to take on the provision of primary health care, particularly, in the urban areas. Health insurance has its potentials and need to be introduced during the Seventh Plan. It should be introduced in the urban areas and to literate persons. As the latter increase, health insurance will have become more popular with the masses and more reliance will be placed on health insurance in successive Plans.

23. Research will have to be given due importance to find solutions in improving health of the nation. Health Systems Research and goal oriented applied research will be given due importance.

24. Development of all systems of medicine will be given priority. Traditional medicine will be encouraged to fully utilize the existing heritage on scientific lines by investigations, research and developing a proper delivery system.

25. Quackery will be banned.

26. Local production of equipment will be given due importance as the requirement for the Seventh and Successive Plans is going to be huge in monetary terms. As far as possible, it will be standardised. Total self-reliance will have to be achieved in many areas like dental equipment, laboratory equipment, ward appliances and aseptic furniture. Priority will also be given to develop capability to repair and maintain the equipment and appliances all over the country.

27. For implementation of the Seventh and Perspective Plans a proper machanism needs to be developed in the implementing machinery at all levels.

PRIORITIES FOR THE SEVENTH PLAN

30. During the Seventh Plan the following areas will be given priority while the remaining mentioned earlier will form the component of the Perspective Plan :

1. Health of the Mother and Child-including immunization, child spacing and nutrition.
2. Treatment of pulmonary tuberculosis till it is no longer a public health problem.
3. Drug abuse with special emphasis on detoxification of heroin addicts and their rehabilitation.
4. Accidents and emergencies.
5. Oral and dental health.
6. School health service.
7. Removal of imbalance of human resources-power job description, training content, training, their deployment and management and career structure-Review functioning and composition of PMDC, Pharmacy Council, Nursing Council and Medical State Faculties.
8. Mental health care.
9. Proper encouragement of Private sector development.
10. Care of the disabled.
11. Care of senior citizens.
12. Public health laboratory services.
13. Development of voluntary Blood Bank services.
14. Modernization of DHQ/THQ hospitals.
15. Development of specialized services in a limited manner.
16. Proper Drug Policy including drug delivery system.
17. Training health functionaries in management.
18. Development of a proper information system.
19. Public awareness for healthful living-health education.
20. Health sector to keep pressure for availability of potable water supply and sanitation.
21. Traditional medicine-proper utilization of all aspects.
22. Halth legislation for various regulatory measures.

23. Pure food laws.

24. Ban on Quackery.

25. Mechanism to oversee implementation of the Plan needs to be developed.

Targets

31. Generally speaking the targets of Health for All by the year 2000 must be surpassed by respective Plan. The following targets are proposed :

(i) Infant mortality will be reduced to 40 per thousand.

(ii) The life expectancy will be increased to be more than 65 years.

(iii) First and second degree mal-nutrition will be eliminated among pre-schoolers during the Seventh Five Year Plan.

(iv) All new-born children will be protected against the preventable diseases of childhood on a regular basis and additional protections will be provided as and when these become available.

(v) All expectant mothers will be provided ante-natal check, atleast, three times during pregnancy with protection against tetanus. Trained personnel will conduct the deliveries. A Proper post-natal care will be provided to every other and suitable infant care will be made available to all children upto the age of one year.

(vi) The maternal mortality will be reduced to less than 10 per 10,000 life births.

(vii) All disabled persons will be provided medical rehabilitation and primary education. 25% of the disabled will be provided Primary education by the end of the Eighth Plan.

(viii) For orcdental health following targets will be achieved :

— Children upto the age of 5-6 years should be free from caries upto 80 percent ;

— Reducing the caries level at 12 years to 3 MDF (Missing, Decayed or Filled) teeth or keeping the lower levels of the disease stable

— No loss of teeth for 85 percent of 18 year olds and

— Reduction of edentulous persons by 50 percent at 45—55 and 25 percent at 65 years and over.

(ix) The nutritional status of children is adequate so that 90 percent of new born infants have birth weight of, at least, 2500 g and 90 percent of children have a weight for age that corresponds to the reference values. Ninety percent of the expectant and lactating mothers will be without anaemia.

(x) All Union Councils will have, at least, one primary health care facility in the form of Basic Health Unit. Larger Union Councils will have more than one such facility.

(xi) For health manpower, the following targets are proposed for the Seventh and Perspective Plans.

Perspective Plan

Category of Personnel	Population/ Facility ratio	Number
— Doctors	1:2,000	80,000
— Specialist Doctors	1:8,000	20,000
— Dentists	1:25,000	6,400
— Pharmacist	1:50 beds	15,000
— Nurses	1:4,000	40,000
Auxiliaries	1:1,000	160,000
Dais	1:1,000	160,000
	Total ..	481,400
— All categories of Health Personnel ..	1:350 as against 1:800 in 1986 in Pakistan and 1:100 in 1986 for developed countries.	

Seventh Plan

Category of Personnel	Population/Facility Ratio
— Doctors	1:2,750
— Specialist doctors	1:15,000
— Dentists	1:40,000
— Pharmacists	1:100 beds
— Nurses	3:10 beds
— Auxiliaries	1:2,000
— Dais	1:1,000

More details appear in the report of the panel on Medical Education.

(xii) For the referral care, one hospital bed will be provided for 1000 persons.

(xiii) During the Seventh Plan 3 nurses will be provided for 10 hospital beds while this ratio will be improved to 3 nurses for 8 beds by the end of the Perspective Plan.

Strategy For Public Health System

32. The present approach of developing a nation-wide integrated health care system will be persued during the Seventh and Perspective Plans so that all the un-and underserved areas are provided adequate facilities. The existing primary health care facilities will be improved and the main features will include the following :

(i) Maternity and child health care components of Basic Health Units as well as of Rural Health Centres be expanded by providing beds and a labour room, space for monitoring growth of children, immunization and practical demonstration area for special feeding formulae and health talks.

(ii) X-ray be provided and laboratory services be expanded at rural health centres.

(iii) A dentist be provided at rural health centre.

(iv) Bed strength of rural health centres be increased to 20—25 with provision for nursing services (preferably male nurses).

33. The details of additional facilities to be provided in existing BHUs and RHCs according to the above mentioned guidelines will be as follows :

Rural Health Centre

(i) Dental unit with dental surgeon and auxiliaries.

(ii) X-ray facilities.

(iii) Labour room where not provided ;

(iv) Improvemnt and expansion of laboratories where already provided, otherwise provision of adequate laboratory services ;

(v) immunization and demonstration rooms ;

(vi) Increase in bed strength to 20—25 beds ;

(vii) Residential accommodation :

— Third Medical officer's residence
— Dental Surgeon's residence

— Nursing staff and paramedics quarters
— Ancillary staff

(viii) Tube well and overhead tank ;
(ix) Septic tank and soakage pit ;
(x) Kitchen ;
(xi) Garage ;
(xii) Ambulance ;
(xiii) Telephone ;
(xiv) Boundary wall where not provided ;
(xv) Stand-by generator.

Basic Health Unit

(i) Medical officers' room with attached bath ;
(ii) Immunization room ;
(iii) Practical demonstration room for special feeding formulae, health talks and monitoring growth of children.
(iv) Reasonable laboratory ; dental hygienist ;
(v) Labour room ;
(vi) Two maternity beds ;
(vii) Residential accommodation for :

— Medicai officer
— Additional paramedics (1-2)
— Ancillary staff quarters.

(viii) Tube-well and over-head reservoir ;
(ix) Septic tank and soakage pit ;
(x) Stand-by generator and boundry wall.

34. After having achieved these, the facilities in the rural areas will continue to be expanded and upgraded in a phased manner during the Perspective plan.

35. Primary health care facilities will be created in urban areas so that hospitals confine themselves to referral care. In urban areas, capital investment will be made jointly by Government and municipalities while these facilities will be operated by municipalities who will bear all recurring expenditure.

36. Tehsil/taluka and district hospitals will be further improved and upgraded. They will be provided modern equipment and centres of excellence will be created. However, specialised institutions will be created, in a limited manner, during the Seventh Plan but as a long term measure all modern facilities will be made available to the people so as to obviate the necessity of going abroad for treatment. On an average one hospital bed will be provided for 1000 persons. During the Seventh Plan three nurses will be provided for every 10 hospital beds but as a long term measures 3 nurses will be provided for every 8 hospital beds. The hospital staff will be reviewed and rationalised so that there is a proper mixture of auxiliaries and ancillaries.

37. The weekest aspect of the link between primary and referral care is the non-existence of a communication link. This will be created by providing ambulances at each rural health centre. A telephone link in urban areas or a telephone or radio link in rural areas will be provided for referral and feed-back.

Maternal and Child Health

38. The risk of dying of mothers and their babies increases during the period from the 28th week of pregnancy to the end of the first week after birth. During this time, the risk of dying of both the infant and mother is determined by the condition of the pregnant mother.

39. Mortality of new-borns is related to the health of the mother both before and during pregnancy, inappropriate delivery practices, prolonged labour, subsequent infections and congenital anamolies. One of the major underlying causes of such infant death is low-birth weight. The low-birth weight infant who may later get infection, has a much greater chance of dying from these infections than an infant of normal birthweight.

40. Low birthweight is caused by mother's malnutrition, lack of rest mother's diseases and infections. Added to malnutrition, too many and too frequent pregnancies contribute to the continued depletion of her body. Such a continued depletion leads to a higher incidence of low birthweight and disease in the infant and mother thus increasing the risk of death to the mother and her child.

41. The rate of mortality around birth is still too high. One out of two infant deaths occurs during the first month of life.

42. Appropriate care during pregnancy and child birth is crucial to women's health and well-being as well as to that of the future generations. This is dependent on how safe pregnancy and deliveries could be made. As far as maternal mortality is concerned the main problem is to manage 5—15 percent of women requiring higher levels of care than found at the comunity or first health facility level. Without an understanding of and technologies for the prevention of prolonged labour, intra-and post-partum haemorrhage and puerperal sepsis, the deaths will continue. Without the higher level facilities and skills 5—10 out of every 1000 pregnant mothers will continue to die a pregnancy-related death.

43. Since half of the large number of infant deaths occur during the neonatal period, unless the attention is focussed on the problems of low birth-weight, maternal health, nutrition and energy balance and intra-partum care, the goal for reducing infant mortality to 40/1000 live births by 2006 cannot be attained. Similarly, if primary health care is not backed by appropriate referral care for 5—15 percent of expectant mothers requiring higher level of care, maternal mortality cannot be reduced. The maternal child health care will include the following components to be offered, at all public health facilities, by properly trained personnel :

(i) antenatal care
(ii) referral of high risk cases
(iii) delivery by appropriately trained attendant at home or in the hospital.
(iv) Infant care including full immunization, breast feeding, growth monitoring, weaning food.
(v) care of the mother after delivery, educating her with better practices of rearing children like breast feeding, personal hygiene and practice child spacing for providing adequate opportunities for her off-spring to attain proper growth.

44. More details may be perused either in the summaries of the panels or in the detail reports of these panels. However, there are some areas which will be examined, in depth, on a more continuous basis like financing health services, health manpower development when more information becomes available.

Main Recommendations of the Speciality Panels

45. These appear panel-wise as follows :—

I. Oral and Dental Health

Current Situation

46. Periodontal diseases (gum diseases) afflict about 90 percent of the population. Dental caries (cavitation of Teeth) is more common in children than in adults. Eighty percent of children have caries while 30 percent of adults suffer from this disease. Mal-occlusion of teeth is on the increase and it is estimated that 40—60 percent of the children have this. Out of cancers, oral cancer is the second most commonly prevalent.

47. Due to accidents, maxillo-facial injuries are on the increase. Observence of dento-facial anamolies is not a rare phenomenon.

48. Inspite of a high incidence of preventable diseases, Government denta clinics confine themselves to a limited range of treatment. The most favoured and admissible treatment to Government servants and their families is extraction of teeth besides some gum treatment.

49. At present, there are four teaching centres for training of dentists and dental auxiliaries. The total number of dentists is estimated to be around 1,400 *i.e.* there is one dentist for 70,000 persons. The yearly output of dentists is 150 while those of dental auxiliaries is limited to about 15 each of dental technicians and dental hygienists. Due to scarcity of trained manpower, unqualified dentists numbering 7,000 have descent living.

50. Currently oral and dental health services are limited to dental clinics at District and Tehsil/Taluka Headquarters hospitals. During the Sixth Plan these are being extended to the Rural Health Centres.

51. The existing teaching institutions are short of suitably qualified trained teachers, equipment, space, books and journals and audio-visuals. The present curriculum is curative phase of dentistry and post-graduate training facilities are virtually non-existent.

52. A wide array of dental equipment from various sources is being imported. Likewise most of the dental materials is imported.

Recommendations for the Seventh and Perspective Plans

53. The long term objectives should be to achieve, at least, the following by the end of the Perspective Plan :—

(*i*) Children upto the age of 5-6 years should be free from caries upto 80 per cent ;

(*ii*) Reducing the caries level at 12 years to 3 MDF (Missing, Decayed or Filled) teeth or keeping the lower levels of the diseases stable ;

(*iii*) No loss of teeth for 85 per cent of 18 years olds ; and

(*iv*) Reduction of edentulous persons by 50 per cent at 54-55 and by 25 per cent at 65 years and over.

54. To achieve the above targets, this will require a massive effort in setting up dental net-work as a component of Nation-wide Health Care System. More important than the physical facilities will be the production of trained manpower. The existing training facilities will have to be expanded and upgraded while more places will have to offer training facilities which will be created during the Seventh Plan and successive Plans. This will require training of master trainers who will have to be trained abroad to build a national capacity to train faculty.

55. The existing deficiencies in the teaching institutions will have to be removed. The curriculum will have to be revised and training modified to make it preventive and promotive oriented. Teachers will require training in teaching methodologies and newer techiques and developments. For this, they will have to be sent to other countries. A separate Dental Council will have to be created to look into all these aspects of dental education.

56. During the Seventh Plan an invasive health education compaign will have to launched to create an awareness among the general public of the importance of orodental health and how to achieve/maintain good standards of orodental health through preventive measures.

57. During the seventh Plan, an all out effort will be made to have a proper school oral health service as a major component of School Health Service.

58. A proper carreer structure to professionals and auxiliaries will have to be offered like other professionals and auxiliaries of health team which have been proposed under medical education panel recommendations.

59. Structural adjustments will have to be made in the Ministry of Health, Planning Division and Provincial Health Departments to have dentists at appropriate levels to advise the Government of actions required and follow up of the implementation of the Plans.

60. To make national health net-work effective, a dental hygienist be provided at each Basic Health Unit while auxiliaries be provided alongwith dentist at the Rural Health Centre. Two dental surgeons with auxiliaries be provided at Tehsil/ Taluka Headquarters hospitals. District Headquarters hospitals should have all the dental specialities and the total district dental services be headed by a District Dental Officer.

61. The dental equipment should be standardised immediately and maintenance and repair facilities created within the country. The import of dental material should be free of duties and taxes. Dental equipment should be locally manufactured.

62. The loaning facility offered to dentists is inadequate. To establish private dental clinics, dentists should be allowed Rs. 300,000.

63. Municipal Committees be made responsible for curative and preventive dental care in urban areas. They shoud also be made responsible for flouridation of water where it is required.

64. Dental units be established for industrial units with 2000 workers and rules amended accordingly. Rules of Government servants should also be amended to include a comprehensive package of oral and dental health except dentures.

65. More details appear in the report of the panel on Oral and Dental Health.

II. Traditional Medicine

Current situation

66. At present, the total number of registered Tabibs is 36,881, while there are 15,786 Homoeopaths and 539 Vaids. Most of the practioners of the traditional medicine are in the private sector. There are 27 training institutions : 11 for Tibb and 16 for Homoeopathy. The number of students qualifying each year in Tibb and Homoeopathy is about 450.

67. In the public sector, there are 84 Tibbi dispensaries in Punjab and 21 in Sind while a few exist in Azad Jammu and Kashmir. A Unani Research Centre is functioning under the Federal Government at Karachi and a Unani Section exists in National Institute of Health, Islamabad. Lahore Municipal Corporation and some other organisations like PIDC, KESC and State Bank have provided some Unani dispensaries for their employees. Homoeopathy have two hospitals in the private sector with 20 beds at Karachi and the other with a fewer number of beds at Lahore.

68. Education and practice of traditional medicine system is regulated under the Unani, Ayurvadic and Homoeopathic Paractitioners Act 1965 (modified-1978). This Act had provided separate Councils for Tibb and Homoeopathy. The functioning of this Council are :—

(*a*) To consider applications for recognition of institutions imparting or desiring to impart education ;

(*b*) To secure the maintenance of an adequate standard of education in recognized institutions ;

(*c*) To make arrangements for the registration of duly qualified persons ; and

(*d*) To promote research and development.

69. There is no Government control on the manufacture, sale, distribution, efficacy and quality of drugs of the traditional medicine system.

Review of Sixth Plan

70. During the Sixth Plan, except for setting up of 84 dispensaries in Punjab and 21 in Sind no significant progress could be made in implementing the other recommendations of the Plan. Because of the lack of expertise in the Federal Health Ministry, Provincial Health Departments and the Councils proper programmes and projects could not be prepared for approval and implementation. The following actions need to be taken during the Seventh and Perspective Plans :

(*i*) The strategies/objectives laid down in the Sixth Five Year Plan (1983—88) should be persued in the Seventh Five Year and Perspective Plans upto Year 2003 except that Homoeopathic and Tibbi dispensaries be established at each union council instead of rural areas unserved by the modern medicine.

(*ii*) Introduction of five years course in the future public sector Colleges with F.Sc. as entrance qualification and graduates be awarded degree.

(*iii*) New curriculum for graduate course needs to be designed. In case of Homoeopathy, the syllabus for graduate course awaiting approval should be adopted. For Tibb, syllabus adopted by the Indian Tibbia Colleges can be adapted to meet our needs.

(*iv*) The existing Colleges be affiliated with the Boards for award of diploma and facilities be established at University level for starting degree course.

(*v*) Establishment of Colleges of traditional medicine in the public sector. Enhancement of grant-in-aid to the Colleges to make up the deficiencies as the existing colleges cannot improve the educational level unless reasonable subsidy is provided by the Government.

(*vi*) Grant of interest free loans to the existing Colleges for enhancing their educational standard.

(*vii*) Functions of the National Councils for Tibb and Homoeopathy should be established on the lines of P.M.D.C.

71. More details appear in the report of the panel on Traditional Medicine.

III. Narcotics Control

72. The multiplying problem of narcotics drug abuse affects adversely the socio-economic progress of the country. A sharp increase in drug abuse has been noticed since 1979. It is estimated that 1.7 million persons are abusing various types of drugs in the country of which 0.45 million are heroin addicts who are mostly in age group of 16—35 years. There are 26 treament and rehabilitation centres in the country which provided medical help to 3500 addicts in 1981. This number has increased by 80 percent by 1985. Out of the treated, relapse rate is about 80 per cent. These centres cannot cope with the increasing menace of drug addiction.

73. The area under cultivation and production of narcotics drugs is estimated to have decreased by 84 per cent during the year 1979 to 1986.

Review of the Sixth Plan

74. During the Sixth Plan period, 1985 represents the most crucial period for drug abuse control in Pakistan. Government launched a major efforts to eliminate the illicit cultivation of opium in the country with the financial assistance of international donors under Special Development and Enforcement Plan (SDEP). A scheme for provision of income substitution and legal frame against production of noxious drugs have been made. The area under cultivation of poppy has been reduced by 84 per cent during the Plan period. Traditional distribution of opium through a network of vends was abolished and the shops closed.

75. Twenty-six treatment and rehabilitation centres in the existing hospitals/health centres in the four Provinces and Northern Areas were established and strengthened. These centres are catering to the detoxification and rehabilitation of drug addict all over the country. The local community would be involved to play an active supporting role in the drug control programme with a view to encouraging the addicts to voluntarily come forward and make the fullest possible use of the opportunities offered.

Main causes of drug addiction and abuse

76. Before formulating long term objectives, there is a need to identify main causes of drug addiction and abuse. These include :—

(*i*) cheap and easy availability of illegal narcotics ;

(*ii*) apparent attractiveness of drugs to the adolescent ;

(*iii*) rapid change in social values placing new demands on individuals for which drugs offer a false solution ;

(*iv*) increased varieties and availability of legal drugs, having potential for abuse and their indiscriminate dispensing ;

(*v*) lack of research data regarding ill-effects of drugs on human mind and body ; and

(*vi*) apathy on the part of education and community leaders in responding to drug abuse symptoms and socio-economic deprivation and apathy

curiosity, unemployment, unplanned leisure, boredom, isolation from wordly worries and contacts with drug addicts.

Perspective Plan Objectives

77. The multi-dimensional aspects of drug abuse including production, processing, illicit trade, increased use and impact on society necessitate immediate attention and sharp focus in long-term objectives in policy planning of the Government. In an Islamic and idealogical State such as Pakistan, the abuse of narcotic drugs with repercussion on socio-economic structure cannot be permitted to profilerate. Concerted efforts to eradicate the production of opium and the raw material used to manufacture heroin have not produced the desired results.

78. The alarming situation demands that meaningful programmes, for prevention of drug abuse including treatment and rehabilitation of drug addicts, education both formal and non-formal for prevention of abuse, community intervention and enforcement of the injunctions of Islam through legal frame against production and trafficking of drugs be undertaken on priority basis. The objectives of drug control programme are ; to develop, promote and institutionalise preventive education for drug abuse ; to generate public awareness of the problem and its implications for individuals families and societies ; to build up and utilise all avenues of social intervention in tackling the problem of drug abuse ; to provide appropriate specialised personnel, medical supplies, equipment for detection, detoxification and treatment in the centres for treatment and rehabilitation of drug addicts ; to eliminate illicit cultivation of poppy and the conversion of opium into heroin ; to introduce appropriate laws for the reduction of demand and supply ; and to strengthen, streamline and raise the efficiency of the law enforcing agencies.

Drug prevention through Education, Information and Communication

79. Prevention through education is considered as the most important component of drug control programme. While there is need to reach every individual in the country, resource constraints have necessitated identification of broad target groups for the programme. These include both groups of high risk for drug usagt and groups that could assist prevention, treatment and rehabilitation and control. These identified groups are youth (16—30 years), labour, parents and elders, medical personnel, teachers, ulema, elected representatives, administrators at district level and their training institutions, neo-literates, target groups institutions, media and press.

80. Non-Government Organizations can play significant role in the fight against the drug menace and would be involved in the programme.

Treatment and Rehabilitation Centres for Drug Addicts

81. The existing treatment and rehabilitation centres will be strengthened by including phycho-social rehabilitation and preventive measures against drug abuse. An indoor detoxification centre will be established in each district according to

population while a five-bedded in-patients unit will be set-up at each tehsil/taluka hospital. These centres will also provide social rehabilitation services through outreach in their area of jurisdiction. One main centre in each Provinec would act as Provincial Headquarter Centre having liaison with all the treatment and rehabilitation as well as community centres in the Province. This centre would receive feed-back from all centres.

Drug Abuse Prevention Resource Centre

82. A Drug Abuse Prevention Resource Centre will be established in Islamabad. It will actively support and encourage local, provincial and national efforts to achieve a drug free society through research, *mass media* compaign, coordination with Government and NGOs to achieve a unified, reinforcing message on drug abuse prevention. It will also serve as clearing house on drug abuse prevention and information for Pakistan.

Programme for the Seventh Plan

83. During the Seventh Plan it is proposed to set up a total of 125 rehabilitation centres at the district level—25 centres each year during the plan period.

84. One centre of Excellence, each at the Provincial Headquarters will be established, in a teaching hospital, to keep liaison with all the treatment and rehabilitation centres in the Province. This centre will organise training from time to time for medical doctors/social workers in the field of treatment/rehabilitation. It will also provide training to personnel of NGO's. One rehabilitation centre in each Province with out-reach centre would be established during the Seventh Plan. This rehabilitation centre would provide two or more skills and skill development programmes which could include tailoring, woodwork and carpentary, electronics, mechanical skills, masonary, typing, education etc. Two trainers for any of the skills will be provided for each centre with necessary equipment for skill trainer. Part-time services of doctors/psychiatrists would be obtained for psychological counselling of individuals. Cost of each centre would be reflected in the health budget/Annual Development Programme and placed at the disposal of the Provincial Government concerned, confining the Narcotics Control Board to monitoring and evaluation of the programmes.

85. A massive national campaign against drug abuse will be launched in collaboration with NGOs. The NGOs would mobilise public opinion against the use of narcotic drugs and assist through public pressure the law enforcement agencies to interdict the supply of illicit drugs in the country.

86. A Drug Abuse Prevention Resource Centre will be established at Islamabad to provide necessary knowledge, information, support grass roots efforts and conduct awareness campaigns in providing necessary coordination to various prevention activities and drug abuse programmes. It will also serve as a clearing house of drug abuse prevention and information for Pakistan.

87. More details appear in the report of the panel on Narcotics Control.

IV. DISABLED

Magnitude of the Problem

88. The population of the disabled is on the increase due the enormous rise in traffic accidents. The trend is expected to continue in coming decades if necessary preventive measures are not taken and existing preventive health-care programmes are not accelerated. On the basis of ILO/WHO estimates 10 per cent population of developing countries is disabled. Pakistan may have somewhere between 8-9 million disabled persons who would have some degree of disability or impairment. About 40 to 30 percent of them would be severely disabled. Out of these 40 per cent are likely to be physically disabled, 20 per cent blind, 20 percent mentally retarded/ill, 10 per cent deaf and mute and remaining 10 per cent have other disabilities.

89. The problems faced by the disabled and an analysis of the current situation appears as follows :—

(*i*) Lack of medical facilities for detection, assessment, diagnosis and treatment of disabilities, particularly as a component of health care.

(*ii*) Prevalence of ignorance, superstition fear and adverse attitude of the able-bodied persons towards the disabled.

(*iii*) Lack of special education, vocational training, job-assessment, employment, and other social rehabilitation facilities for the disabled.

(*iv*) Non-availability of latest rehabilitation equipment, instruments, artificial limbs, and aids in the country as a whole and particularly in medical, social welfare and special education institutions.

(*v*) Lack of proper arrangement for distribution and delivery of such rehabilitation equipment, instruments, aids and artificial limbs to the disabled.

(*vi*) Lack of arrangement for indigenous manufacturing and production of such equipment as mentioned above, artificial limbs and aids in the country.

(*vii*) Lack of adequate facilities for professional training of medical and rehabilitation workers including special education teachers.

(*viii*) Absence of an organizational and institutional framework in Health Education, Social Welfare and Employment systems to deliver medical rehabilitation and social rehabilitation services to the disabled.

90. The common causes of various disabilities were considered to be as follows :—

(*i*) Inadequate nutrition of mothers and children including vitamin deficiencies ;

(*ii*) Abnormal pre-natal or peri-natal events ; pre-natal damage, genetic factors and incompatibility ; damage at birth during the neo-nata period ;

(*iii*) Infectious diseases ;

(*iv*) Accidents ; and

(*v*) Various other factors, including environmental pollution and impairments of as yet unkown origin.

Recommendations for the Seventh and Perspective Plans

91. The main recommendation is that the following three components should be the mainstay of a strategy dealing with the care of the disabled :—

(*i*) Prevention ;

(*ii*) Detection ; and

(*iii*) Rehabilitation, *i.e.* medical and social rehabilitation.

The main recommendations are as follows :—

(*i*) Extensive family counselling/parental training through *mass media* to adopt preventive measures against disabilities.

(*ii*) Intensive family counselling/parental training through Health, Education, Population Welfare and Social Welfare Institutions at grass root levels to adopt preventive measures against disabilities.

(*iii*) Early and preliminary detection of disabilities through (i) potentiation and expansion of school health services ; (ii) B.H. Us/RHUs/MCHs ; (iii) Population Welfare Centres ; (iv) Social Welfare Institutions which provide health services ; and (v) a mobile survey team (which should be organized and institutionalised at district level by each provincial Health Department).

(*iv*) A compaign of community education should be launhced to highlight alarming increase in proportion of congenital diseases/disabilities due to consanguine marriages.

(*v*) Provision of services for medical and social rehabilitations of all types of disabilities.

(*vi*) Special education of all categories of disabled.

(*vii*) Detection, assessment, care and referral care of all disabilities should form part of the Primary Health Care net-work and PHC workers in the public and private sector a like.

(*viii*) The Objective of the Perspective Plan should be to identify, treat, educate and fully rehabilitate all disabled by the end of the Plan. During the Seventh Plan, at least, one fourth of the disabled should be enrolled for primary education by setting up special and integrated school for the disabled.

(*ix*) Detection Assessment, and treatment during the Seventh Plan should be made a component of the Primary Health Care all over the country. Referral care should be provided as part of the Nation-wide Health Care system at all teaching hospitals, during the Seventh Plan, which should be capable to deal with all aspects of medical rehabilitation. All District Headquarters Hospitals should be providing such facilities in the Perspective Plan.

92. More details appear in the report of the panel on the disabled.

V. Senior Citizens

Current situation

93. There were no specific programmes for the senior citizens in previous plans. The situation of the Sixth Plan is no different. The population in age groups 60—64, and 65 is around 6.9 per cent, being 5.82 million of the total population of 84.25 million according to the latest census taken in 1981. Some 20 per cent increase is expected in these age groups by year 2000 according to demographic projections. The senior citizens face numerous problems resulting from the following reasons :—

(*i*) Large scale migration of young people to foreign countries as well as from villages to cities resulting in fragmentation of the joint family system ;

(*ii*) Trend of husband, wife and other members of the family working away from homes ;

(*iii*) Industrialization and urbanization leading to housing shortages ;

(*iv*) Rapid socio-economic changes combined with inflation ;

(*v*) Lack of facilities in the field of health, welfare, housing, social services etc. ; and

(*vi*) Non-utilization of the talent and skills of senior citizens.

Existing facilities/services

No specific programme in public sector exists, with the exception of limited facility available in the form of pension and related benefits to retirees. The senior citizens, however, are eligible to benefit from general health and other welfare services as available to all citizens but they have to take their turn alongwith others.

Recommendations

94. During the Seventh and Perspective Plans, the following priority areas have been identified.

Health Care.—Health care programmes should be accorded priority alongwith creation and strengthening of organizational and institutional base in

the health system. This should include :—

(*i*) Extending Social Security Institutions health care benefits to all senior citizens. The contribution should be made by employers, Government and Zakat Fund.

(*ii*) Health education of Snior Citizens through mass media, health outlets and social welfare agencies ;

(*iii*) Establishment of Geriatric Wards, earmarked beds and seperate dispensing windows for senior citizens in hospitals ;

(*iv*) Provision of free medicines and domiciliary care through health visitors, public health nurses and medical social workers.

(*v*) Introduction of Gerontology as a compulsory subject in the curriculum of Medical Colleges and establishment of a National Institute of Gerontology to prepare special Health Care Workers for the care of senior Citizens ; and

(*vi*) Medical research on health aspects of Senior Citizens.

95. *Social Welfare.*—This should include the following :—

(*i*) Day care centres for senior citizens be established in order to keep senior citizens busy in such activities which ensure utilization of their talents, skills and experience and provide recreational facilities as well.

(*ii*) The on going pilot projects of " Homes for the Aged " in the Punjab should be replicated and undertaken by all provinces, federal agencies and NGOs to provide institutional care and facilities for such senior citizens who are shelterless, homeless and without a family.

(*iii*) The Union Councils and Town Committees should register and maintain a record of senior citizens with regard to their problems, needs and potentialities. The local Zakat Committees in cooperation with Union Councils/Town Committees should support indigent senior citizens on a regular monthly basis and one time zakat grant to utilize their talent and skills to become self-supporting.

(*iv*) To undertake research studies to find out the nature and extent of social problems of aging and the aged in different segments of the population in urban and rural areas.

Staff Welfare Services

96. (*i*) Establishment of Day Care centres for retirees in Islamabad and provincial headquarters on the lines proposed above.

(*ii*) Establishment of a Pensioners Welfare Board to look after the over all interest of the pensioners and their families and to propose appropriate measures for their welfare ;

(*iii*) Provision of special credit facilities on easy terms to Government employees, well ahead of their retirement, to enable them to build or purchase a house or alternatively to allow the Government servants at the age of 55 or on completion of 25 years of service to draw interest free and adjustable advances against commutation for purchase or construction of house.

(*iv*) Elimination of dispartities in pensions between old and new pensioners ;

(*v*) Concessional rail and air travels for the retirees ;

(*vi*) Initiation of a programme of re-employment of the low-paid retirees in in order to enhance their reduced incomes ; and

(*vii*) Retirement counselling service to prospective retirees to prepare them for the eventuality.

Labour Welfare.—This should provide the following :—

(*i*) Labour Division to review and amend the existing ordinances for Social Security and Old Age Benefit for provision of better health-care and welfare services to the aged workers.

Women Welfare.—This should include the following :—

(*i*) Women Division to formulate a long term plan to provide social insurance for elderly women.

(*ii*) Educating the elderly women to become suitable mother-in-laws.

99. *Coordination.*—The Federal Ministry of Health, Special Education and Social Welfare shall coordinate all sectoral programmes and shall take necessary measures for organizational and legislative changes required to introduce services for the aged.

100. More details appear in the report of the panel on Senior Citizens.

VI. Nutrition

Current situation

101. According to Food Balance Sheet of 1981-82, average per capita availability of calories (2352) and protein (61 gm) is reported to be satisfactory. However, nutrition situation still remains far from satisfactory among vulnerable groups.

102. It is estimated that about 17 percent of the children are suffering from moderate to severe malnutrition. About 80 percent of the children suffer from diarrhoea and respiratory infections, infant mortality is about 90/1000 live births. Around 25—30 percent of babies born are of low birth weight (LBW) and around 60—70 percent of the mothers and adolescent females are anaemic. In the highlands goitre is pandemic.

Review of Sixth Plan

103. The strategy of the Sixth Plan aimed at improving accessibility of health facilities and quality of health services. Health sector has launched, since 1982, an Accelerated Health Programme. So far 16 million children have been fully immunized, 29 million packets of Oral Rehydration Salts distributed and 23,950 Traditional Birth Attendants trained. Immunization is estimated to be saving 100,000 children deaths while ORS has substantially reduced the mortality due to diarrhoea. In addition, 400,000 beneficiaries are provided wheat, edible oil and dry skimmed milk under the World Food Programme from 2,000 primary health care facilities. This programme has trained 600 doctors and 2,000 lady health visitors in nutrition who in turn impart nutrition education to their clients.

Programme for the Prospective Plan

104. Main nutritional problems and strategies identified by the group are as under :—

— *Problems*

(*a*) Protien energy malnutrition.

(*b*) Anaemia.

(*c*) Goitre in localized areas.

(*d*) Osteomalacia in pregnant women.

— *Strategies*

1. The strategies and objectives of the Sixth Plan should be persued in the Seventh and Perspective Plans till elimination of malnutrition of any form.
2. Growth monitoring—a nation-wide campaign with community participation.
3. Remedial meaures to be taken as a package deal of growth monitoring programme.

Targets

105. (i) Average *per capita* caloric intake will be increased to 2650 Kcals.

(ii) The occurrence of first degree malnutrition should be prevented and per valence of second and third degree malnutrition be reduced to minimal levels.

(iii) All new cases of goitre must be prevented.

(iv) The deficient group of anaemia will be eliminated.

(v) Infant mortality rate will be reduced to below 50 per thousand live birth by year 2000 and further reduced by 2006.

(vi) Pre-school mortality be reduced proportionately.

(vii) Birth weight should be improved to minimise babies born with low birth weight by appropriate maternal care.

Programmes proposed

106. Policy formulation :

(*i*) Development of federal and provincial/district capability to deal with food and nutrition plan.

(*ii*) Introduction of nutrition activities as a component of primary health care and health net-work.

(*iii*) Develop strong and viable linkages with related sectors.

(*iv*) Institutionalization of nutrition as a discipline by creating a proper infrastructure for implementation, monitoring and evaluation of nutrition programmes and projects.

(*v*) Establishment of a centre of excellence for undertaking :—

(i) Nutrition profile studies.

(ii) Health and nutrition education and training.

(iii) Research into specific problems.

(iv) Training of various level of workers.

(*vi*) Nutrition education of the nation and mothers in particular by formal and non-formal techniques.

(*vii*) Specific intervention programmes :—Specific nutrient deficiency diseases like goitre, anaemia, rickets, osteomalacia and avitaminosis may be prevented with suitable programmes, which include dietary and non-dietary programmes. These are as follows :—

(a) Dietary programmes are the package of policy measures like :

— Increased availability of better nutritional foods.

— Nutrition education compaign through mass media.

— Specific intervention programmes like lipoidal therapy and fortification.

— Better food distribution system for far flung areas.

(b) Non-dietary programmes :

— Income generating activities and availability of food items at reasonable price.

— Diarrhoea diseases control.

— Nutrition rehabilitation.

— Immunization.

— Child spacing.

— Nutrition and child health services.

(*viii*) Establishment of monitoring nutrition centre as component of BHUs/ MCH Centres where growth monitoring, health/nutrition education and primary health care activities will be performed and finally,

(*ix*) Monitoring health and nutritional status of the expectant and lactating mothers.

107. More details appear in the report of the panel on Nutrition.

VII. Medical Education

Current situation

108. The present output per annum of various categories of health manpower is as under :—

Category	*Output per annum*
Doctors	4000
Post-graduate doctors with various diplomas ..	400
Nurses	1100
Nurse teachers	60
Auxiliaries	4200

109. On aggregate basis, there is one health worker for 800 persons while in the developed countries there is one health worker for 100 persons. These aggregate figures give the magnitude of the problem as regards the health manpower requirements of the country.

110. A number of categories of health personnel are not produced according to the national needs. The number of nurses being trained is much lower than the requirement. The same is the case for dentists. At present, there is one dentist for 70,000 persons. The auxiliaries are also in short supply. Out of auxiliaries, female auxiliaries are far too few than the needs of the nation.

111. The number of doctors exceeds the market considerations and there is a serious problem of unemployment of doctors. About 500 pharmacists are produced every year but they are not utilized in the health systems. Absence of trained persons in retail pharmacies is posing many more problems than their absence in the health systems. There are serious deficiencies in the training institutions of all categories of health personnel, dis-satisfied faculty due to poor salaries, absence of career structures and lack of residential accommodation. Most of them are not trained teachers and have no exposure to teaching methodologies.

Recommendatiou for the Seventh and Perspective Plans.

112. The building of all training institutions particualarly of nursing and auxiliaries should be proper with academic blosks, residential accommodation for students and faculty and recreational facilities. The existing deficienties in medical colleges need to befemoved.

113. The admission in medical colleges should not exceed 200 students and efforts should be made -o bring it as close to 100 as possible. The admission in nursing schools oneeds to be increased by providing necessary facilit ssnd opening new schools. More training schools for auxiliaries should befet up at least one in each medical college on the pattern of Pajkistan Institute of Medical Sciences Islamabad and the proposed Paramedical School for Auyb Medical College, Islamabad . The ratio of admissions of auxiliaries should be in favour offemales and a ratio of 30 to 70 of males to females should be followed for their admissions. Faculty members should be givenfraining forfeaching methodology. They should be offered better pay scales and appropriate career structiure and residential accommodation.

114. Private practice has adversely affected the quality of medical education. There should be two types of teachers : one with teaching designaions and not allowed private practice and paid adequately ; the second category should fe those of consultants and allowed private practice. Till such time tis is not possible, institutional practice be only allowed.

115. A proper professionaJ career structure will have to be gi ven to all orofessional of health system. These include doctors, dentists, pharmacistis *s* nd university graduate nurses. The following prototype is recommended :

— Starting scale in Government Service .. BPS—17

— Promotion prospects :

BPS 17 to 18	..	..	..	100% in 5 years.
BPS 18 to 19	..	..	..	50% in 7 years.
BPS 19 to 20	..	..	..	50% in 5 years.
BPS 20 to 21	..	..	..	25% after 5 years in BPS 20.
BPS 21 to 22	..	..	..	50 per cent.

116. Para-professionals should be given better starting ay scales than currently in vogue. These require special consideraions as without them professionals cannot perform their functions efficiently and effectively. They will be have to be considered equally important like Stenotypists and Stenographers in the Secretariat that without them very little can be achieved by the senior most func tuibaries of the Government. Such a special deal is required for parameics/ auxiliariew s to have, at least, four diffrent level for promotional avenues.

117. Job description of all categories of personnel should be developed. On this basis, their training content to be decided and facilities developed accordingly. Examinations should be conducted by universities for professional categories and by the regional boards for auxiliaries. Refresher courses should be offered to faculty and for all categories of personnel who work in health delivery systems. Functions and compositions of Pakistan Medical and Dental Council, Pharmacy Council, Nursing Council and State Medical faculties be reviewed to make them more effective.

118. The Ministry of Health and the Provincial Health Departments should be strengthened to have proper staff to deal with medical education and research in all its face to these Medical Education and Research Directorates should enjoy reasonable autonomy to advise the Government for proper health manpower development.

119. The general scarcity of specialists of various categories of health personnel be removed by providing suitable facilities at adequate level. This applies to all categories particularly, doctors, dentists and nurses. Enrolment be increased in existing training institutions and new should be set up where feasible.

120. The following targets are proposed for the Seventh and Perspective Plans :—

Category of Personnel	Population/ facility ratio	Number
— Doctors	1:2,000	80,000
— Specialist Doctors	1:8,000	20,000
— Dentists	1:25,000	6,400
— Pharmacist	1:50 beds	15,000
— Nurses	1:4,000	40,000
— Auxiliaries	1:1,000	160,000
— Dais	1:1,000	160,000
	Total ..	481,400
— All categories of Health Personnel.	1:350	as against 1:800 in 1986 in Pakistan and 1:100 in 1986 for developed countries

121. For the Seventh Plan the following targets are recommended :—

Category of Personnel	Population/Facility ratio
— Doctors	1:2,750
— Specialist Doctors	1:15,000
— Dentists	1:40,000
— Pharmacists	1:100 beds
— Nurses	3:10 beds
— Auxiliaries	1:2,000
— Dais	1:1,000

122. More details appear in the report of the panel on Medical Education.

VIII. Nursing Services and Nursing Education

Current stituation

123. Currently about 1100 nurses are being trained every year and there are not too many applicants for admission. Due to this, real selection is not possible. There is an acute shortage of nurses to manage the wards, specialised units and special areas of the hospitals. Due to shortage of nurses, hospitals are running on the strength of student-nurses and nurses have long working hours during night resulting in poor nursing care. The schools lack in academic facilities and residential areas for students and faculties. There is no career structure for nurses and image of nurses in the eyes of public is generally poor.

Recommendations for Seventh and Perspective Plans

124. There is an urgent need to increase the output of nurses to meet the requirements of the Seventh and Perspective Plans. To improve the quality of applicants, their aptitude and knowledge of English should be tested. Where possible, students with higher secondary education be preferred.

125. During the Seventh Plan nurses should be produced at the rate of 3 for 10 hospital beds, and during the Perspective Plan the target should be 3 nurses for 8 beds. In a phased manner, the output of nurses will have to be increased to 4000. The deficiency in existing nursing schools should be set up according to the standards laid down by the Pakistan Nursing Council whose composition and functioning needs to be reviewed to make it more effective.

126. Pay scales of the nurses should be revised throughout the country. A proper career structure be provided to nurses based on time scale promotion like any other professional category of health manpower.

127. The requirements of ward staff should be reviewed and there should be proper mix of professionals, auxiliaries and ancillaries. Night duty should be split in two shifts and provided to nurses residing in the hospital.

128. To overcome the acute shortage of nurses, males should be trained and utilised for rural health programmes and in areas where female nurses are reluctant to serve. Married nurses may be engaged on contract on part time basis and should be governed by seperate service rules. Large hospital should provide day care centres for young children of married nurses and should run a transport service for their staff including nurses.

129. There should be a massive campaign to improve the image of nurses through *mass media* like Radio and Television and also nurses should be invited to introduce their profession, as one of the alternate for career choices to girls in secondary and higher secondary schools.

130. The existing faculty positions should be filled by giving incentives. The students : teacher ratio should be according to the standard laid by Pakistan Nursing Council. The job description of nursing needs to be revised in the light of changing circumstances and factual service in the wards. Their curricula for basic and post-basic training should be developed on the new job description and they should be trained accordingly. Nurses education should be seperated from service. Universities should be the examining and degree awarding bodies for nursing instead of Nursing Boards.

131. More institutions should be set up in the country to train specialists nurses and reasonable number should be sent abroad to fill the faculty positions of such institutions. They should be trained in management alongwith doctors and other members of the health team so that team spirit is inculcated.

132. More details appear in the report of the panel on Nursing Services and Nursing Education.

IX. Pharmaceuticals

Current situation

133. The total domestic demand for drugs and medicines as of 1985-86 is Rs. 4.5 million. The drug market is growing at an annual rate of 20 percent. There is a vast array (9,500) of registered medical products of which 6,500 worth Rs. 3,150 million are manufactured/formulated locally while 3,000 items worth Rs. 1,350 million are imported.

134. Pakistan is at present, totally dependant on imported raw material for manufacture of drugs. While granting licence to the manufacturers of drugs, commitment is obtained from the concerned parties for undertaking basic manufacture. This commitment, for various reasons, has not been fulfilled.

135. The prices of drugs are regulated by the Federal Ministry of Health. The price fixation involves lot of procedural delays and lacks a proper secrutiny by professionally qualified cost experts.

136. Although the manufacturers are primarily responsible for the quality of each product they market, yet the government has appointed Drug Inspectors to keep a constant check on the quality of drugs. The quality control of drugs, however, remains the weakest link of the system.

Recommendations for Seventh and Perspective Plans

137. There is a need to rationalise the vast array of drugs and concentration of resources on meeting the requirements of drugs for the most common ailments. This can be obtained by eliminating irrational combination products, obsolete drugs, drugs having placebo effects and formulation of a separate drug list for the public sector at various levels of health delivery system.

138. The import of drugs should be limited to these drugs which are not being formulated/manufactured locally. Basic manufacture be given appropriate incentives and encouraged even at the cost of increase (initial) in the prices of drugs. The country should be self-sufficient in basic manufacture of drugs by the year 2000.

139. The prices of all drugs and medicines other than essential and life saving be decontrolled.

140. The amount spent by pharmaceutical firms on promotional activities should be curtailed and the medical profession provided advertisement free drug information.

141. A multi-directional effort on R&D work on medicinal plants be undertaken to accomplish self sufficiency in herbs and herbal preparations. A suitable legislation be enacted to control the manufacture, sale etc. of traditional medicines.

142. Standard quality control laboratories, at least one each for each province, be set up and adequate funds (approximately Rs. 400 million) be provided for these during the Seventh Plan. An independent Drug Laboratory be established at the Federal level.

143. To carry out research work on drugs and medicines, a laboratory, which could be designated as National Biological Evaluation centre be established at the Federal level. This can be financed from the R&D funds provided by the pharmaceutical industry.

144. As a long term measure there is a need to establish an independent Directorate of Drugs Control including Quality Control.

X. HEALTH FINANCING

145. Health Sector, for quite sometime, was not given the importance as a component of public sector development programmes. In 1961, development expenditure for health sector was Rs. 9 million. This gradually increased to Rs. 96 million in 1973 and to Rs. 629 million in 1976. It was in the mid 1970s when health sector got some importance and was allowed more funds than allowed hitherto. In 1982, the development expenditure was Rs. 1037 million and the allocation for 1986-87 is Rs. 2.615 billion. The non-development expenditure did not experience that sort of progress and it remained lower than the investment expenditure until 1985. In 1986, the non-development expenditure was more than the development expenditure. The non-development budgetary allocation for 1986-87 is Rs. 3.27 billion. Taking into account medical research and some expenditure on nuclear medicine which are reflected in other sectors, the total allocation (development and non-development) for 1986-87 is more than Rs. 6 billion which is a little more than one percent of GNP. This used to be around 0.6 percent of GNP in 1982. The non-development expenditure has also improved and it has moved from somewhere between 2 to 2.5 percent to nearly 3 percent of the budget. The development expenditure has moved from 307 percent in 1982 to 5.56 percent of the ADP in 1986-87. The most significant achievement has been the utilization of allocations which has picked up over the years and is now estimated to be around 95 percent.

146. The total expenditure on health sector according to World Bank estimates in 1982 was 3.2% of GNP. Since then, the expenditure on the public sector has increased by 0.5% of GNP and significant improvements have been noticed in the private sector spending. The current estimates indicate that Pakistan is spending around 4 percent of GNP on health sector.

147. For the Perspective Plan, if Pakistan has to achieve a reasonable level of health, and during the Seventh Plan it should be spending more than 5 percent of GNP on health and during the Seventh Plan it should be as close to 5 percent as possible by increasing the expenditure on the public sector as well as encouraging development of the private sector. Various alternates were discussed to improve the financial allocations for health sector. The points generally agreed are as follows :

(*i*) Improve management of health care system to optimise the benefits ;

(*ii*) Initiation of health services research to improve efficiency and cost benefit ratio ;

(*iii*) Decongestion of hospitals through primary health care in urban areas ;

(*iv*) Recurring bill of primary health care should be borne by the municipalities/Zilla Councils/Union Councils or, atleast, shared by them ;

(*v*) *Extension of social security scheme to non-industrial sector and to the* employers employing even upto two persons ;

(*vi*) Coverage of public sector employees upto Basic Pay Scale 1—16 through social security ;

(*vii*) Build more private wards/rooms in the public sector hospitals for cost recovery and earning profits.

(*viii*) Introduction of users' charges.

(*ix*) Health insurance to be introduced. Drugs in the out patients should not be provided free by tertiary care facilities.

(*x*) Rationalization of pharmaceutical industry and drug bill ;

(*xi*) More incentives for private sector for sharing of burden of health care.

(*xii*) Sharing burden of health manpower training with private sector ;

(*xiii*) Avoiding duplication of services.

(*xiv*) Gradual increase in revenue budget from present around 3 percent to about 5 percent.

148. It was finally decided that a sub-committee should look into this and suggest concrete measures of cost sharing and suggest distribution of available resources. Planning and Development Division have contracted out a study to foreign consultants in collaboration with Pakistani firm to go into the whole question of financing of health care in Pakistan. According to the agreement, the study results will be available in September/October 1987 which will be utilized for the Plan purposes.

149. More details appear in the report of the panel on Health Financing.

XI. Pharmacy Services

Current Situation

150. Education and practice of Pharmacy is regulated under the Pharmacy Act, 1967. This Act provides Pharmacy Councils-one at the Central level and one in each province. The main function of the Central Council is to prescribe the equipment and facilities and to secure the maintenance of an adequate standard of education in institutions conducting courses of study in Pharmacy.

151. Provincial Councils are mainly responsible for registration of Pharmacists and preparing and maintaining registers of Pharmacists besides conducting examination for their registration. There are three categories of registered pharmacists *i.e.* A, B, and C. Register A includes Graduate Pharmacists only.

152. Whereas the Central Pharmacy Council is responsible for regulating the Pharmacy education, it has failed to perform this function because the Pharmacy Institutions/Departments are under the direct financial and administrative

control of the Universities and University Grants Commission who do not want any interference in their jurisdiction through Pharmacy Councils.

153. Disciplines of Pharmacy are as under :

(i) Pharmacy Education and Research.

(ii) Professional Pharmacy (Retail/Wholesale/Distribution of drugs).

(iii) Hospital Pharmacy.

(iv) Industrial Pharmacy.

(v) Drug Regulatory Agencies.

Pharmacy Education

154. Seven universities in all the 4 provinces are offering 4 years B. Pharmacy degree course each with an average intake of 600 students and output of over 500 pharmacy graduates every year. Only 20—25% of these pharmacists get employment and that too mostly in industry. Total number of pharmacists is estimated to be about 5,000.

Professional Pharmacy

155. Professional Pharmacy includes : manufacturing, distribution, retail sale and whole-sale. Salient features of Professional Pharmacy are :

(i) Manufacturers, importers, wholesalers and retailers are licenced under Drugs Act,1976.

(ii) Importers, Distributors/Sub-Distributors are not required to employ a qualified pharmacist under the Drugs Act.

(iii) Retailers freely supply all type of drugs without prescription, with the exception of narcotics, prescribe substitute durgs at their own ; even prescribe drugs to customers.

(iv) Drugs in general and those requiring special storage conditions are stored as items of general commodity under most un-satisfactory conditions.

(v) Grant of retail/wholesale licences without any rationale for population, areas or distances which are generally clustered around hospitals, private clinics and special bazars.

Hospital Pharmacy

156. Total Drug Delivery System in hospitals is managed and run by unqualified persons who hardly play any professional role because they have no concept on drugs interaction, incompatibility, toxicity, quality, efficacy, storage and selection of drugs of choice to the disadvantage of doctors, nurses, patients

and administration. Inspite of the production of over 500 qualified Pharmacists every year their services are not being utilized to complete the triology of doctors, pharmacists and nurses which are essential for standard health care system even in most of the developing countries.

Review of the Sixth Plan

157. The following actions are contained in the Sixth Five Year Plan :

(i) Hospital Pharmacies upto Tehsil/Taluka level shall be managed by pharmacy graduates. In large hospitals, pharmacists, on an average, will be employed for every hundred beds.

(ii) Licences for dealing in Drugs and Medicines will be restricted to persons possessing a degree or diploma in Pharmacy.

158. None of the above objectives have so far been achieved.

Recommendation for Seventh and Perspective Plans

159. *Pharmacy Education.*—(i) Pharmacy institutions should be directly made responsible and accountable to Pharmacy Councils which should be given the status and authority equivalent to PMDC.

(ii) Teachers in Pharmacy should have basic degree in Pharmacy as a condition for future recruitment.

(iii) Sufficient funds should be made available to accelerate research activities in the universities imparting pharmacy education.

160. *Hospital Pharmacy.*—(i) Necessary infrastructure should be provided to plan and organize the pharmacy services both at Federal and Provincial level.

(ii) Immediate appointment of hospital pharmacists starting at Tehsil/Taluka level. One pharmacist be appointed for every 50 beds in all hospitals both in public and private sector as a long term goal. For the Seventh Plan there should be at least, one pharmacist for every 100 beds.

(iii) Director Hospital Pharmacy be appointed and made responsible to organize and supervise pharmacy services for hospitals with or more than 500 beds.

(iv) Hospital Pharmacists be actively associated in screening, selection and purchase of institutional drug requirements.

161. *Professional Pharmacy.*—(i) Issuance of new licences in urban areas be resricted to pharmacy graduates with facility of soft term loans upto Rs. 0.5 million on the analogy of medical profession.

(ii) Sale of drugs other than OTC items, must be only on prescription of licenced medical practitioners, dentists and vetenarians and, in emergency, by a graduate Pharmacist owing or working in a retail pharmacy.

(iii) Employment of a graduate pharmacist by retailers and wholesalers with an annual direct turn-over of Rs. 5 million and above.

(iv) Drug handling at distributor level must be under licence and direct supervision of category 'A' registered pharmacist.

(v) No new licence be granted for the area in which cluster of chemist shops are already in operation. The criterian for the grant of new licences be based on one pharmacy for 10,000 inhabitants and this should apply uniformly to urban and rural areas.

(vi) New registration in category 'C' should be stopped with immediate effect to exclude the means for exploiting the Drugs Act and Pharmacy Act.

(vii) Pharmacists should be produced in such a number as to man about 30,000 Drug Stores.

(viii) Centres of excellence for research in pharmacutical science be created at Lahore and Karachi.

WORKING GROUP FOR SEVENTH PLAN (1988—93) AND PERSPECTIVE PLAN (1988—2003)

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50**. Association of Pakistani Physicians in North America .. ,,

* Did not attend.

** Did not attend due to short notice.

ORAL AND DENTAL HEALTH

53—54

I. ORAL AND DENTAL HEALTH

Current situation

The expert panel on dental health met on November 18, 1986 at Islamabad under the Chairmanship of Dr. Siraj-ul-Haq Mahmud, Senior Chief (Health and Nutrition), Planning and Development Division, Islamabad. List of participants is annexed.

2. Common orodental diseases are : dental caries ; periodontal diseases ; malocclusion ; maxillo-facial injuries ; pre-cancerous conditions and cancer and dento-facial anamolies *e.g.*, cleft lip/palate.

3. Dental caries affect all age groups. It is estimated that 80 per cent of children and 30 per cent of adults suffer from dental caries. The prevalence of caries is increasing rapidly due to changes in life style and eating habits. We may be facing a major new public health problem if preventive and educative measures are not undertaken now.

4. Periodontal diseases also start at a very young age and assume first rank in importance among persons over 25 years of age. The periodontal diseases effect about 90 per cent of our adult population. Periodontal diseases affection ranges between 7—9 per cent of the children. Periodontal disease begin in childhood, creating conditions of continuing oral sepsis throughout adolescence and adulthood, causing premature and massive loss of otherwise sound teeth by the age of 40—50. Periodontal diseases once regarded as incurable diseases are preventable and curable. About 10 per cent of the individuals suffering from Periodontal disease require treatment by an expert Dental Surgeon while the rest can be prevented and cured by dental health education and dental hygienist. The prognosis in advanced stages is poor and is a major cause of tooth mortality in adults.

5. Malocclusion, a condition where there is a departure from the normal relation of teeth, to other teeth in the same arch or and to teeth in the opposing arch. is estimated to affect 60—70 per cent of the school going children, leading to functional, asthetic and health abnormalities.

6. Maxillo-facial injuries are on the increase due to day to day accidents on road, rail, industry, construction works, etc. It is imperative to introduce preventive safety measures to reduce mortality and morbidity. Dental profession should actively participate in accident preventive programme and in providing appropriate treatment of facial injuries.

7. Carcinoma of the oral cavity is the second commonest tumour both in males and females. A good percentage of these is directly related to the habit of chewing of pan, tobacco, beatle nut and snuff, smoking, etc. Oral cancer and similar pre-cancerous lesions like sub-mucous fibrosis are preventable by health education of the public.

8. The incidence of Dento-facial anamolies of the face and oral cavity *e.g.*, cleft plate, harelip is of the magnitude of 1/1200 births which is a very high proportion as compared to other congenital anamolies.

9. There are oral health services in the form of dental clinics at districts and tehsil/taluka hospitals and Rural Health Centres for meeting demand of population. These services are inadequate to the extent that these does not include oral health services, particularly their prevention.

10. There is no organizational structure either at the District, Provincial or Federal level to plan, execute, coordinate and supervise dental health services.

11. There are four institutes producing dental graduates. These are de'Montmorency College of Dentisty, Lahore ; Dental Sections of Khyber Medical College, Peshawar ; Liaquat Medical College, Jamshoro and Nishtar Medical College, Multan. The total number of graduates being produced annually by these institutions is 150. Another dental section is being planned as part of Bolan Medical College, Quetta and is likely to start admission next year.

12. The present teaching Institutions are short of suitably qualified teachers, equipment, space, books and journals and audiovisual aids. Except for de' Montmorency College of Dentistry, Lahore, other dental teaching institutions are functioning only as sections/departments of medical colleges and lack an identity of their own.

13. As of today, there are about 1525 dentists registered with the Pakistan Medical and Dental Council. Out of these 1400 are estimated to be available within the country. There is one qualified dentist for a population of 70,000. This population/dentist ratio does not take into account the geographical mal-distribution as situation in rural areas is much worse than urban areas.

14. There is a large number of unqualified dental practitioners in the country whose number is estimated to be around 7,000.

15. A paradox in the production of dentists is that while the dentists population ratio compares unfavourably even with countries at our stage of development, there is unemployment of qualified dentists in the country. There appears to be two main reasons of unemplyment of dentists. In the first instance, the expansion of dental care facilities in the public sector have been very slow ; secondly the private sector has not been given adequate incentives to attract dental graduates for establishing dental clinics. The cost of establishing a dental clinic in the private sector is beyond the reach of most of the qualified dentists as it needs an initial investment of not less than Rs. 300,000. The private dental sector can, therefore, play a supplementary role only if promotional measures are initiated by the Government.

16. Dental auxiliaries comprise Dental Surgery Assistants, Dental Hygienists and Dental Technicians. The number of dental technicians, Dental

Hygienists and Dental Surgery Assistant in the country is negligible. It is generally stated that one dental technician is required for 15 dentists and every 4 dentists need one dental hygienist and for every two Dentists one trained Dental Surgery Assistant is required. Accordingly, requirement of dental auxiliaries for the next 5 years shall be as bollows :

I.	(*a*) Total existing Dentists in Pakistan	1,400
	(*b*) Addition of Dentists in next five years	600
	Total ..	2,000
	— Existing Dental Technicians	120
	— Addition in next five year	75
	— Existing Dental Hygienists	15
	— Addition in next five year	75
II.	**Requirement by Five to ten Years**	
	— Dental Teachers	80
	— Dental Managers	10
	— Dental Specialists in Private Sector	200
	— Dental Specialists in Public Sector	225
	— Dental Specialists	445
	— Research Scholars	32
III.	— General Dental Practitioners	
	— In private sector	300
IV.	**Dental Auxiliaries**	
	— Dental Technicians in public sector	350
	In private sector	300
	— Dental Hygienist in Public Sector	350
	In Private sector	450
	— Dental Surgery Assistant in Public Sector	400
	In Private sector	500

17. The dental equipment is imported and dental materials, as well, are imported. The dental equipment available in the market range from sophisticated six handed surgery with orthopantogram to the conventional dental unit. It is essential that all dental equipment be rationalised and standardised at each level of dental care system in public sector. The services for repair and maintenance of the equipment are inadequate.

18. The concept of community dentistry and dental health education has not been explored and practised.

Goals and targets for the Seventh and Perspective Plans

19. Children upto age of 5-6 years shall be free of caries (upto 80 per cent). This should concentrate on parental education about prevention, later preventive education in school going children and provision of curative services for residual disease.

20. Reducing the caries level at 12 years to 3 MDF teeth or keeping lower levels of the disease stable, but this goal requires a specific school service. That service would concentrate on preventive education and activities like tooth brushing, flouride pastes, rinses, or flouride tablets in school and service for residual diseases.

21. No loss of teeth for 85 per cent of 18 years olds. There is need for extension of school service, preventive and curative programmes to 16 years. The combination of oral hygiene and fluoride administration will be instrumental in preventing loss of teeth due to advanced periodontal disease. For maintaing prevention and cure from 17 years may be facilitated by insurance, community clinics and Government clinics and Private clinics.

22. Reduction in percentages of edentulous persons by 50 per cent at 45—55 and by 25 per cent at 65 years and over.

23. The responsibility for providing health education prevention, emergency services and care on demand would be shared by private practitioners and Government Dental Health services. The Government should provide clinics for the general population preferentially for rural and small to moderate urban population and for low income groups. Social security services should provide clinics for the workers and their families.

RECOMMENDATIONS

(i) A dental surgeon be appointed as Deputy Chief in Planning Commission, Government of Pakistan ;

(ii) In the Federal Government, a Director for Dental Services assisted by two Assistant Directors for curative and preventive measures be appointed.

(iii) At the provincial level, there is a need of a Directorate of Dental Service at par with the Directorate of Health Services. At divisional leve Deputy Director in Dental Services be appointed.

(iv) The terms and conditions of services of dental surgeons and the promotional avenues should be at par with their medical collegues.

(v) The career structure should be the same as has been proposed for professionals and para professional categories of health team under medical education.

(vi) There should be separate budget allocation for dental services, both developmental and operational/recurring.

(vii) The staff and facilities for treatment at Basic Health Unit, Rural Health Centre, Tehsil and Taluka Headquarter, and District Headquarter Hospitals shall be specified as outlined :—

Basic Health Unit

Staff .. Dental Hygienist.

— Functions .. (*i*) Prophylaxis.
(*ii*) Dental Health Education.
(*iii*) Data Collection.
(*iv*) Emergency Treatment.
(*v*) Identifying oral mucosal lesions.
(*vi*) Referral Centre.

Rural Health Centre

— Staff .. .. (*i*) Dental Surgeon -B.D.S.
(*ii*) Auxiliaries.

— Functions .. (*i*) Supervisery duty (Transport for supervisory functions).
(*ii*) Extraction.
(*iii*) Minor oral surgery.
(*iv*) Filling
(*v*) Diagnosis of oral lesions.

Tehsil/Taluka Headquarter Hospoital

— Staff .. .. (*i*) Two Dental Surgeons.
(*ii*) Auxiliaries.

— Functions .. (*i*) As above and.
(*ii*) Provision of dental appliances
(*iii*) Equipping Dental Laboratory.

District Headquarter Hospital

— Staff .. .. (*i*) District Dental Officer-Administration/Supervision.
(*ii*) Oral Surgeon
(*iii*) Orthodontist.
(*iv*) Periodontist.
(*v*) Prosthodontist.
(*vi*) Restorative Dentistry/Endodontist.
(*vii*) Auxiliaries.
— Comprehensive Dental Laboratory.

(viii) The Municipal Committees to be made responsible for curative and preventive dental care for urban Areas.

(ix) For every industrial unit of 2,000 workers Social Security Organization should provide a Dental Clinic and law may be suitably amended.

(x) At Federal/Provincial Headquarters, separate dental clinics shall be provided for Government Servants. These clinics should provide comprehensive service excluding dental.

(xi) School dental services be introduced and mobile dental clinics be assembled within the country to provide dental aid in Rural Areas and to augment School dental service.

(xii) Public and Private Sector be utilized for general health and dental health education through information medias, measures to be taken to arrest harmful advertisements.

(xiii) The existing teaching institutions are not in a healthy shape. The recommendations of P.M.D.C. be followed and deficiencies be removed.

(xiv) All departments of dentistry in medical colleges be re-designated as dental colleges and their heads/principals be given same administrative privileges as their counterparts in the medical colleges.

(xv) To provide trained and qualified teaching staff in all the four dental Institutions :

— Two scholarships of one to two years duration shall be earmarked for each Dental Institution continuously for atleast, a period of six years, for higher education abroad preferably leading to a degree/diploma in the chosen field of speciality.

— Two facilities should be exclusively earmarked for each dental Institution for short courses ranging from three to six months period for the existing teachers in their field of specialization. This process shall be continuously followed to update the teachers.

— Dental Technicians have an improtant effective role in Postgraduate/ undergraduate Dental Education, therefore, at least one Dental Technician from each Institution should be provided facilities for training in advance Dental Technology abroad every third year.

(xvi) Till a time that the country is self-sufficient in dental specialists and teachers, a positive thought should also be given to endowed chairs and guest teachers in specific deficiencies for specific period of time to improve teaching facilities.

(xvii) A dental College be established at Jinnah Post-graduate Medical Centre and as a beginning in the Dental Department in Jinnah Post-graduate Medical Centre the post of Professor-1, Associate Professor-2, Assistant Professor-4, Registrar 4 and House Surgeons 6 be created.

(xviii) Training of dental auxiliaries be initiated in all teaching Institutions including dental departments and Jinnah Postgraduat Medical Centre, Karachi. This should be taken on a priority basis.

(xix) Presently, postgraduate education in dentistry is being imparted at the de'Montmorency College of Dentistry. From 1976 till date 15 persons have done M.D.S. A long term aim in postgraduate dental education should be that all dental institutions be made capable of imparting postgraduate education.

(xx) As the existing facilities for training of postgraduates in dentistry within country are not adequate, dentists should not be disallowed to obtain degree and diplomas from other countries. Scholarship facilities should be earmarked for each dental institution for orientation of senior teachers and longer courses for junior teachers.

(xxi) Diploma, M. Sc, and M.D.S. courses shall be initiated in the departments where staff, facilities, infrastructure is available to hold these courses, thus a beginning be made to provide specialists, lecturers, research scholars, managers and professors.

(xxii) Dental Act shall be promulgated and the following shall be registered in separate registers :

1. Qualified Dentists ;
2. Unqualified Dentists ;
3. Dental Hygienists ;
4. Dental Technicians ;
5. Dental Surgery Assistants ;

Under this Act provincial Dental Board be constituted with respect to certification and registration of unqualified Dentists within a specified short period to stop their mushroom growth.

(xxiii) Dental services can develop and expand only if the country is self-reliant in manufacture and maintenance of dental equipment. A beginning to this effect should, therefore, be made forthwith.

(xxiv) Dental Surgeons desirous of establishing private clinics be given incentives as :

(a) Soft term loans of a minimum of Rs. 300,000.

(b) Equipment, material and supplies be allowed to be imported duty free.

(c) Tax holiday for a period of 5 years. It should be brought to the notice of Central Board of Revenue that 45—55 per cent of the gross income from a dental clinic goes towards the cost of dental medicines, materials, equipment and maintenance of clinic and should, therefore, be exempted from income-tax.

LIST OF PARTICIPANTS

1. Dr. Siraj ul-Haq Mahmud Senior Chief Health and Nutrition Planning and Development Division Islamabad .. .. *Chairman*
2. Maj. Gen. Atta-ur-Rehman Khan Director, Dental Services, Armed Forces Instiute of Dentistry, Rawalpindi .. *Member*
3. Prof. Muhammad Saleem Cheema Principal De' Montmorancy College of Dentistry Lahore .. .. .. ,,
4. Dr. S. Inam Kazmi, Chief (Health and Nutrition) Planning and Development Division, Islamabad .. .. .. ,,
5. Dr. M. Zareef Orakzai, Deputy Director (Dentistry) Health Directorate N.W.F.P. Peshawar. .. .. .. ,,
6. Prof. Ahmad Iqbal, Dental Centre, Khyber Medical College, Peshawar .. .. ,,
7. Dr. Rasheed Malik Dental Surgeon, Pakistan Institute of Medical Sciences Islamabad .. .. ,,
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9. Dr. Naseem Haider Rizvi, Dental Surgeon Jinnah Postgraduate Medical Centre, Karachi .. .. ,,
10. Dr. Ijaz Aqeel Dental Surgeon, Fauji Foundation Hospital Rawalpindi .. .. ,,
11. Dr. M. Rauf, Dental Surgeon, Sandeman Civil Hospital Quetta. *Member.*
12. Dr. Wajid Ali, Assistant Chief, Planning and Development Division, Islamabad .. .. *Member/ Secretary.*

TRADITIONAL MEDICINE

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II. TRADITIONAL MEDICINE

Meeting of the sub-group on Traditional Medicine was held on November 2, 1986 with H/Dr Jawaid Awan, Member, National Council for Homoeopathy in the Chair. List of participants is appended.

2. The current situation of Traditional Medicine in Pakistan was reviewed. There are three aspects of Traditional Medicine which are distinct entities and have specific problems *viz.* education and practice, trade and industry, and research/development.

3. Education and Practice of Traditional system of medicine is regulated under the Unani, Ayurvadic and Homoeopathic Practitioners Act, 1965 (modified-1978). The Act provides separate Councils of Tibb and Homoeopathy with 21/22 members each for its implementation. Each Council gets Government annual grant of Rs. 0.525 million for its functioning. The functions of the Councils are :—

(*a*) To consider applications for recognition of institutions imparting or desiring to impart education ;

(*b*) To secure the maintenance of an adequate standard of education in recognized institutions ;

(*c*) To make arrangements for the registration of duly qualified persons ; and

(*d*) To promote research and development.

4. Number of Government recognized Colleges to impart education in Tibb are 11 and in Homoeopathy 16. No College has its own building and are functioning in rented buildings. None of these have outdoor/indoor facility for teaching except three Homoeopathic Colleges. There is no regular budget for these institutions. They receive grant-in-aid from the Government which is Rs. 0.9 million for Tibbi Institutions and Rs. 1.00 million for Homoeopathy institutions. Number of students qualifying each year in Tibb and in Homoeopathy is about 450. The entrance qualification for admission to these institutions is matriculation with or without science. In addition, those qualifying from Deeni Madrassa are also eligible for admission to Tibbi Institutions.

5. Total number of registered Tabibs are 36,881 registered Homoeopaths 15,786 and Vaids 539. The break-up is :—

	Qualified Registered	Category (A)	Category (B)	Total	5th Plan Period
1. Tabibs	4,807	3,459	28,415	36,881	35,090
2. Homoeopaths ..	2,819	11,997	970	15,786	14,240
3. Vaids	Nil.	146	393	539	539
Total ..	7,626			53,206	49,869

Note.—Category (A)—unqualified with 7 years or more experience.
Category (B)—unqualified with less than 7 years experience.

6. There are 84 Tibbi Dispensaries in the Province of the Punjab and 21 in Sind Province. There is no dispensary in the Province of Baluchistan and N.W.F.P. The Federal Government has provided Unani Research Centre at Karachi with 3 Tabibs. National Institute of Health, Islamabad has provided Unani Section with one Tabib and one Homoeopath. Apart from these, the Lahore Municipal Corporation and other local bodies have provided few dispensaries. In the Private Sector Organizations like P.I.D.C., K.E.S.C., State Bank have also provided Unani dispensaries to cater to their employees. There is no dispensary in the public sector in the Homoeopathic System of medicine except that a Hospital with few beds is attached to Lahore College of Homoeopathy and a 20 bed Hospital is attached to Homoeopathic College Karachi. Out-door facilities exist in the Rawalpindi Homeopathy College.

7. Both the Unani and Homoeopathy systems have their own pharmacopoeia. Tibbi Pharmacopoeia approved by the Board includes almost all the drugs of Allopathic system. Another Pharmacopieia published by Hamdard Foundation provides lot of useful information on traditionai medicine. According to a survey carried out by N.I.H. there are about 200 herbs used in day to day practice of the Hakims either alone or in combination. Homoeopathic Pharmacopoeia includes the drugs of their own system.

8. There is no Government control on the manufacture, sale, distribution, efficacy and quality of traditional medicine. Virtually all the herbs with the exception of few are being imported. Most of the herbs could be made available not only for local use but also for export. India is earning million of dollars by the export of herbs and similarly Sri Lanka and China. Number of manufacturers of traditional medicine in Tibb runs into hundreds, but there are about 10 leading manufacturers of Unani medicines who are processing wide range of products on commercial scale with a sizeable annual turn-over. They are equipped with some modern equipment. Besides these manufactu rs, drugs are being formulated by individual practitioners for their own use and these drugs run into thousands requiring their rationalization.

9. As regards the homoeopathic drugs, about 25—30% of the mother tinctures are manufactured but all the patent and proprietory drugs are presently being imported.

10. Whereas the manufacture, sale, distribution, import and the quality of Allopathic drugs is regulated by Drug Legislation, the drugs of traditional system are not covered by any legislation. This situation has resulted in the marketing of useless, unethical and toxic products. India has enacted drug Ordinance of 1982 to regulate traditional medicine.

Research and Development

11. The Unani, Ayurvadic and Homoeopathic Act of 1965 duly provides for research as the function of the respective Councils and so also the 5th and 6th Five Year Plans but no rogress has been made in this direction. There is no organized research activity in the field of traditional medicine. Some research work on herbal drugs is, however, being carried out in the PCSIR Laboratories, Peshawar, Pharmacology Department of Agriculture University, Faisalabad, National Institute of Health, Islamabad and in some other University Departments. However, this research is only of academic nature and is not goal oriented.

12. The Sixth Plan provided comprehensive objectives for the promotion and development of traditional medicine. However, no significant headway could be made in implementing the Sixth Plan recommendations. Some of the reasons are :—

(*i*) Lack of proper Government patronage and support to the Councils.

(*ii*) Failure of the Councils in achieving the objectives provided in the Sixth Plan.

(*iii*) Non-acceptability of these system by the medical profession.

(*iv*) Lack of manpower development in the system.

(*v*) Lack of proper and effective infrastructure in the Government.

(*vi*) Lack of any Government control on the manufacture, sale, efficacy, quality etc. of traditional medicine.

(*vii*) Low educational level of practitioners of traditional systems.

(*viii*) Lack of training of traditional practitioners in basic principles of modern scientific medicine.

(*ix*) Lack of any systematic research programme.

(*x*) Lack of co-ordination with WHO.

(*xi*) Lack of knowledge of traditional practitioners about international developments in the field of traditional medicine.

Role of W.H.O.

13. The role of U.N. Agencies was also reviewed. WHO is playing a vital role in the promotion and development of traditional medicine as its contribution to " HEALTH FOR ALL " is potentially very great. WHO provides support in the following :—

(*i*) Evaluation of traditional materia medica and practices.

(*ii*) Co-operation with member countries in their effort to introduce traditional elements of proven use into their health care system, particularly at primary health care level.

(*iii*) Provision of training facilities.

14. WHO collaborating centres for traditional medicines continue to strengthen national efforts in research and development. Sixteen such centres have been designated, four in the Asian Region, three in Americas. one in the European region, two in South East Asia and six in Western Pacific, Surprisingly there is none in EMRO region which includes Pakistan.

15. While discussing implementation of Sixth Plan targets, all the members of the sub-group took a serious note of planning—implementation gap. The members were of the view that it is still possible to make some headway in remainder part of Sixth Plan, provided :

(*a*) Structural adjustments are introduced for Plan implementation at Federal and Provincial levels to bridge planning—implementation gap. The existing arrangement may be supplemented by advisors for Tibb and Homoeopathy in the Health Division in BPS—19 and Deputy Directors in BPS-18 at both national and provincial health services. Thier functions should be control of :

(*i*) Traditional medicine education ;

(*ii*) Development and supervision of health services in public sector :

(*iii*) Implementation of drug Act ;

(*iv*) Research enhancement ; and

(*v*) Liaison with the Councils.

(*b*) Role of Homoeopathy and Tibb Councils is made more effective.

(*c*) Hiring of Consultants for projectization of Sixth Plan Objectives.

16. Educational system for Tibb and Homoeopathy was debated at length. The existing Colleges were said to be working as private shops in hired premises, without laboratory support, libraries, affiliated outdoor/indoor facilities and full time teachers. The diploma awarded to the graduating students is not recognized by any Board/University. The sub-group made following recommendations to improve image of Tabibs and Homoeopathic doctors :—

(*a*) Establishment of Colleges in the public sector as agreed in the Sixth Plan ;

(*b*) Enhancement of grant-in-aid to the Colleges to make up the deficiencies as the existing colleges cannot improve the educational level unless reasonable subsidy is provided by the Government ;

(*c*) Introduction of five years course in the future public sector Colleges with F. Sc. as entrance qualification and graduates be awarded degree ;

(*d*) The existing Colleges be affiliated with the Boards for award of diploma and facilities be established at University level for starting degree course ;

(*e*) New curriculum for graduate course needs to be designed. In case of Homoeopathy, the syllabus for graduate course is pending with Ministry of Health for approval. For Tibb, syllabus adopted by the Indian Tibbia Colleges can be tailored to our needs ; and

(*f*) Grant of interest free loans to the existing Colleges for enhancing their educational standard.

17. Functions of the National Councils for Tibb and Homoeopathy were much criticised as the financial arrangements and powers were not commensurate with the functions. The members were of the view that these Councils should be established on the lines of P.M.D.C. and be made responsible for maintenance of educational standards and registration of qualifying Tabibs/Homoeopathic doctors. Control of Colleges should be taken up by the Universities /Boards for examination and award of degree/diploma. As an interim arrangement grant-in-aid to both the Councils be enhanced to meet their recurring costs with full staffing. Additional funds be provided to undertake research and development.

18. Regarding rationalization of traditional medicine, the house was informed by the representative of the Health Division that Drug Act, 1986 is on the envil. It has been vetted by Law Division and endorsed by the members of both the Councils. However, the subject would be dealt in depth again in the sub-group on pharmaceuticals.

19. **Recommendations**

(*i*) The strategies/objectives laid down in the Sixth Five Year Plan (1983-88) should be persued in the Seventh Five Year Plan and for the perspective plan upto 2006 except that Homoeopathic and Tibbi dispensaries be established at each union council instead of rural areas unserved by the modern medicine.

(*ii*) Functions of National Councils for Tibb and Homeoopathy be framed on the lines of P.M.D.C.

(*iii*) Future/existing Tibbia Colleges be affiliated with Boards/Universities for conduct of examination and award of degree/diplomas.

(*iv*) Colleges to be established in the public sector under Sixth/Seventh Plans should have F. Sc. as entrance qualification and award University degree after five years course.

(*v*) Further increase in grant-in-aid to the Homoeopathic and Tibbia Colleges for improving their educational standard.

LIST OF PARTICIPANTS

1. H/Dr. Jawaid Awan, Member, National Council for Homeopathy, Changa Manga, Kasur .. .. *Chairman*
2. Dr. Inamul Haq, Drug Controller, Health Division, Ialslamabad. Member
3. Dr. S. Inam Kazmi, Chief, Health and Nutrition Section Planning Division, Islamabad .. .. ,,
4. Dr. Anwar Ahmad, Medical Plant Botanist, Forest Research Institute, Peshawar .. .. ,,
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NARCOTICS

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NARCOTICS

III. NARCOTICS CONTROL

The first meeting of the expert panel of Sub-Working Group on narcotics control was held on Thursday, 20th November, 1986, under the Chairmanship of Mr. Dilshad Najmuddin, Chairman, Pakistan Narcotics Control Board, Ministry of Interior at the PNCB Law Enforcement School at Islamabad. The list of participants is appended as Annexure-I.

2. The deliberations of the meeting started by an address from the Chairman, Pakistan Narcotics Control Board who stated the terms of reference for this meeting. The agenda circulated for discussion was as under :—

(1) A review of the prevailing situation in the field of narcotics production, processing, trafficking and abuse.

(2) Strategies for narcotics control-present and future.

(3) Programmes-objective and targets.

(4) Details of plans alongwith cost of operations for the Seventh and Perspective Plans pertaining to :

(*a*) Production ;
(*b*) Processing ;
(*c*) Trafficking ; and
(*d*) Drug Abuse Prevention.

3. After a prolonged discussion on all the aspects of the agenda, it was decided to form the following two committees :

(1) Supply Control Committee and
(2) Demand Reduction Committee.

4. The names of the convenors and the members of the committee are shown in Appendix-II.

5. It was decided that these committees should work out the details of the programmes and again meet on November 27, 1986 at Islamabad to submit their respective reports for onward transmission to the Planning Comission. These reports were consolidated in the meetings and are as under :

A REVIEW OF THE PREVAILING SITUATION IN THE FIELD OF NARCOTICS PRODUCTION, PROCESSING, TRAFFICKING AND ABUSE

The Menace of Drug Abuse

6. The abuse of narcotic drugs has become a serious problem in the country. It is resulting into health hazards and affecting the society adversely in achieving he goal of socio-economic progress of the nation. In an Islamic and idealogical

state such as Pakistan, the abuse of narcotic drugs with its repurcussions on socio-economic structure cannot be permitted to proliferate. The multi-dimensional aspects of drug abuse including production, processing, illicit trade, increased use and impact on society necessitate immediate attention and sharp focus in the Government's policy planning. It is apprehended that if effective and meaningful programmes are not implemented by the Government now, the menace of drug abuse will gain immense proportion to cause irrepairable damage to national health, process of education, industrial production, social structure, economic progress, religious values, international relations and the entire socio-economic fabric of the nation.

Production of Narcotic Drugs

7. The large scale production of narcotic drugs, opium and cannabis, must stop in the country. Although concerted efforts to eradicate the production of opium, the raw material used to manufacture heroin in source areas have been successfully undertaken, still huge quantities of opium and cannabis are produced. In 1979 the area under cultivation was 81,000 acres and Pakistan produced 800 metric tonnes of opium. This area was reduced to 13,000 acres and quantity reduced to only 130 tonnes in 1986. The quantity of cannabis has never been assessed but is known to be cultivated and resin (charas) extracted in abundant quantities for illicit trade. It is mainly the local production of narcotic drugs that has established regular supply and a demand in domestic market with low prices and high purity. The results are obvious.

8. The production of narcotic drugs is an illegal activity. The production of opium and cannabis are banned under Prohibition (Enforcement of Hadd) Order 1979 and Dangerous Drugs Act of 1930. The provisions of these laws should be implemented by government strictly to stop the production of narcotic drugs. The producers of narcotic drugs are equally liable for punishment as narcotics traffickers and pedlars are punished in the country.

9. In order to avoid any economic hardship caused to the farmers, who produce narcotics, Government of Pakistan has launched income substitution programmes in the poppy and cannabis growing areas. The programmes have been implemented with the financial assistance of international donors under the mbrella of Special Development and Enforcement Plan (SDEP) in most of poppy producing areas of NWFP. The provisions of income substitution and legal frame available in the country against the production of noxious drugs, the profit motive cannot be allowed to play with the health and socio-economic fabric of the nation.

Abuse of Narcotic Drugs

10. There are estimated to be around 1.7 million persons abusing various types of drugs in the country. 1.5 per cent of the total population of Pakistan is dependent on one type or another narcotic drug. It is observed that most popular drug of abuse is cannabis resin (charas) as 54.5 per cent of the total drug abusers

smoke charas, Heroin ranks No. 2 in the frequency of abuse as about 15 percent of drug addicts use heroin. Heroin, a lethal opiate, is abused by about 450,000 persons falling in the age group of 15—35 years. Polydrugs including mandrax, alcohol, bhang, psychotropic and psychoactive substances are also abused by addicts. The drug abusers encompass all urban and rural areas, all social and economic strata. About 5 percent of the male adults or every 10th family is directly afflicted by the menace of drug abuse. The quantum of drug consumption within the country indicates that these figures are extremely conservative. To derive accurate statistics in this respect is difficult. Nevertheless, it is absolutely clear that the abuse of drugs in Pakistan is escalating exponentially and unless immediate steps are taken, the problem will reach un-manageable proportions, with all its concommitants of disease, violence, terrorism, waste of human potential and the destruction of the very fabric of society. The most urgent problem today is the astronomical increase in the number of heroin abusers. The cuases of drug addiction and abuse include :

(1) Cheap and easy availability of illegal narcotics due to local production and illicit import.

(2) Increased varieties and availability of legal drugs which have a potential for abuse.

(3) Apparent attractiveness of drugs to the adolescent.

(4) The rapidly changing social values which place new demands on the individuals for which drugs offer a false solution.

(5) Indiscriminate dispensing of legal drugs.

(6) Erroneous attitudes about drugs from hearsay, and incomplete and inaccurate information.

(7) A lack of specific research data regarding the ill-effects of drugs on the human mind and body of the individuals.

(8) Apathy on the part of education and community leaders in responding to drug abuse symptoms.

(9) Socio-economic deprivation and apathy, curiosity, unemployment, unplanned leisure, boredom, isolation from wordly worries and contacts with drug addicts are also said to be responsible for the spread of drugs in Pakistan.

11. In 1981, of the 3,500 persons who were provided medical help for their drug habit only 8 percent were heroin dependents. By 1982 this had risen to 40 percent, it was more than 55 percent in 1984 and almost 80 percent by 1985. The findings of the National Survey on Drug Abuse in Pakistan-1982, show that the potential victims of drug abuse constitute more than 28 percent of the total population *i.e.* more than 23.7 million people, and most of them, in the age group of 16—35 years. From this picture it is imperative that meaningful programmes for the prevention of drug abuse including treatment and rehabilitation of drug addicts.

education both formal and informal for the prevention of abuse, community intervention against the abuse of drugs and enforcement of the injunctions of Islam through the existing legal frame against the production and trafficking of drugs be undertaken on priority basis by the Government.

Objectives of Drug Control Programme

12. (1) To develop, promote and institutionalize preventive education for drug abuse.

(2) To generate public awareness of the problem and its implications for individuals, families and societies.

(3) To build up and utilize all avenues of social intervention in tackling the problem of drug abuse.

(4) To strengthen and expand the existing centres for treatment and rehabilitation of drug addicts.

(5) To provide appropriate specialized personnel, medical supplies and equipment for detection, detoxification and treatment.

(6) To eliminate the illicit cultivation of poppy and the conversion of opium into heroin.

(7) To introduce appropriate laws for the reduction of demand and supply.

(8) To strengthen, streamline and raise the efficiency of the law enforcing agencies.

Drug Prevention through Education, Information and Communication

13. Prevention through education is the most important component of most national drug control programmes and justifiably so. Law enforcement has failed to stem the supply of illegal drugs and rehabilitation efforts have shown no worthwhile success in stopping or reclaiming addicts. The only hope seems to be in prevention. The most important modern trend in drug education is to define the problem in psycho-social terms rather than in pharmocological, legal or medical terms. It is the cause of addiction that requires treatment.

14. While there is need to reach every single person in the country, resource contraints have necessitated the identification of broad target groups for the programme. These would include both groups at high risk for drug usage and groups that could assist in its prevention, treatment and rehabilitation and control. The identified target groups could broadly be listed as :

(a) Youth (between the ages 16—30 years), with special reference to students. Young people constitute the most vulnerable strata of society as far as drug abuse is concerned. Whereas for all drugs the average age is 35 years and is almost exclusively confined to males, the " National Survey on Drug Abuse in Pakistan ", 1982, has clearly shown that abusers of heroin constitute the youngest group. 24 years constitutes the average

age for this lethal drug, commencing from as early as 15 years. Moreover, illiteracy, lack of educational facilities and achievement are not decisive factors contributing to drug abuse. Rather, according to the National Survey, the opposite holds true: a fair level of educational attainment is positively linked with drug abuse. Use of hard and more potent drugs, such as heroin, coincides with higher standards of educational achievement, specially in rural areas. As apparent from the National Survey the majority of abusers (particularly among the younger age groups) and potential future abusers were or are enrolled in schools. There is need to launch a massive preventive education campaign against drug use within educational institutions. A substantial number of abusers get their first drug contacts from the school or college peer group. Additionally, there is also need to reach the vast majority of out of school youth through field orientation programmes.

(b) *Labour*.—The focus in this Plan Period would mainly be the labour force that is easily accessible through their institutions of employment. Drug preventive education should be introduced in their normal training programmes. Additionally, inplant orientation programmes may be arranged through the unions and management. For the rest of the vast unidentified mass, the media and interpersonnel communication would be the avenue of access.

(c) *Parents and Elders*.—For this group the purpose would be to provide them needed information on the harmful effects of drugs and the recognition of the physical and psychological symptoms of its usage. The problem of drug use is compounded by the almost negligible knowledge that people have about it. Parents in particular can play a major role in its control, if they are armed with the requisite knowledge. By recognizing symptoms of drug use, parents can take remedial measures before the stage of addiction is reached. The home is crucial in the battle against drugs.

(d) *Medical Personnel*.—With particular emphasis on the vast cadre of paramedical and auxilary health personnel, such as LHVs, F. W. Workers, Nurses, dispensers, dais etc. Practitioners of indigeneous medicines such as Hakims should also receive orientation. The drug related curriculum in medical colleges is being introduced to cover the latest advances in the treatment and rehabilitation of addicts. For doctors in service, refresher training and seminars may be organized. Similarly, the pre-service training of the para-medical cadre should be augmented by inservice training in this field.

(e) *Teachers*.—Teachers have a vital role to play in any programme designed for social change. During the Seventh Plan it is proposed to introduce

drug preventive education in the school curriculum at the middle, secondary and higher secondary levels. This content will be integrated into the content of relevant subjects in a graded and sequential form, keeping in view the demands of each particular discipline. Teachers resource books be developed and teacher orientation programmes organized. Where possible, teaching hours on drug preventive education be included in the regular in-service training programmes of teachers. This content may also be included in the pre-service curriculum of teacher training institutions at the PTC, CT and B.Ed. levels.

(f) *Ulema.*—Ulema can contribute significantly to the national campaign on drug abuse, particularly in view of the explicit Islamic injunctions on the use of narcotics and intoxicants.

(g) *Elected Representatives.*—Elected peoples' representatives can play a significant role in their constituencies, particularly in matters relating to the cultivation and production of raw materials. They could also provide much needed assistance to the law enforcing agencies.

(h) *Administrators-District Management Group.*—They are directly involved in the law enforcement aspect of the drug control programme. They will have a major role to play in the preventive and legal aspects of drug control. Relevant content be included in the training of probationers at the Civil Services Academy, Lahore. The subject may also be covered in all in-service training programmes for government servants through other institutions of training such as NIPA, Defence Training College, PARD, PASC etc.

(i) *Neo-Literates.*—The adult literacy programme can become a significant point of interjection in the fight against drugs. It is proposed to include drug-related content in the materials being used in literacy programmes. Teachers of literacy may also receive necessary orientation.

(j) *Target Group Institutions.*—These would be the large national employers such as the Armed Forces, PIA, Railways, WAPDA, PASMIC, Police.

(k) *Media and Press.*—Media and Press will have an increasingly vital role to play with the rise in education and wider access to the written word. Additionally, the educative force of TV and Radio should also be used.

(l) *Non-Governmental Organisations.*—In the fight against the drug menace the most significant role is played by NGOs and other social welfare agencies at the grass roots levels. Through the Government sponsored programme, it will be possible to reach only a small, clearly defined percentage of the target group. Moreover, such programmes would, of necessity, entail heavy financial outlay and, in practical terms, their efficiency and effectiveness would be undermined by cumbersome

procedures. It is only through the NGOs that the vast mass of the people can be reached. The experience of the developed countries has clearly shown that all the forces of education, of law, of sophisticated media and modern medical facilities have in themselves failed in the fight against drugs. What is perhaps vital in this battle is to mobilize all forces of social intervention—the family and the community—and, by arming them with the knowledge, the authority and necessary sanctions to enlist their support in eradicating this evil.

During the Seventh Plan it is proposed that grass roots NGOs should receive grants and funding for drug control programmes. They will mobilize cadres of volunteers and out-reach workers and use the forces of inter-personnel communication to educate people in their communities and mobilize the consensus of public opinion against drug use. They should not only assist the government sponsored efforts in education and control but perhaps prove more effective channel for follow-up and rehabilitation of treated cases.

15. While designing strategies for the prevention of drug abuse, it is also necessary to reach those who have already become addicted. For them it is necessary to set up both treatment and rehabilitation centres. A major issue associated with the problem of drugs is the vast numbers of treated cases who relapse into addiction within a very short period of time. The major reason for this is the frustrations associated with social ostracism, and the inability to fined gainful employment.

16. At present only restricted treatment and rehabilitation facility exists in Punjab, Sind, N.W.F.P., and Baluchistan. Keeping in view the magnitude of addiction to the tune of 1.7 millions including 450,000 heroin abusers spread over vast geographical area, existing facility is insufficient. This forcibly has to continue and to be extended to other towns as well as to outreach centres and including the improvement of existing centres. The objective is to provide treatment to addicts so that their drug dependence is eliminated. A community based programme of Psycho-social rehabilitation is also essential.

17. The ongoing treatment and rehabilitation units are located in existing hospitals/health centres in Peshawar, Rawalpindi, Lahore, Sialkot, Faisalabad, Multan, Bahawalpur, Karachi, Hyderabad, Quetta, Gilgit, Sukkur, Dadu, Mirpur Kash, Khuzdar, Mardan and Mingora. Additional centres should be established in hospitals (health centres in all the four provinces), including outreach services in each of the ongoing and new centres. This should include psycho-social rehabilitation and preventive measures against drug abuse. It is proposed to establish an indoor detoxification centre in each district according to the population. Each district centre should have a close liaison with the other community centres established by NGO's. In this way a bilateral flow of communication and a joint NGO/GO effort should bring fruitful results.

18. Each Tehsil/Taluka Hospital should have a five bedded in-patient unit including the Tribal areas and Northern Areas.

19. These proposed centres will primarily cater to the detoxification/rehabilitation of drug addicts. The psycho-social rehabilitation centres attached to the district detoxification (treatment) centres will provide social rehabilitation services through outreach in the area of their jurisdiction.

(A) **The compositon of Staff for Distt. Hospital Unit.**

		Indoor	*Outdoor*
1.	Medical Officer (BPS-17)	1	
2.	Social Worker (BPS-16)	1	1
3.	Nurse (BPS-14)	2	
4.	Driver (BPS-4)	1	
5.	Orderly (BPS-1)	1	1
6.	Sweeper (BPS-1)	1	

(B) **Composition of Staff in Tehsil/Taluka Hospitl Unit**

		Indoor
1.	Social Worker (BPS-16)	1
2.	Medical Officer (BPS-16)	1
3.	Nurse (BPS-14)	1
4.	Orderly (BPS-1)	1
5.	Sweeper (BPS-1)	1

20. One main centre in each centre of excellence (teaching hospitals) should act as a Provincial Headquarter Centre which should have liaison with all the treatment and rehabilitation centres in the Province. This centre should work as a clearing house dissipating all the relevant scientific and preventive education material to all the centres. This centre should also receive feedback from time to time from all the centres and flow the formation to PNCB Islamabad. The composition of the centre should be as follows :—

		Indoor	*Outdoor*
1.	Medical Officer (BPS-17)	1	1
2.	Clinical Psychologist (BPS-17)	2	
3.	Social Worker (BPS-16)	2	1
4.	Laboratory Technician (BPS-11)	1	
5.	Stenographer (BPS-15)	1	
6.	Naib Qasid (BPS-1)	1	
7.	Nurse (BPS-14)	3	
8.	Sweeper (BPS-1)	1	

21. The Provincial centre should also organise training from time to time for medical doctors/social workers in the field of treatment/rehabilitation. The centre should also provide training to the NGO's Social Workers and Doctors

There should be at least one Rehabilitation Centre in each Province whose staff should consist as follows :—

1.	Social Worker	1
2.	Occupational Therapist	1
3.	Clinical Psychologist	1

22. The outreach centre should have the following :

1. Social Worker (BPS—16) for rehabilitation purpose. This centre should have close liaison with the Provincial and District Centres.

Rehabilitation Centres

23. During the Plan Period it is proposed to set up a total of 125 rehabilitation centres at the district level. Wherever possible, they should be near to treatment centres but not in the same vicinity as contact with individuals still addicted may hasten the relapse into drug use by the newly treated :

— 25 such rehabilitation centres would be set up each year during the Seventh Plan.

— Each centre would be staffed with :

(a) Social Welfare Officer	1
(b) Social Worker	1
(c) LDC	1
(d) Peon	1

— Each centre would provide 2 or more skill and educational development programmes. These could include tailoring, woodwork and carpentary, electronics, mechanical skills (welding, plumbing), masonary, typing, education etc.

— Provision is being made for the appointment of 2 Trainers for any of the skills to be utilized by a centre.

— Provision is also being made for purchase of necessary equipment for skill training *i.e.*, sewing machines, typewriters, lathe machines, electrical saws etc.

— For psychological counselling of the individuals, the part time services of a doctor/psychiatrist would be obtained.

— In recruiting the staff special care will be taken to ensure the appointment of suitably qualified candidates in relation to the speical needs of the rehabilitation centre.

— Capital cost of detoxification centres should be reflected in the Health Budget/Annual development Programme and placed at the disposal

of the Provincial Government concerned. They should be fully responsible for accountability etc. Salaries, transport, POL and other contingent expenditure should be charged to the Revenue/recurring budget.

— The Narcotics Control Board should confine itself to management, monitoring and evaluation of the programmes.

National Campaign Against Drug Abuse

24. A massive awareness and educational programme against drug abuse is the need of time. The NGOs should be assigned the task of mobilizing public opinion not only against the use of narcotic drugs but assist through public pressure the law enforcement agencies to interdict the supply of illicit drugs in the country.

Drug Abuse Prevention Resource Centre (DAPRC)

25. While law enforcement and treatment of existing addicts are going forward, a need has been felt for a comprehensive drug abuse prevention effort to inform the people about the facts, what can be done, and how to begin reducing the rapid escalation in drug abuse. There is no single method to conduct prevention efforts ; a comprehensive effort is required which is designed to touch a wide range of the population from the young people who are greatest risk to the policy makers whose decisions can help or hinder the goal of a drug abuse free nation.

26. While no single method is completely appropriate, the establishment of a single institution to provide the necessary knowledge, information, support grass roots efforts, and conduct awareness campaigns does give the necessary coodination to the various prevention activities and programmes. Such an institution is the Drug Abuse Prevention Resource Centre, a division of the Pakistan Narcotics Control Board.

27. The Centre's main goal is to actively support and encourage local, provincial, and national efforts to achieve a drug free society through reduction of drug demand. A secondary goal is to serve as a clearing house on drug abuse prevention and information for Pakistan. Both of these goals are achievable by meeting several specific objectives which are to :

— Collect and disseminate research findings and other information on drug abuse issues ;

— Encourage additional research and information gathering on vital drug abuse issues within Pakistan ;

— Arrange for audiovisual and printed materials to support training and other drug abuse prevention activities ;

— Maintain contacts with the press and broadcast journalists through seminars, press releases, press conference, and other methods which increase the level of understanding of the press on drug abuse issues ;

— Arrange for curirculum development and followup training for formal education institutions, including primary, secondary, college and university levels ;

— Assist in coordination of mass media compaigns together with community, provincial, and national groups (both governmental and NGOs) ;

— Assess the effectiveness of its own programmes and materials with a view to increasing the impact of the efforts ;

— Coordinate with other prevention-oriented agencies and groups to achieve a unified, reinforcing message on drug abuse prevention ; and

— Educate policy and decision makers about the nature of the drug abuse problem and the several solutions which are possible through their assistance and attention.

Recommendation (Demand side)

28. (1) Facilities be increased for treatment of the addicted population. This includes infrastructure and personnel.

(2) Rehabilitation centres for the *ex*-drug addicts be established to make them productive citizens.

(3) To prevent the present generation from the hazards of drug addiction preventive education both formal and non-formal be introduced, A multi-media approach is envisaged to curb this evil.

(4) Though the situation warrants that every single person in the country be approached, resource constraint require the identifcation of broad target groups be approached *i.e.* youth, labour, parents, social workers, medical practitioners, teachers, ulema, concillors etc.

(5) Since drug abuse is a community problem, it is recommended to involve the Non-Governmental Organizations in the fight against drug abuse and a respectable sum be allocated for them in this behalf.

(6) Capital cost of detoxification centres should be reflected in the Health Budget/Annual Development Programme and placed at the disposal of the Provincial Government concerned. They should be fully responsible for accountability etc. salaries, transport, POL and other contingent expenditure should be charged to the revenue/recurring budget.

(7) The Narcotics Control Board should confine itself to management, monitoring and evaluation of the programmes.

Annexure I

LIST OF PARTICIPANTS IN THE MEETING OF SUB-WORKING GROUP ON NARCOTICS CONTROL HELD ON 20TH NOVEMBER, 1986 IN THE PNCB DRUG LAW ENFORCEMENT SCHOOL ISLAMABAD

S. No.	Name and Designation	
1.	Mr, Dilshad Najmuddin, Chairman, Pakistan Narcotics Control Board, Islamabad	*Chairman.*
2.	Mr. Sultan Ali Mahmood, Director (Enforcement), PNCB, Islamabad.	Member
3.	Dr. Khalid Mufti, Psychiatrist, Provincial Coordinator (Health) Lady Reading Hospital, Peshawar	,,
4.	Dr. I.A.K. Tareen, Professor of Psychiatry, Provincial Coordinator Psychisatry Department, Mayo Hospital, Lahore	,,
5.	Prof. Muhammad Sajidin, Economics Department, University of Karachi, Karachi	,,
6.	Mr. Saeed Warsi, President, National Federation of NGOs, National Headquarters, Shah Faisal Colony, Karachi	,,
7.	Ch. Hasan Nawaz, Joint Secretary, Ministry of Justice and Parliamentary Affairs, Islamabad	,,
8.	Justice (Retd. Mr. Amir Raza Khan, Sr. Advocate, Supreme Court Plomer's Building, 26, The Mall, Lahore	,,
9.	Prof. Dr. Riffat Rashid, Officer on Special Duty, Social Welfare & Zakat Department, Lahore	,,
10.	Mrs. Rukhsana Hamidi, Director, Monitoring and Evaluation Population Welfare, Sind, Karachi	,,
11.	Mr. Khawar Zaman, Inspector General of Police, Islamabad ..	,,
12.	Mr. Muhammad Suleman, Chief (Customs), Central Board of Revenue, Islamabad	,,
13.	Mr. Fazal Karim, Deputy Secretary, Ministry of Interior, Islamabad	,,
14.	Mr. M. Toaha Qureshi, Director (Planning), PNCB, Islamabad.	,,
15.	Mr. M. Abdul Haleem, Deputy Chief (Health), Planning Division, Islamabad	Member/Secretary

Annexure II

TREATMENT AND REHABILITATION, PREVENTIVE EDUCATION (FORMAL AND INFORMAL) AND COMMUNITY INFRASTRUCTURE FOR DRUG ABUSE PREVENTION

COMMITTEE No. I

1. Dr. Riffat Rashid .. .. *Convenor*
2. Dr. I.A.K. Tareen.
3. Dr. Khalid A. Mufti.
4. Prof. Muhammad Sajidin.
5. Mrs. Rukhsana Hamidi.
6. Mr. Saeed Warsi.
7. Mr. M.A. Haleem.

COMMITTEE No. II

LEGAL FRAME AND LAW ENFORCEMENT

1. Mr. Mohammad Suleman .. .. .. *Convenor*
2. Ch. Hasan Nawaz.
3. Mr. Khawar Zaman.
4. Mr. Amir Raza Khan.
5. Mr. Fazle Karim.
6. Mr. Sultan Ali Mahmud.

DISABLED

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IV. DISABILITIES

The Working Group on disabled met on 11th November, 1986 at National Institute of Health in Islamabad. Professor Mohammad Rashid Chaudhry presided over the meeting. The list of participants is enclosed at Annexure I. The meeting discussed and deliberated over the problems and needs of the Disabled, some of which were already highlighted in various papers prepared and circulated to members. The group formed four sub-committees to thoroughly examine the problems and needs of each category of disabilities. These committees after thorough examination, discussion and deliberation over the problems and needs of the disabled presented their reports which are enclosed at Annexure I to IV. This report has been prepared to highlight the common recommendations of the sub-committees, recommendations of the sub-group on the disabled and the main panel on Health Sector.

Magnitude of the Problem

2. The Group took note of the increasing trend of population of the disabled in the country, particularly physically disabled due the enormous rise in traffic accidents. The trend is expected to continue in coming decades if necessary preventive measures are not taken and existing preventive health-care programmes are not accelerated. On the basis of ILD/WHO estimates 10 percent population of developing countries are disabled. Pakistan may have somewhere between 8—9 million disabled persons who would have some degree of disability or impairement. About 30 to 40 percent of them would be severely disabled. Out of these 40 percent are likely to be physically disabled, 20 percent blind, 20 percent mentally retarded/ ill, 10 percent deaf and mute and remaining 10 percent have other disabilities.

3. The Group considered that the disabled population face numerous problems, some of which are mentioned as follow :—

(*i*) Lack of medical facilities for detection, assessment, diagnosis and treatment of disabilities, particularly in the primary stage.

(*ii*) Prevalence of ignorance, superstition, fear and adverse attitude of the able-bodied persons towards the disabled persons.

(*iii*) Lack of special education, vocational training, job-assessment, employment, and other social rehabilitation facilities for the disabled.

(*iv*) Non-availability of latest rehabilitation equipment, instruments, artificial limbs, and aids in the country as a whole and particularly in medical, social welfare and special education institutions.

(*v*) Lack of proper arrangment for distribution and delivery of such rehabilitation equipment, instruments, aids and artificial limbs to the disabled.

(*vi*) Lack of arrangment for indigenous manufacturing and production of such equipment as mentioned above, artificial limbs and aids in the country.

(*vii*) Lack of adequate facilities for professional training of medical and rehabilitation workers including special education teachers.

(*viii*) Absence of an organisational and institutional framework in Health, Education, Social Welfare and Employment systems to deliver medical rehabilitation and social rehabilitation services to the disabled.

4. The group while taking into consideration the WHO definition of *impairments, disabilities,* and *handicaps* agreed to adopt the following definition of these terms :—

(*a*) An *impairment* may be missing or defective body part, an amputate limb, paralysis after polio, restricted pulmonary capacity, near-sightedness, mental retardation, limited hearing capacity, facial disfigurement, or other abnormal condition ;

(*b*) *Disabilities* as a result of an impairment may involve difficulties in walking, seeing, speaking, hearing, reading, writing, counting, lifting or taking an interest in and making contact with one's surroundings. Just as impairments may be permanent or transitory, so disability may last for a short or long time, may be permanent or reversible, may be progressive or regressive, and may vary in its impact from the demands of one situation to another ; and

(c) A disability becomes a *handicap* when it interferes with doing what is expected at a particular time in one's life. Persons with disabilities may become handicapped in caring for themselves, engaging in social interactions with other fellow beings, communicating their thoughts and concerns, learning in and out of school, and developing a capacity for independent economic activity.

5. The common causes of various disabilities were considered to be as follows :—

(*i*) Inadequate nutrition of mothers and children including vitamin deficiencies ;

(*ii*) Abnormal pre-natal or peri-natal events ; pre-natal damage, genetic factors and incompatibility; damage at birth during the neo-natal period;

(*iii*) Infectious diseases ;

(*iv*) Accidents ; and

(*v*) Various other factors, including environmental pollution and impairments of as yet unknown origin.

Recommendations

6. The main recommendation of all the sub-committees is that in any strategy dealing with care of disabled, the following three components should be the mainstay of such a venture :—

1. Prevention ;
2. Detection ; and
3. Rehabilitation, *i,e.* medical and social rehabilitation.

7. The other common recommendations are as follows :—

(1) *Extensive family counselling/parental training.*—through mass media to adopt preventive measures against disabilities.

(2) *Intensive family counselling/parental ttraining.*—through Health, Education, Population Welfare and Social Welfare Institutions at grass root levels to adopt preventive measures against disabilities.

(3) *Early and preliminary detection of disabilities.*—through (i) potentiation and expansion of school health services ; (ii) B.H. Us/RHUs/ MCHs ; (iii) Population Welfare Centres ; (iv) Social welfare institutions which provide health services ; and (v) a mobile survey team (which should be organized and institutionalised at district level by each provincial Health Department).

(4) A campaign of community education should be launched to highlight alarming increase on proportion of congenital diseases/disabilities due to consanguine marriages.

(5) Provision of services for medical and social rehabilitations of all types of desabilities.

(6) Special education of all categories of disabled.

(7) Detection, assessment, care and referral care of all disabilities should form part of the Primary Health Care network and PHS workers in the public and private sector alike.

(8) The Objection of the perspective plan should be to identify, treat, educate and fully rehabilitate all disabled by the end of the plan. During the seventh plan, at least, one fourth of the disabled should be enrolled for primary education by setting up special and integrated school for the disabled.

(9) Detection, assessment, and treatment during the seventh Plan should be made a component of the Primary Health Care all over the country. Referral care should be provided as part of the Nation-wide Health care system at all teaching hospitals, during the Seventh plan, which should be capable to deal with all aspects of medical rehabilitation. All District Headquarters Hospitals should be providing such facilities in the perspective plan.

LIST OF PARTICIPANTS

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10. Prof. Manzoor Ahmad Khan,
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11. Dr. S. Inam Kazmi,
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19. Begum Sajeela Aslam Khan,
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20.	Dr. M. Bashirul Haq, Deputy Chief, Planning and Development Division, Islamabad.	*Membar*
21.	Syed Wadood A. Jilani, Director, Directorate General of Special Education, Rizwan Plaza, Blue Area, Islamabad.	Do
22.	Col. Abdul Ghafoor, Director, Directorate General of Special Education, Rizwan Plaza, Blue Area, Islamabad.	Do
23.	Syed Izhar Hussain, Director, Directorate General of Special Education, Rizwan Plaza, Blue Area, Islamabad.	Do
24.	*Dr. Abdul Malik, Assistant Professor, Sundeman Hospital, Quetta.	Do
25.	Prof. Bashir Ahmad, Neuro-Surgeon, King Edward Medical College, Lahore.	Do
26.	Col. Mohammad Afzal Kiani, Commandent, Armed Forces Institute of Rehabilitation, C.M.H., Rawalpindi.	Do
27.	Mr. M. Ahsan Reaz, ... Deputy Chief, Planning & Development Division, Islamabad.	*Member/ Secretary*

*Did not attend.

Annexure-I

REPORT OF THE SUB- GROUP ON REHABILITATION OF THE PHYSICALLY HANDICAPPED APPOINTED BY THE GROUP ON REHABILITATION OF DISABLED.

It is estimated that there are 4 million physically disabled persons in Pakistan to be rehabilitated and intergrated. To help them to become productive and effective citizens of the country, very well coordintated and joint efforts are needed. This can be done by well planned involvement of NGOS, and the Government Institutions including the community based services.

2. Major causes of physical disability are as under:

(*i*) Congenital factors.
(*ii*) Arising out of injury (road accidents, domestic accidents, occupational accidents and medico-legal cases).
(*iii*) Poliomyelitis.
(*iv*) Nutritional disorders.
(*v*) Neuromuscular disorders.

Rehabilitation Process

3. The Rehabilitation process can be divided into three main sub-groups:

(*i*) Prevention.
(*ii*) Medical Rehabilitation.
(*iii*) Vocational and Social Rehabilitation.

Prevention

4. This sub-group is by far the most important group which is the concern of Public Health Sector and requires planning for effective measures against prevent table causes of disabilities.

5. The Government has already introduced expanded immunization progrramme against six preventable diseases which should help a great deal in reducing the disabilities caused by these diseases. The group has the following recomendations to make for the prevention of the physical disabilities:

(*i*) Introduction of School Health Services Programme for early detection and treatment.

(*ii*) Prevention of road accidents by enforcing strictly the traffic rules.

(*iii*) Effective enforcement of measures provided in the Factories Act for Prevention of industrial accidents.

(*iv*) Effective legislation to control the safety in manufacturing of

domestic appliances and gadgets and civic education for use of these appliances by the public.

(*v*) Enforcement of Legislation against practice by unqualified people and abuse of drugs.

Medical Rehabilitation

6. Ideally the facilities required for Medical Rehabilitation should be availabl to each and every individual at grass root level. Howerver, due to manpower and financial constraints, strategies will have to be developed to provide medical facilities to maximum number of people during the shortest possible time. This sub-group can help in preventing, minimising or in some cases curing the disability resulting in complete rehabilitation of the disabled in society without even having to go the third sub-group. It is, therefore, very important to develop the facilities for Medical Rehabilitation which include:

(*i*) Treatment in Orthopaepic units and special Rehabilitation centres like Spinal Injury Centres.

(*ii*) Medical Social Services.

(*iii*) Provision of Ortho Prosthetic appliances (Artificial Limbs)

(*iv*) Treatment by Physical and Oc cupational therapy.

7. Orthopaedic units are essential for the treatment of physical disabilities. These units at present exist in the medical colleges and postgraduate institutes of the country and two districts in punjab (Sahiwal and Rahimyar Khan). Following recomendations are made in connection with the development of these units in the next Five Year Plan.

(*i*) Upgrading and improvement of the existing units raising the bed strength to at least fifty with full professional units.

(*ii*) Establishment of 25 bedded orthopaedic units in every district of the province with one orthopaedic Surgeon and two assistants.

Vocational And Social Rehabilitation*

8. The 3rd sub-group deals with rehabilitation of the disabled back into society after all possible improvement has been done by the Medical Rehabilitation

(*i*) Provision of social welfare services.

(*ii*) Vocational Training and Vocational guidance.

(*iii*) Job Placement.

(*iv*) Sheltered Workshop/Hostel for severely disabled including Paraplegics.

Community Based Rehabilitation (CBR)

9. The Sub-Committee felt that the magnitude and the dimensions of the incidence of disabilities and particularly physical disabilities demand an all out effort by the Government and the people and it cannot be tackled unless a Community-based Rehabilitation Programme is launched. In this connection the Sub-Committee supports and recommends the strategies and approaches adopted by the WHO expert Committee on Disability Prevention and Rehabilitation:

Specific Strategies and Approaches

There are two principal strategies

(a) Prevention of disability through all types of measures within and without the health sector, that contribute to a reduction in the incidence of impairment. If impairment is already present, measures should be taken to reduce the severity or to postpone the occurance of disability and handicap.

(b) provision of rehabilitation using the primary health care approach Community-based rehabilitation services (with an appropriate system of supervision and referral) should be provided, with the aim of total coverag of all populations. These services deliver at least the most essential care, and form an integral part of the national socio-economic develpoment programme.

In view of the social changes that have occured and the high cost of institution-based rehabilitation services, it is recommended that it should be explained to the public that if a shift is made from institutional care to community-based rehabilitation and if the relatives of the disabled undertake to look after their disabled family members, equally good, if not better, care can be provided at a much lower cost to society as a whole. While we are developing primary health care services, disability prevention and rehabilitation services should be planned in such a way that they can be incorporated into them. Existing rehabilitation institutions and professionals should be involved in the promotion of community-based rehabilitation programmes

MANPOWER DEVELOPMENT AND INVOLVEMENT EXISTING PROFESSIONALS AND INSTITUTIONS

C.B.R.

10. The implementation of a community-based rehabilitation programme relies first on members of the local community. The disabled themselves, their family, or other community members have to be trained to undertake the daily tasks related to the training of the disabled. Locally recruited first level supervisors be trained to identify the disabled, motivate the disabled or family members who will undertake the training, offer instruction, make referrals and follow up the progress of the programme. WHO may be requested to organize national technical training programmes for the first or second level supervisors in order to facilitate the implementation of the early phases of the programme.

11. For the development of prosthetic and orthotic services in Pakistan, the training of manpower is a pre-requisite without which any development plan will be futile.

Training of Prothetics/Orthotics

12. For the coordination of development activities for training, a national Institute for Orthopaedic Technology is proposed. This institute would then, apart from being the centre for education and training in this field, also house the office for establishment of Prosthetic and Orthotic Centres in the country. In this way the institute would be a resource centre for technical development and planning as well as for training, staffing and management. The institute would then consist of two components; school of Orthopaedic Technology and Office for Development of Prosthetic and Orthotic Services.

13. The orhopaedic technologist to be trained in Pakistan will represent a mid-level category of staff with specific responsibilities. The International Society for Prosthetics and Orthotics, ISPO*, recognizes four categories of staff: Category I (high level); Category II (mid level); Category III (low levevel) and Category IV (sub-standard). At present Category I does not exist in the developing world and can only be found in the industrialized countries. Therefore Category II personnel will perform similar duties to those which normally fall on Category I staff. In a developing country, like Pakistan, this has been accepted as an interim solution, although it is realized that this is a dynamic situation.

14. However, as the demand for trained personnel will gradually increase, training of assistant technologists should also be pursued to ensure an acceptable standard of the production. They will then become Category III personnel with specific responsibilities. The course would be for 12 months for upgradation of people lacking formal training, but with a suitable educational background and having experience in the field. This course would lead to eligibility for admission to the orthopaedic technologist course.

Advanced Training

15. At a later stage, advanced training in prosthetics and orthotics (orthopaedic engineering) should be introduced. This could be arranged in collaboration with some foreign university, which has training in this field on its programme.

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*Report of ISPO Workshop on Prosthetics & Orthotics in the developing world with respect to training and education and clinical sevrices, Moshi, Tanzania 1984

(i) To facilitate this, the recognition of the Orthopaedic Technology Course for orthopaedic technologists as a Bachelor's Degree Course is important and in this respect an affiliation of a University should be solicitated.

(ii) In this way, later on some high level (Category I) professionals will emerge in the country to provide leadership and guidance for the futuretechnical and scientific development of the prosthetic and orthotic field in Pakistan.

(iii) The feasibility of a future extension/transfer of the institute into a training centre for other rehabilitation personnel as well. e. g. , physiotherapists, occupational therapists and Community Based Rehabilitation supervisors, should be explored. In this way an Institute of Rehabilitation Technology could serve the purpose to train staff for specialised rehabilitation facilities as well as for basic services.

Supply Of Material

16. At present, the supply of material for the existing prosthetic/orthotic centres comes from local contractors and in certain centres from their own production. One centre relies on imported components to a considerable extent whereas a limited in most cases minimal, import of components for sophisticated devices exist at other centres. With a future expansion of prosthetic/orthotic facilities in the country, the demand for components will increase considerably.

17. This situation has been anticipated by the Federal Ministry of Planning and Development which has formed a 'Technical Group on prostehtic and orthotic equipment'. At the meeting of this group in March 1985 it was decided to establish a national organization for production, procurement, storage and distribution of components for prosthetic and orthotic appliances. In view of this decision a proposal for a Depot for orthopaedic-technical (prosthetic/ orthotic) components is presented.

National Depot For Orthopaedic-Technical Components And Eouipment

18. The establishment of a National Depot for orthopaedic-technical components is seen in three phases. The main features are:

Establishment of Main Supply Depot (Phase I). Establishment of Department for research and development (Phase II).

Establishment of Department for manufacturing of components, tools and equipment (Phase III).If feasible, phases II-III could be coordinated to materialize simultaneously. This way it could initiate and speed up the indigenous development of the field of orthopaedic technology.

It is important that this Depot has a accurate administrative set-up in form of a 'public-sector autonomous body', so that bottlenecks like rigid and time-consuming procedures for procurement and distribution will be avoided.

Main Supply Depot (Phase I)

19. The first proirity is to establish a Main Supply Depot. This Depot would be able to cope with the present demand for components and would ensure a uniform standard of orthopaedic-technical components and appliances in the country. It should be empowered to sub-contract private sector for local manufacturing and be authorized to import components and appliances as and when necessary.

20. One possibility worth exploring would be a bilateral trade agreement with India and its Artificial Limbs Manufacturing Corporation of India (ALIMCO). This is a Government of India enterprise established to supply prosthetic/orthotic components for centres all over the country. The production is based on a comprehensive selection of good quality components and the prices are very competitive in comparison with the components imported from the industralized world. Another possbility to purchase prosthetic/orthotic components at a comparatively low cost is through Varimex Warszawa, Poland. This is a govenment agency and their products are of a good quality.

21. The local market should be thorughly explored so that all possibilities in terms of technology and material on this level will be utilized. Import from the industrialized countries should be limited to essential components and in proportions to the demand for sophisticated devices.

Department for Research and Development (PHASE II)

22. The department for research and development should be established, as part of the National Depot, in the second phase. It would assess the demand and feasibilty of components and devices to be produed, design and construct them. Dies and tools for orthopaedic-technical production should also be subject for research and fabrication as prototypes. The feasibility of a production of various types of components by sub-contracts to the private sector compared to production at the special Manufacturing Department, to be attached to the Depot, should be studied.

Department for Manufacturing of Components, Tools, and Equipment (PHASE-III)

23. In the last phase, this unit would be added to the Depot. This deparment should specialize in the fabrication of such tools, equipment and components as found feasible by the Research and Development department and on a limited scale. Investment costs for a full-scale production of prosthetic/orthotic components are very high and must be viewed in light of the present limited demand for this kind of products. However, when at a later stage, the prosthetic/orthotic services develop further, with a subsequent increase in the demand for com

ponents, an extension of this Depot should include this aspect from the onset of planning activities.

Training of physiotherapists, occupational therapists and speech therapist to meet the future requirements

24. Training institutions should be set up for training in these disciplines so that there areat lea st two schools of each discipline in the country-one for the northern part of the country and one for the southern part so that all the four provinces can utilise training facilities. The existing training institutions one each at Lahore and Karachi should be further developed.

Recommendations

25. The Group has the following Recommendations to make for the development of facilities for the Physically Disabled :

Model Rehabilitation Centres

The Group felt that one Rehabilitation Centre each in the Provincial Headquarters and one in Islamabad with at least the following basic facilities be established during the Seventh Plan period :

1. Prosthetic/orthotic service.
2. Occupational Therapy.
3. Poysiotherapy.
4. Spinal Injury Unit.
5. Social Services.
6. Vocational assessment, guidance, vocational training and job placement.
7. Sheltered Workshop with a hostel for severely handicapped.
8. Special Schools for disabled children who are unable to attend normal schools.

Rehabilitation Units

26. Rehabilitation Units having Physiotherapy, occupational therapy and prosthetic-orthotic services should be established firstly one each at Divisional Headquarters level attached to hospitals during the Seventh Plan period and one each at the District Headquarters level during the Perspective Plan period.

NGOs

27. The Group felt that the facilities at the Rehabilitation Centre of the Society of Rehabilitation of the Disabled Persons Lahore, and Al-Shifa, Karachi, be expanded with Government grants.

28. A National Institute of Rehabilitative Services may be establihsed at Islamabad for the training of :

1. Orthopaedic Technologists.
2. Physio-therapists and
3. Occupational Therapists.

29. Pending construction/completion of the above institute, the existing training facilities avialable at the School of Orthopaedic Technology and School of Physiotherapy at Mayo Hospital, Lahore, and the School of Physiotherapy at the Jinnah Post-Graduate Medical Centre, Karachi, should be fully utilized by deputing trainees from other provinces and extending financial assistance to cope with the increased training facilities.

30. Ortho-Prosthetic Centre have already been planned to be established, in various parts of the Punjab. Similar centres may also be developed in various places in all the other provinces. To start with, five centres may be established in Sind, three in Baluchistan, three in NWFP, one in Azad Jammu and Kashmir and one in Northern Areas to meet the urgent needs of the disabled.

31. Physiotherapy and Occupational Therapy Units may also be established alongwith the above mentioned centres.

32. To reach the needy disabled persons in the remotest corner of the rural population, mobile Ortho-prosthetic Units at the above mentioned Centres should also be established. These Centres will be visited by the handicapped people living in the surroundings rural areas according to a specified time table.

33. A National Training Centre and a Sheltered Workshop alongwith a hostel for severely disabled persons should be established one each in the provincial headquarters during the Seventh Five Year Plan period.

34. To meet the large demand of artificial limbs and braces, to improve the quality and to cut short the period of making and fitting the applicances to the disabled, it is recommended that an agency with the name of Pakistan Artificial Limits Manufacturing and Supply Corporation (PALMSCO) should be established under the sponsorship of the Government of Pakistan.

SUMMARY

A. Existing Facilities

I. Karachi :

JPMC	1. School of Physiotherapy.
	2. School of Occupational Therapy.
	3. Orthopaedic Workshop.
Civil Hospital	Brace Shop. (Barely Operative).

II. Lahore :

Mayo Hospital	1. Orthopaedic Workshop.
	2. Newly Commissioned School of Physiotherapy.
Society for Crippled Children ..	1. Orthopaedic Workshop.
	2. P.T. & O.T. departments.
	3. Rehabilitation Ward.

III. Peshawar :

Khyber Hospital	1. Orthopaedic Workshop (German Assisted Programme).
	2. P.T. (Staff out side the country on training).
Lady Reading Hospital ..	1. Orthopaedic Workshop (Improvised), Future one projected in the new bldg.
	2. P.T. Department in an Improvised corner.
Rehabilitation Centre for Afghan Mujahedin.	1. Orthopaedic Workshop, Limbs are made out of leather socket attached to pylon and rubber foot. (Jaipur foot).
	2. Spinal Injury Centre. It is manned by a Swiss Physiotherapist very efficiently.

IV. Quetta .. .. .. 1. Orthopaedic workshop (under construction). It is a British Government aid project with no staff.

V. Islamabad/Rawalpindi :

P.I.M.S./Children Hospital ..	1. No Orthopaedic Workshop.
	2. P.T. & O.T. departments.

Fauji Foundation	1. Limb fitting centre. Fully operational but lacks adequate technical Manpower. 2. Paraplegic Ward not in satisfactory condition. 3. O.T. Department too small. 4. P.T. Department needs further Improvement.

NO SPEECH THERAPY FACILITY EXISTS ANYWHERE IN ANY FORM

B. REQUIREMENT

DEVELOPMENT OF MANPOEWR IN ORDER TO DELIVER THE REHABILITATION SERVICES

1. Prosthetic/Orthotics, to run the existing & projected limb fitting services in different provinces of the country. At present they are-manned by improperly trained personnel. There is urgent need to establish a technical school in Islamabad P.I.M.S. to train prosthetists/ othertists for he existing Centres as the first step.

2. To Upgrade the school of physiotherapy and occupational therapy at J.P.M.C. by providing consultants from international agencies such as WHO/UNDP etc.

3. To establish speech therapy programme without further loss of time for aphasics, dysarthitics and other categories. This can be done at J.P.M.C. with international support.

4. To establish two paraplegic centres in Islamabad on most modern lines, one in P.I.M.S. and one other at Fauji Foundation with international Techincal support vide president's directive

5. To start Training of Doctors in physical Medicine in collaboration with College of Physicians & Surgeons.

6. To open Rehabilitation wards in all teaching Hospitals where physiotherapy, Occupational Therapy, speech therapy, prosthetic & orthotic programmes are available. In this way President's directive can be implemcnted comprehensively.

As a first step:—PC-I may be filled-up for establishing a National Training School in prosthetics /orthotics at P.I.M.S., a spinal injury centre in P.I.M.S. and a new spinal injury centre at fauji Foundation.

SUB-COMMITTEE ON PHYSICALLY DISABLED

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Annexure II

Priorities

(I) Medical Rehabilitation :

(a) Prevention.
(b) Early detection, assessment and diagnosis.
(c) Treatment/Management,

(II) Social Rehabilitation :

(a) Assessment and diagnosis.
(b) Special education.
(c) Education in the home and in an informal sectting, through community based programme.
(d) Family education and counselling.
(e) Vocational and occupational training.
(f) Job assessment, placement and employment.
(g) Social and financial assistance.

(I) Medical Aspects in Rehabilitation

(a) Prevention :

(i) Immunization should be extensively introduced in whole of the country including rural areas. It may be considered as pre-requisite for admission in school. It should be an essential pre-requisite at the time of admission in all educational institutions.

(ii) Annaul medical check up of the students should be strictly followed through school health service at all levels.

(iii) Training of primary school teachers to measure visual acuity of new entrants to the school by utilising Snellen's chart.

(iv) BHUs/RHCs/MCH Centres should serve as Centres for Immunization. LHVs should be trained to detect the visual handicap at an early stage.

(v) Training of multi-purpose worker in early identicfiation of cases of disability through door to door exhortation in-coordination with community based services at all levels.

(vi) In order to check visual defects orthoptic units should be established at all levels. These institutions/units can play vital role in prevention and treatment or management of visual defects.

(vii) There should be eye specialist in Tehsil/District and Divisional Headquarter's Hospitals.

(viii) All teaching hospitals should have referral centres equipped with all modern gudgets and trained manpower.

(ix) Community education should be launched through *mass media* in view of an alarming increase in proportion of congenital diseases/ disabilities due to consanguine marriages. This will avoid congenital blindness.

(x) Mobile Eye Unit should be atteached with Tehsil Headquarters Hospitals to provide services of eye treatment and surgery.

(II) REHABILITATION

(a) There is substancial percentage of corneal blindness in Pakistan. In such cases the vision can easily be restored by surgery of eye and corneal grafting:

(i) There should be legislative cover to extract human eyes from the dead, who willed for the donations of eyes. NGOs can be established to motivate people for donation of eyes.

(ii) Eye Banks should be established near to the casualty department in the hospitals at all levels.

(iii) Campaign should be launched for motivating the people for donation of eyes by utilising all posible ***mass media.***

(iv) There should be special cell in hospitals for registration and treatment of blindness. Referral services should also be made available for getting specialised services/treatment.

(b) *Production of Various Types of Visual Aids.*—Government should establish industries for assembly and production of various types of aids for visually handicapped. It includes braille press, word processors, laser sticks, close circuit TV. white canes and low vision aids. Private Sector should be given incentive of exemption of taxes for establishment of industries.

(c) *Optimetric Courses.*—The following measures should be taken to use and to restore vision of partially blind people in order to make them useful manpower in the country. More and more opticians be trained to test the eye sight of the normal individual with a view to:

(a) Minimising great rush in the hospital.
(b) Lessening the burden of trained doctors & eye specialists.
(c) Achieving easy and cheapest way of getting treatment.
(d) Trained opticians be only allowed to run refraction clinic for which licences should be mandatory.
(e) A council of opticians be created in the country to highlight their problem and requirements.

(d) *Orthoptic Unit*

Each teaching hospital should have a full fledged Eye Department equipped with an orthoptic unit with trained orthoptist in BPS-17 having a diploma of 3 years.

Special Education, Vocational and Social Rehabilitation Aspects

Following are suggestions with regard to Special Education, Vocational Training and Social Rehabilitation:

(i) Special education centres coupled with Vocational Training units for visually handicapped children should be established both in private and public sectors.

(ii) NGO's should be encouraged by the Federal and Provincial Governments to establish such centres by providing technical, financial and equipment support.

(iii) Special education units should be established in ordinary schools which will help in integration of visually handicapped children.

(iv) Provincial Governments and local authorities should be made responsible for extending special education to rural areas.

(v) The Government should provide free education, free transport from and to schools/clinics, free visual aids and free braille books and cassettes etc.

(vi) After development of institutional set-ups in Health, Social Welfare and Special Education sectors at local levels a team of health care, social welfare and special education workers should be formed to detect visual disabilities in population, particularly children.

(vii) Public authorities should earmark specific areas for play grounds for the visually handicapped. These play grounds should be properly equipped

(viii) Braille presses should be established as to produce teaching material in braille to meet the requirements of institutions for Visually Handicapped.

(ix) Talking Book Centres should be established in private and public sector at Provincial, Divisional and District level to provide recorded educational and other meaterial for visually handicapped.

(x) In order to make the visually handicapped mobile and efective it is imperative to establish mobility training centres at Provincial/Divisional/ District levels. It will provide an opportunity to blind persons to become independent and self-reliant.

(xi) All teachers training colleges should be required to include a subject of Special Education in all B.Ed. classes and M.Ed. classes. Postgraduate

courses for Masters of Education in Special Education should be undertaken by all the Universities.

(xii) National Institute of Special Education should sponsor, design and organise courses for special education teachers/administrators in both special and integrated schools. Short courses should be developed by National Institute for parents, hospital and clinical staff, contact persons, officials of Employment Exchange etc.

SUB-COMMITTEE ON VISUALLY HANDICAPPED

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ANNEXURE-III

SUB-COMMITTE REPORT ON MENTALLY ILL/RETARDED

Mental handicap and resulting behaviour disorders and emotional problems refer to a broad spectum of diversified problems which so impede or impair the performance and achievenemt level of a child or adult that he is not able to become functionally independent and productive. If not helped to overcome the disability he will not only become a burden and a constant source of anguish for the family but also a drain and a nuisance for the society as well.

2. According to the U. N. estimate 10 per cent of the population need specialised help at one stage or another to become a productive and useful member of the society. The bulk of these are stuck with one or another kind of learning disability/mental retardation.

3. At present the existing services for these less fortunate individuals in Pakistan are inadequate and scanty. Hence, there is an acute need of planning comprehensive services for these persons at national level.

A. PRIORITIES

(i) Prevention.

(ii) Early detection, assessment and evaluation of the problem.

(iii) Remedial measures : Psycho-therapy, treatment and Special Education.

(iv) Social and vocational rehabilitation.

(v) Dissemination of knowledge through *mass media* to create public awareness.

(vi) Training of personnel and experts,

(*vii*) Research and surveys to find out the extent, exact nature and causative factors of these problems as they exist in our society.

I. Preventive Measures

(i) Training of the Public Health Workers to guide the public about the steps that can be taken for the prevention of the problem.

(ii) Tradition of inter-family marriage should be discouraged through a planned campaign. In Pakistan it has been observed that in at least 30 to 40 per cent of handicapped children, there is a history of cousin marriage with also a history of frequent inter-family marriages.

(iii) Public health worker can also provide proper prental-natal care and assistance during delivery to avoid damage of brain cells or injury to central nervous system during these stages.

(iv) Initiation and promotion of school health services should be accorded priority. A proforma should be prepared to assess the mental level and functional level of learning abilities of children at the time of admis-

sion. Principals/teachers should be trained to administer and evaluate the proforma as a part of the admission policy.

When children are put under pressure to perform and achieve at the level for which they are not mentally ready, they are inevitably caught in a vicious circle of failure—avoidance more failure. Moreover experience of failure becomes a cause of giving birth to diversified behaviour disorders/emotional problems/neuroses and even psychoses.

(v) The Seventh Plan should include provision for training of pre-primary and primary school teachers to detect the problem of mental handicap or signs of maladjustment in a child. It is universally recognised that early detection of the problem ensures effective and best possible corrective measures.

I. Curative and Remedial Measures

(i) The existing two mental hospitals and a few psychiatric nits in general hospitals are both insufficient and inadequate to meet he need of mentally ill and retarded persons in the country. Additional medical care facilities, at least, one in each division, on the pattern of Jinnah Postgraduate Medical Centre/Fountain House should be established to meet the requirement of ever increasing number of mentally ill/retarded persons. District hospitals should have facilities on a limited scale to look after such cases and those who are drug abusers.

(ii) The existing arrangement of keeping mentally ill persons in separate wards of jails should be immediately abondoned and abolished. The propsed divisional hospitals should admit all mentally ill persons even the present ones from jails. These hospitals should be manned by professionally qualified personnel and staff and integrated with general hospitals.

(iii) The government should encourage and promote mental health hand hygiene programme through mass media and existing health population welfare, social welfare and education institutions local level.

(iv) Provision of School Psychological Psychotherapy service is very important. There could be one educational/clinical psycholgist for 5,000 to 8,000 school going population at primary level, where teachers could refer the child for the proper detection/diagnosis/treatment of the problem alongwith the suggested remedial measures. To start with one School Psychological Service Unit should be established in each Comprehensive Secondary School at District level. In course of time, the programme should be extended to such schools at tehsil level. The existing Institutes of Education in each province should arrange to prepare professionally qualified educational and clinical psychologists to operate the propsed Units.

(v) At least, two special schools should be established in each district for moderately and mildly retarded. Most of those suffering from mild and moderate mental disabilities could be helped, if provided specialised guidance. Thus the

individual could be saved from developing not only as a waster but also as delinquent.

(vi) Parental training and guidance through "Portage Parent Training Programme" to make parents able to provide the required help at home should be started.

(vii) Family education and counselling through mass media to help the mentally ill/retarded children/persons should be arranged.

(viii) Royalities can be taken from abroad/foreign firms for production of special education aids and toys for mentally retarded children. They can easily be adapted and modified according to our local cultural patterns.

(ix) The ultimate aim of all the services is to be make the mentally retarded independents, useful and productive member of the society. Following suggestions are given:—

— Sheltered Workshops should be established for those who cannot work independently in the open market.

— There should be a legislative cover to get a certain percentage of workers from mentally handicapped persons in industries organizations in public and private sectors. They can be very good workers for assembly line procedures.

— A market survey should be conducted to find out the potential job opprtunities for mildly mentally retarded persons in various organizations/institutions/industries.

SUB-COMMITTEE ON HEARING AND SPEECH IMPAIR ENTS

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Annexure-IV

SUB-COMMITTEE REPORT ON HEARING AND SPEECH IMPAIRMENTS

The first two years are crucial in the acquisition of spoken language. This in turn enables the child to communicate with his environment, to express his thoughts, needs and feelings to others. Acquisition of this two-way communica - tion process is ghighly dependent upon an adequately functioning auditory system. It has been established that deafness or hearing impairment can now be detected and diagnosed quite early in life during the early part of the Ist year of the child. Several deaf children under the age of two years can learn to understand speech through lip reading. Early detection and diagnosis of deafness in a child is essential for development of speech. Parents are in the best position to detect and diagnose deafness in the child in the first instance. Therefore, it is recommended that extensive family education and counselling should be arranged through Press, T.V., Radio, Books and Films for public at large to find out deafness in their children.

2. In the diagnosis of congential deafness, basically two aspects are involved. There are the screening programmes to identify the " at risk " population and the individual patients whose parents are concerned. This can be done if a high risk registry is maintained for neo-natal deafness through some arrangement in hospitals and medical institutions in the country. High risk history should include (i) family history, (ii) hyperbilirubinaemia, (ii) maxilo-facial anomalies, (iv) prematurity, (v) Rubella/Cytomegalovirus infection in pregnancy and (vi) neo-natal sepsis. A Uniform Standard of methodology of Screening should be adopted. The Seventh Plan should provide necessary health component in hospitals/medical institutions and at the same time should include programme for training of professional workers required for detection, diagnosis, treatment and therapy of those who are suffering from hearing and speech impairments.

3. It is maintained that very few children, if any, who have been considered really deaf have no residual hearing. Until one obtains information to the contrary, all deaf children should be treated as partially deaf-hence candidates for amplification to boost their hearing. It is recognised that the ability to use wearable hearing aids improves substantially with time, indicating that a child's use of residual hearing improves through auditory experience. All district/tehsil hospitals should have fully equiped ENT department manned by professionally qualified personnel to enroll such infants for early detection and intervention through a prescribed trining programme.

4. The hearing impaired child is rarely the exclusive responsibility of either the physician or the educator, because the delivery system serving the child has to multifaceted. The roles of the doctor, audiologist, speech audiologist, and teacher are self-evident. However, other professionals such as the psychologist and social worker may also be necessary. The various education and health care needs in-include (i) Regular Health Care, (ii) Specialized care for the hearing loss and (iii) Special Education alongwith hearing and speech therapy.

5. The education of the deaf child is an intricate matter. The basic goal is to enable the child as an adult to be able to communicate with his environment. The best method to achieve this goal has been the subject of much controversy. In an around the sixteenth and seventeenth centuries, two schools of thought developed ; those that advocated teaching speech and lip reading and those that adovcated "sign language" continuing. It is recommended that the oral method should be the method of choice in educating the deaf in Pakistan because "sign language" method inhibits the development of speech. Besides this, it has the obvious disadvantage of requiring good lighting and both hands free to "talk". Moreover, normal hearing parents of deaf children are not themselves competent in finger spelling and sign language and hence not readily able to teach the deaf infant. However, for profoundly deaf children purely auditory programme is not the adequate answer. The difficulties of developing auditory perception increases with advancing age, until by the age of four it is unlikely that any useful perception can be developed in a very profound loss. In such cases a combined approach is probably the ideal.

6. Parental encouragement, support, counselling and guidance are most essential. This service should be provided through health, education and social welfare institutions.

7. A greater commitment is required on the part of Special Education and Health Institutions to train and accommodate audiologists, speech therapists and special education teachers in order to establish the infrastructure of a sound rehabilitation programme.

8. The existing otorhino-laryngology departments must be strengthened to include the services of, at least, one full time audiologist and speech therapist to evaluate deaf mute children.

9. It is strongly recommended that Special Education institutions be located close to the existing medical colleges attached with otorhino-laryngology departments. This will facilitate the ongoing medical care and evaluation so necessary for the continued well-being of deaf mute children.

10. The fitting of proper hearing aids is a speciality in itself. The availability of the various hearing aids, spare parts, moulds, batteries, etc, at reasonable prices should be promoted through appropriate measures.

11. Audiology clinics and laboratories should be provided in the premises of teaching hospitals.

12. The Medical Board examining personnel at the first entry in service should also include ENT Specialists.

13. Factories/industrial areas/workshops and others similar institutions where noise is a hazard for hearing, must be inspected by the ENT Experts for enforcement of rigorous protections for the ears, so that the number of deaf does not go up.

14. There is a great necessity for setting up of more Special Education Centres for Hearing Impaired Children in the country. The Federal and Provincial Governments should take initiative to establish such Centres.

15. Earmould Laboratories should be established in Private and Public Sector at provincial, divisional and district level to provide accurate and adequate earmoulds.

16. At present there is no assembly/manufacturing plant for Hearing Aids. There is a great need to have our own plant as the imported aids are very costly.

17. The existing Ordinance for Employment of the Disabled should be reviewed to provide career guidance and job security to the deaf mute persons.

18. The deaf mute persons should be provided Zakat/Financial assistance to purchase essential hearing aids.

SENIOR CITIZENS

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V. SENIOR CITIZENS

The Working Group on Senior Citizens met on 26th and 27th November 1986 respectively at National Institute of Health and Aabpara Community Centre, in Islamabad. Lt. Gen. A.N. Ansari, presided over the meetings. The list of participants is enclosed at Annexure I. The meeting discussed and deliberated over the various papers prepared by subject specialists which were circulated to members. The group as a whole deplored omission of any programme for the Senior Citizens in the Sixth Five Year Plan, despite increase in survivor's rate due to better health facilities, medicinal advancement, improved nutritional status and socio-economic condition in the country during the last decade. A Senior Citizen was defined to be a person who is of the age 55+.

Magnitude of the Problem

2. The Group took note of the increasing trend of population of senior citizens. The trend is expected to continue in the coming decades. The group considered that the senior citizens face numerous problems resulting from the following reasons :

(*i*) Large scale migration of young people to foreign countries as well as from villages to cities resulting in fragmentation of the joint family system ;

(*ii*) Trend of husband, wife and other members of the family working away from homes.

(*iii*) Industrialization and urbanization leading to housing shortages.

(*iv*) Rapid socio-economic changes combined with inflation.

(*v*) Lack of facilities in the field of health, welfare, housing, social services etc.

(*vi*) Non utilization of the talents and skills of senior citizens.

Existing Services/Facilities

3. The group expressed the view that at present there is no distinct programme for Senior Citizens in any sector of development, with the exception of limited facility available in the form of pension benefits to the retirees.

4. During 1980 a National Committee was constituted by the Ministry of Health, Special Education and Social Welfare to chalk out a comprehensive Plan of Action, ensuring health-care, social and economic security to the Senior Citizens as well as extending to them opportunities to contribute to national development process. This Committee prepared a Plan of Action which could not be implemented as it did not form part of sectoral programmes of the Sixth Plan.

POLICY OBJECTIVES FOR THE SEVENTH PLAN

5. The Seventh Plan should aim at fulfilment of the following policy objectives :

(*i*) To undertake research studies to find out the nature of the problems of aging and the aged in different segments of the population in urban and rural areas and collect relevant data.

(*ii*) To develop programmes and to maintain and strengthen the structure, potential and resources of the family and community for the welfare and rehabilitation of the senior citizens ;

(*iii*) To provide needed facilities and services to senior citizens.

(*iv*) To motivate, promote and assist the establishment of institutions both in private and public sectors for the welfare of senior citizens and utilization of their talents and skills for national development.

(*v*) To develop programmes to meet the specific needs of the poverty stricken and disabled senior citizens.

Priorities

6. The group agreed that priority be accorded to developing health care programmes side by side with developing infrastructural programmes like systematic research, strengthening of the institutions of multi-generation family, establishment of organizational administrative institutions, training of personnel, promulgating necessary legislation in each sector of development for speedy and effective implementation of sectoral programmes for the senior citizens.

Health Care

7. The Plan should include the following programmes for health care of senior citizens :

(*i*) Health education of senior citizens should be organized and undertaken through mass media, health outlets and social welfare agencies to promote and create awareness about basic principles and practices of health care for senior citizens.

(*ii*) Following facilities should be arranged and provided to senior citizens on progressive basis :

(*a*) Specific separate arrangements in hospitals for provision of medical consultation, diagnosis, treatment and dispensing ;

(*b*) Provision of earmarked beds for senior citizens in general class ;

(*c*) Medicines should be provided free of cost in all health outlets.

(*d*) Domiciliary care should be provided through health visitors, public health nurses and medical social workers.

(*e*) Provision of transport facilities to senior citizens to avail medical services in hospitals.

(iii) Medical social workers should be provided orientation/short-term training courses in gerontology.

(iv) The subject of gerontology should form a part of the curriculum (both under and post-graduate levels) of medical colleges.

(v) NGOs should be associated and assisted in promotion of health care programmes.

8. Eventually a National Institute of Gerontology should be established by the Federal Ministry of Health.

SOCIAL WELFARE SERVICES

9. Priority should be accorded to such actions as will strengthen the institutions of traditional multi-generation family that is our heritage. In view of the rapidly rising cost of living the Government may consider providing incentives in the way of tax relief, concession in electric and gas bills,
house building loans on easy terms to such families who live together.

10. Concessional travel in buses and trains should be made available for senior citizens on production of identity cards on the same basis as for the students and journalists.

11. Employment of suitably qualified senior citizens in "Mass Literacy" and other such programmes where their talents, skills and experience can be utilised.

DAY CARE CENTRE FOR THE AGED

12. Day care centres for senior citizens may be established as pilot projects particularly in big cities which are under the impact of industrialization and social change. The primary objectives of day care centres will be to provide facilities to elderly persons in order to keep them busy in such programmes and activities which ensure utilization of their talents, skills and experience and at the same time are beneficial and profitable both for the aged and the community.

13. It is to be ensured that senior citizens are not treated like inmates of a welfare institutions; they are rather accorded full membership of a collective and cooperative association. Appropriate measures will be undertaken to inculcate a feeling of self reliance, a spirit of self care and mutual understanding among the senior citizens so that they do not become dependant liabilitiesei ther for the centres or for their families; they should rather become national assets through utilization of their talents, knowledge and experience.

14. The Government will only provide supportive assistance in the form of accommodation, staff and annual grant.

HOMES FOR DESTITUTE AND SHELTERLESS AGED.

15. The group is of the opinion that there is no place for institutional "Homes for elderly" in an Islamic Society because such homes would tend to weaken family ties. However, for the destitute senior citizens with no family there is no alternative but to provide shelter.

16. The ongoing pilot projects of "Homes for the Aged" in the Punjab should be replicated and undertaken by all provinces, federal agencies concerned and NGOs. The main objective of such homes will be to provide institutional care and facilities for such senior citizens who are shelterless, homeless and without a family.

ZAKAT ASSISTANCE

17. The Union Councils and Town Committees should register and maintain a record of senior citizens with regard to their problems, needs and potentialities. The local zakat committee in cooperation with Union Councils/Town Committees may sanction a certain amount of monthly zakat assistance and one time zakat grant for the poverty stricken aged. While primary objective of monthly zakat assistance will be to ensure economic security of the elderly within their family structure, the purpose of the one time zakat grant will be to utilize their talents and skills to become self-supporting.

ORGANIZATION, COORDINATION AND LEGISLATION

18. The Federal Ministry of Health, Special Education and Social welfare shall coordinate on sectoral programmes at the Federal and Provincial levels. This Ministry will also take necessary measures to include "Health care and Welfare of Senior Citizens" in its Rules of Business. The existing "1960 Ordinance to Control and Regulate Voluntary Social Welfare Agencies" should also be suitably amended to include "health care and welfare of senior citizens" in its list of subjects. The Ministry of Health, Special Education and Social Welfare should take the initiative to introduce necessary legislation for the welfare of the senior citizens.

19. The Ministry of Health, Special Education and Social Welfare may form "National Council of Senior Citizens" composed of prominent senior citizens and representatives of Government and NGOs. The main objective of this Council will be to advise the Government and NGOs. to initiate and execute programmes and projects for Welfare of senior citizens. The council will also take necessary steps to monitor and ensure easy, speedy and effective implementation of such programmes and projects.

STAFF WELFARE SERVICES.

20. The existing staff welfare services/facilities cover only serving government employees. The staff Welfare Organization (Establishment Division) is advised to start appropriate programme to meet the special needs of Government Employees who have retired or are pensioners.

21. A Pensioners Welfare Board may be formed under Establishment Division :

(i) to look aftter the over all interest of the pensioners and their families; and

(ii) to propose appropriate measures for the welfare of the pensioners.

22. The Staff Welfare Organization with the assistance of Federal Board of Trustees (Benevolent Fund and Group Insurance) or Finance Division should provide special credit facilities on easy terms to Government employees, well ahead of their retirement, to enable them to build or purchase a house. An alternative arrangement may be to allow the Government servants at the age of 55 or on completion of 25 years of service to draw interest-free advances against commutation for purchase or construction of house.

23. The Staff Welfare Organization may initiate a programme of re-employment of the low-paid retirees in order to enhance their reduced incomes after retirement.

24. The Government should take appropriate steps to eliminate disparities in pensions between old and new pensioners, consequent upon July 1986 scale of pension and commutation rates and other fiscal benefits.

25. The Staff Welfare Organization may arrange to provide retirement counselling service prior to retirement of Government employees.

26. The Staff Welfare Organization may arrange annual Concessional fare of rail and air travels of the retirees.

27. The provincial Governments should be advised and persuaded to initiate their own staff welfare programmes for retirees.

Labour and Manpower Division

28. Labour Division in cooperation and consultation with the Provincial Labour Departments should review and amend the existing ordinances for Social Security and old age benefit for provision of better health-care and Welfare Services to the aged workers.

Women

29. In addition to the general measures recommended it should be recognized that the elderly women pose special problems because of longer life expectency aggravated by economic needs and isolated widowhood with little or no prospects of paid employment. In view of this, a long term plan to provide social insurance for elderly women should be developed. In addition, possibilities of employing elderly women in productive ways and encouraging their part icipation in social and recreational facilities be explored. In this connection the Ministry of Health should coordinate with the Women's Division.

Annexure I

LIST OF PARTICIPANTS

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NUTRITION

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VI. NUTRITION

Meeting of the Penal of Experts constituted for the Seventh and Perspective Plans on National Nutrition Strategy was convened by the Planning Commission on 30th November, 1986, under the Chairmanship of Dr. Sirajul Haq Mahmud, Senior Chief Health and Nutrition, Planning Commission. List of the participants is appended.

2. The deliberations of the meeting started with a brief account of the current national nutritional scenario. According to the Food Balance Sheet of 1981-82, on an aggregate basis, the average per capita Calorie (2352) and protein (61 gram) availability is reported to be satisfactory. However, there still exists mild to moderate to severe malnutrition among the vulnerable groups under specific geophysical conditions. The nutrition situation still remains far from satisfactory among the vulnerable groups.

3. A comparison of food availability with nutrient intake on aggregate basis leads to mistaken conclusion, since it fails to take into account the fact that the distribution of the food is an important determinant of consumption and thus of the nutritional status. This hides the inequitable distribution according to the nutritional needs. There are inter-and intrafamily maldistribution in addition to inter-and intraregional maldistribution *i.e.,* between food surplus and food deficit areas. Another important reason for this discrepancy is that nutrition is primarily a function of income distribution.

4. Malnutrition amongst infants and young children is still a major health problem with over 7 percent suffering from severe and about 10 percent suffering from moderately severe malnutrition respectively. Of every 10 Pakistani children born, one dies before reaching first birthday and over 20 in every 100 die before reaching their 5th birthday. Some 80 percent of children under 5 suffer from diarrhoea and respiratory infections. Acute dehydration caused by diarrhoea kills 30 percent malnourished as against 2 percent of well nourished babies.

5. While severe malnutrition in rare, protein calorie malnutrition is estimated to affect one third of the infant population. Infants, young children and pregnant and lactating women being amongst the worst affected. Besides, 98 percent mothers are of less than standard weight. The occurence of frequent pregnancies, maternal illness, and malnutrition, coupled with late introduction of weaning foods constitute the malnutrition syndrome in Pakistan.

6. From the data available of 1976-77, the national picture of nutritional status is as under :—

(i) Infant mortaility	90/1000 live birth
(ii) Third degree mlanutrition	7 percent
(iii) Second degree malnutrition	9.5 percent
(iv) First degree malnutrition	43 percent

7. Unsatisfactory maternal nutrition is generally recognized as a factor in the causation of low infant birth weight-the most widely accepted index of prematurity. At birth, the baby's state of nutrition is greatly influenced by the mother's diet during pregnancy. 25-30 percent of babies born in low socio-economic householder are below 2.5 kg. In well-off families the birth weight is almost the same as in developed countries (3.5 kg) with only 10 percent below 2.5 kg.

8. The teaching of health, hygiene and nutrition education at schools is negligible. The subject of nutrition is not included in the curricula of medical colleges and no formal or nonformal training in nutrition is imparted to medical personnel at any level.

9. According to the information available there has been no significant decline in the magnitude of malnutrition problem during the last five years inspite of better *p. r capita* food availability than baseline year. The Fifth Plan's main weakness was in translating the broad principles into programmes and projects for specific target groups. The main reason for failure of developing programmes and projects was lack of proper infrastructure and institutional framework at all levels especially in provinces/districts, where the action was required. The programmes formulated at the federal level could not yield the desired results without adequate machinery for their implementation at the provincial level.

10. In our set up, the malnutrition is a combination of faulty feeding practices and recurrent infections. In urban areas, problems of bottle feeding exist while in rural areas, there is a problem of late and inadequate introduction of complementary foods to mother's milk. These feeding practices lead to protein energy malnutrition (PEM). Because of these practices, and high infection rate, malnutrition continues to be one of the leading causes of infant and young child mortality. This hampers growth and the development of child.

11. Improving nutrition of the people should be seen as an objective of development planning in its own right, and the whole range of sectoral policies and programmes need to be drawn and harmonized. Keeping this objective in mind there is a need for realistic and implementable national food and nutrition policy. This has to be multidisciplinary.

12. Without this multisectoral approach, the activities carried out directly with the people to promote better nutrition and to prevent and cure malnutrition should be considered as one of the most important responsibilities of the health sector. However, health has been traditionally more involved with the treatment of malnutrition and much less with the promotional or preventive aspects of malnutrition. These efforts have achieved only a restricted success, because of the curative approach and limited coverage of the health services.

13. Economists tend to view nutrition as one of the unproductive personal and social expenditure that competes with investment. Improvement in nutrition is thus seen as hinderance to economic development. The case can be made as

nutrition being, an investment, it is own right that malnutrition during pregnancy, infacncy and early childhood may produce consequences for physical and mental development. Large expenditure in health and education may be necessary later to partly reverse these effects, whereas proper nutrition during growth contributes to productivity.

14. Any lasting changes in the nutritional status of population must be affected by a combination of non-nutrition and nutritional measures. For this, a systematic approach is needed on the nutritional and income distribution implications of food production and supply policies, and food distribution policy and public health policy. Limitations inherent in the economic system of the country also constitute serious financial obstacle to the solution of food and nutrition problems.

15. Before any plan of action is formulated consideration must be given to the feasibility of its implementation. The executing agencies often lack the resources, or the scale of action proposed exceeds the financial capacity of the country.

16. Though the proposals outlined in the Fifth and Sixth Plan were very clear and comprehensive for the amelioration of the nutritional status of the population in general and vulnerable groups in particular, hardly anything has been achieved during this period. One of the main reasons was failure of Institutionalization of Nutrition Plan.

17. The other factors leading to non-achievement of objectives of the Plan were lack of nutrition education programmes (both formal and nonformal) at all levels and no specific nutrition intervention programmes targetted to groups at risk.

18. The accomplishments in nutrition sector during the Fifth and Sixth Plan period, were reviewed. Although the food production in the country has increased substantially, the average *per capita* availability remained almost the same and no visible improvement occurred in the average nutrient intake. This has primarily been offset by an increase in population.

Health Sector

19. (*i*) *Primary Health Care* (*PHC*).—There are, at present, about 8480 primary health care facilities and 630 hospitals. The strategy of the Sixth Plan aims at increasing both the quantity and the accessibility of health facilities as well as improving the quality of services rendered. Every PHC worker is supposed to be trained in information, education and communication including weaning food and breast feeding and undertakes the pertinent activities at tne community level.

20. (*ii*) *Accelerated Health Programe.*—This programme has, since 1982, immunized over 16 million children, distributed 29 million packets of ORS and 23,950 trained Traditional Birth Attendants (TBAs) are now engaged in assisting women during childbirth. Immunization alone is saving about 100,000 children

deaths and 45,000 children from becoming disabled. The TBAs curriculum ha special section on nutrition education for pregnant and nursing mothers and the newborns. With the wide dispersal of TBAs in the rural areas the programme is expected to bring a positive change in the nutritional habits of the targe group.

21. (*iii*) *Special Food Aid Programme* (*World Food Programme*).—The World Food Programme is being launched by the Health Division through Provincial Health Departments since 1979. Under the programme food supplements like wheat, edible oil and dry skim milk are distributed to malnourished children and other vulnerable groups. The programme outlets number 2000. The number of beneficiaries is estimated to be 400,000. Nutrition education is an essential component of the programme. The programme over the years has trained 600 doctors and 2000 lady health visitors in nutrition including dissemination of nutrition information to their contacts.

22. (*iv*) *Joint Nutrition Support Programme* (*JNSP*).—Joint Nutrition Support Programme which became operational with effect from July 1986 is another effort to bring dietary changes in improving the dietary practices by the population. The main theme of the programme is delivery of nutrition services through primary health care network system. One of the major components of this programme is imparting nutrition information through *mass media*. Other components include training, research and women activities like income generating.

23. (*v*) *Iodine Deficiency Disease Control—Goitre Control Programme.*— Programmes to control goitre especially through the iodation of salt have been started and a plant for such purpose is functioning at Peshawar since 1981. The total distribution of paper annum is 8000 m/tonnes. The programme of distribution iodised salt is being reinforced in the current year by givoing 'iodine in oil' capsules and iodine by injections.

Land and Agriculture

24. The per capita availability K Cal per day has improved a 2078 in 1949-50 to 2248 in 1985-86. There has also been age in the consumption of some food items. There is an increase per capita availability of wheat, meat, refined sugar and edible oils and refined sugar is indicative of changing food hits of the masses due to increased prosperity. The food availability is satisfactory. However, in future, the animal protien may become more expensive.

E'ucation

25. *Formal* : The existing curricula of the primary secondary education include education include some lessons on Food and Nutrition courses of Food and Nutrition are taugat at the higher secondary level to all female students. In addition, degree programmes in Nutrition are offered in colleges of Home Economics and Agricultural Universitities in the country. Medical curricula contain clinical aspects of Food and Nutrition.

26. *Non-formal* : There are no regular programmes for improvement of dietary habits in the country. This deficiency be fulfilled through Pakistan/WHO/ UNICEF. Joint Nutrition support Programme which became operational *w.e.f.* July 1986. Thi programme will concentrate on improving the nutritional status the population in the country with emphasis on the improvement of dietary practices in the rural areas and urban slums.

On. o. the important components of this programme is dissemination of nutritional knowledge through information, education and communication strategy. This will improve the deitary habits of the population in the country.

27. National Nutrition Survey, which is in an advanced stage, was reviewed. According to this, the nutrition situation was not significantly different than the previous surveys.

28. Importance of Nutrition Education both formal and non-formal was considered to have a key element of nutrition programmes at all levels. It was emphasized that proper food labelling, food hygiene and strict food laws should be enforced. An account of nutrition education in medical colleges was reviewed and weaknesses pointed out.

29. The importance of training health personnel at various levels in dealing with nutritional status and nutritional problems was reiterated. There is a need for focal point, where a uniform type of training material should be prepared, training may be imparted and operational research could be conducted. It was pointed out that an institution like Children Hospital, which has just been established has the capability of taking this responsibility. Once a focal centre of excellence is developed, identical centres could be established at various places in the country, where ever expertise is available depending on the need.

Nutritional problems

30. The working group identified the following as the main nutritional problems of Pakistan:—

(*a*) Protein Energy Malnutrition mainfested by :

(i) Growth retardation

(ii) Low birth of weight of children in 30 percent of live-born children.

(iii) High incidence of marasmus among the peri-urban slum dwellers.

(iv) High infant mortality rate of 90 per 1000 live births.

(v) Infection and diarrhoea.

(*b*) Anaemia which is seen in pregnant female population upto 70 percent and 30 percent in male population.

(*c*) Goitre in localized areas.

(*d*) Occult Osteomalacia in pregnant women.

31. To stimulate discussion, the group was of the view that :

1. The strategies and objectives already spelt out in Sixth P'an (1983—88) should be persued in the Seventh and Perspective Plan till the target of elimination of malnutrition of any form is achieved.

2. Growth Monitoring - a country wide campaign.

3. Problem identification with community participation.

32. After a lengthy discussion, the following recommendations have been agreed by the group :—

Policy Formulation

33. (i) Developing of the Federal and Provincial/Districts capability to deal with food and nutrition plans at all levels.

(ii) Integration of nutrition related activities in the health network through Primary Health Care and Family Welfare Centres of the Population Welfare Division

(iii) Develop strong and viable linkages of health sector with other disciplines like agriculture, education and rural development.

(iv) Institutionalization of Nutrition as a discipline by creating a proper infrastructure for the implementation, monitoring and evaluation of nutrition programmes and projects. The need for development of Institute of Human Nutrition to undertake research, training, dissemination of knowledge and technical coordination was endorsed. A viable infrastructure needs to be established which should be able to develop, plan, implement, and monitor the nutrition programmes with community participation.

34. The skeleton of infrastructure recommended is Federal Nutrition Syndicate (already in existence) Provincial Nutrition Boards, District Development Committee/Subcommittee on Nutrition.

Establishment of a Centre of Excellence

35. A sound policy needs a strong data base. In order to formulate and give directions to the programmes, it is essential to generate data on the root causes of nutrition problems and to provide technical guidance to policy makers. The technology blindly transferrded without previous inquiry concerning the people and the context for whom it is destined frequently proves futile.

36. Hence the Panel endorsed the establishment of Centre of Excellence of Human Nutrition. The objectives of the Centre could be as follows :—

(i) Nutrition profile studies.

(ii) Health nutrition education.

(iii) Research into specific problems.

(iv) Training of various level of workers.

Nutrition Education

37. The Panel recommends that the nutrition education both formal and non-formal (mass media) should get priority in the Seventh Plan and Perspective Plans.

38. At present very little nutrition education is imparted in the medical and paramedical institutions. A component of community nutrition should be included in curricula of these institutions. In addition lessons should be incorporated in the existing books of various subjects in the formal school system.

39. The formal education would have a restricted coverage and will take a long time to be effective. To bring a public awareness, it is essential that healthful nutritional knowledge and practices be publicised through *mass media*.

Specific Intervention Programmes

40. In some of the geographical areas, because of their physical location, nutrition deficiency diseases are widely prevalent. The examples of such diseases are anaemia, goitre, rickets, osteomalacia and avitaminosis etc. They can be easily prevented with proper programmes. Hence the group recommended the following :—

(*a*) Dietary Programme - Action would encompass the deitary goals through a package of policy measure like :

(i) Increased availability of better nutritional foods and emphasis on such crops.

(ii) Nutrition education : A massive compaign through all types of *mass media*.

(iii) Specific intervention programmes like lipoidal therapy and fortification.

(iv) Improvement in food distribution system especially in far flung and remote hilly areas, and from food surplus to food deficit areas.

(*b*) Non-dietary - The non-dietary aspects would include :

(i) Income generating activities and availability of food at reasonable price.

(ii) Diaroeal diseases control.

(iii) Nutrition rehabilitation centres especially in urban slums.

(iv) Immunization.

(v) Child spacing.

(vi) Maternal and child health services (Iron and vitamin supplements).

41. A network of community nutrition centres as a component of BHU or MCH level be established, where growth monitioring should be performed, in addition to Health/Nutrition education and primary health care activities. A proper referral system should be established for third degree cases, detected by Primary Health Care facilities to referral care facilities.

42. The goals wi'l be achieved through special programmes which will have the following basic activities :—

(i) Introduction of adequate supplementary food besides breast feeding, using local food items at appropriate age.

(ii) Promotion and protection of breast feeding in rural areas and promotion of breast feeding in urban areas.

(iii) Monitoring of child growth using growth chart from birth to 4 years of age.

(iv) Detection of malnourished cases with remedial action as required.

(v) Treatment and rehabilitation of severely malnourished cases with referral system.

(vi) Better care of lactating and expecting mothers with improved nutrition.

(vii) When required distribution of iron/vitamin tablets.

(viii) Immunization.

(ix) Oral rehydration.

(x) Emphasis on child spacing for the proper growth of child and the health of the mother to prepare her for subsequent pregnancy.

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MEDICAL EDUCATION

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VII. MEDICAL EDUCATION

I. Review of present situation

This was reviewed for the following categories of health manpower:

(*i*) Doctors
(*ii*) Dentists
(*iii*) Nurses
(*iv*) Pharmacists
(*v*) Auxiliaries.

The following were the main weaknesses observed by the sub-panel:

(*i*) The number of doctors far exceeds the market considerations and there is a serious problem of unemployment of doctors. Currently, it is estimated that there is one doctor for 3500 persons. According to the health care needs, the requirement is far greater than the current output.

(*ii*) There is general scarcity in basic sciences in medical colleges and post-graduate medical centres/ institutes. Their remuneration is much lower than their fellow colleagues in clinical sciences because of private practice. Their image is also poor in comparision with their clinical sciences teachers.

(*iii*) The number of dentists also exceeds the current absorptive capacity and it is reported that some of the dentists are unemployed though there is one dentist for 70,000 persons. The rate at which dentists are being produced currently will not be enough even for rural health programme.

(*iv*) Nurses are in short supply and about 1100 are being produced every year. Their attrition rate is very high. The current bed/nurse ratio is far from satisfactory. The current output is not sufficient for new beds being added every year though these are also on the lower side than technically considered necessary. Nurses are insufficient for major hospitals while there are none for public health.

(*v*) About 500 pharmacists are being produced every year but they are not utilized in the health sector. The non-utilization of the pharmacists leads to improper storage and dispensing of drugs while inadequate directions given to users on the usage of drugs. Their absence in retail pharmacies are posing many more problems than their absence in the public health system.

(*vi*) Auxiliaries are in short supply like nurses. There are very few categories which get formal trainings. Their training schools are deficient in physical plant, regular faculty and regular accommodation for faculty and students. Except for lady health visitors, medical technicians or some other categories, they do not have any structured training programmes.

Out of auxiliaries, female categories are scarce due to unattractive sala ry, hazards of posting away from home and hostile work environment.

(*vii*) The quality of all categories of health manpower is not upto the desired standards. This is true of doctors, dentists, unrses and auxiliaries. The last category is worst hit due to reasons explained earlier. The main reason why the quality of doctor's training has suffered is due to the concession allowed to the clinicians to undertake private practice which takes most of their time and leaves very little time for preparation of lectures and teaching of students.

(*viii*) The various bodies, like PMDC, Pharmacy Council, Nursing Council and State Medical Faculties, which should exercise effective control on medical education on all aspects like intake, output, the curricula, student/teacher ratios, educational standards and physical facilities are seemingly ineffective.

(*ix*) There is no coordination in training and production of various categories of health manpower and at no stage they are brought together to let them feel that they are members of a team and they have to work as a team in actual field situations in health systems.

(*x*) Faculties have very little background in pedagogy and they do not keep themselves abreast with latest developments. They take little interest in students.

(*xi*) The teaching institutions have little library support and access to latest information.

(*xii*) Faculties lack interest in research and are not trained in research methodologies. This obviously affects trainees.

(*xiii*) There are little training opportunities for qualified personnel once gainfully employed.

(*xiv*) Examination system and assessment of students performance are outdated.

(*xv*) Speciality training is scarce for all categories of health manpower.

(*xvi*) Properly trained personnel, generally, do not like to be on the faculty of any training institute except doctors in clinical sciences or those who do not have alternate opportunities and take teaching institutions as sheltered workshops. The remuneration and status in teaching jobs is low compared to their counterparts engaged in health delivery system. Promotion avenues are generally missing.

II. Recommendations

The following recommendations are made by the sub-panel :

(*i*) The physical plant of training institutions, particularly, auxiliary training schools should be proper and perceptable. Nursing schools should have their own identity and dental departments require upgradation to colleges. The existing deficiencies in medical colleges need to be removed

(*ii*) The admission in various categories of training institutions needs to be rationalised. For medical colleges 200 students should be the outer limit and efforts should be made to bring it as close to 100 as possible. The admission in nursing schools need to be increased by providing necessary facilities. More nursing schools should be opened at place which fulfil the proper training requirements. While many more school for auxiliaries need to be set up, all medical colleges should start trainin programmes for training of auxiliaries and each college should admit 100 students per year as has been approved for Ayub Medical College, Abbottabad and Pakistan Institute of Medical Sciences, Islamabad. For admission of auxiliary training programmes, girls should be preferred so as to achieve a ratio of 70:30 of females to males in training programmes of auxiliaries.

(*iii*) Faculty members should be carefully selected in sufficient numbers so that proper student/teacher ratios can be maintained. We should avoid to put square pegs in round holes.

(*iv*) Teachers should be offered better pay scales and career structure than their counterparts in health delivery stystem. Seperate pay scales will have to be offered to clinical sciences teachers and basic sciences teachers.

(*v*) A proper professional career structure will have to be given to all professionals of health system. These include doctors, dentists, pharmacists and university graduate nurses. The following prototype is recommended :

— Starting scale in Government Service. BPS-17

— Promotion prospects :

BPS-17 to 18 :	100% in 5 years
BPS-18 to 19 :	50% in 7 years
BPS-19 to 20 :	50% in 5 yeards
BPS-20 to 21 :	25%after 5 years in BPS-20.
BPS-21 to 22 :	50 percent.

(*vi*) Private practice has adversely affected the quality of medical education. There should be two types of teachers : one with teaching designations and not allowed private practice and paid adequately ; the second category should be those of consultants and allowed private practice. Till such time this is not possible, institutional practice be only allowed.

(*vii*) They should be provided sufficient opportunities within country and abroad to keep themselves updated with various developments taking place in their respective areas.

(*viii*) Conferences, workshops, and seminars should be organized more frequently to share knowledge and experience.

(*ix*) Examination system needs to be modified so as not to base the assessment of the student on the basis of his/her memory capability at the time of the examination. Their knowledge and ability should be objectively examined and all examinations of professional categories, at least, should be conducted by universities. Those of auxiliaries should be entrusted to regional boards.

(*x*) Job description of all categories of personnel should be developed. On this basis, their training content be decided and faculties and facilities developed accordingly.

(*xi*) All faculty members must be trained teachers and should get daequate training in pedagogy.

(*xii*) Refresher courses for faculty and health delivery personnel should be organised at regular intervals.

(*xiii*) The general scarcity of specialists of various categories of health personnel be removed by providing suitable facilities at adequate level. This applies to all categories particularly, doctors, dentists and nurses. Enrolment be increased in existing training institutions and new should be set up where feasible.

(*xiv*) Review should be undertaken of the functioning and composition of PMDC, Pharmacy Council, Nursing Council and State Medical Faculties to make them more effective.

(*xv*) The medical education and research section of the Ministry of Health should be elevated to a level to attract suitalbe talent. This should be headed by a Director General for Medical Education and Research and be designated as D.G. Human Resource Development and Research. Similar senior level positions be created in provincial health departments. All units should be adequately staffed to look after most of the aspects of medical education and research. These units, in addition, should be able to get the advice of independent experts who could be

compen-sated for their work. They should also be able to contract out studies on some special areas requiring in-depth analysis. They should monitor the education and research programmes and undertake continuous evaluation

(*xvi*) These "Medical Education and Research Directorates" be governed by autonomous boards having broad based representation to assist Federal Health Ministry and Provincial Health Departments in planning, production deployment and management of health manpower and fostering research.

(*xvii*) As a long-term objective for the Perspective Plan, the following targets are proposed :

Category of personnel	Population per category	Number
Doctors	1:2,000	80,000
Specialist Doctors	1:8,000	20,000
Dentists	1:25,000	6,400
Nurses	1:4,000 (3 for 8 beds)	40,000
Auxiliaries	1:1,000	160,000
Dais	1:1,000	160,000
	Total ..	466,400
All categories of Health Personnel	1:350	as against 1:800 in 1986 in Pakistan and 1:100 in 1986 for developed countries.

(xviii) For the Seventh Five Year Plan the following ratios are recommended :

Doctors	1:3000 persons
Specialists doctors	1:20,000 persons
Dentists	1:50,000 persons
Nurses	3 for 10 beds
Auxiliaries	1 for 2,000
Dais	1 for 1,000

WORKING GROUP FOR SEVENTH PLAN (1988—93) AND PERSPECTIVE PLAN (1988—2003)

A. Terms of Reference

1. State of the art-current situation and an analysis of the current programmes.
2. Problems of maintenance of completed projects/buildings and other physical and social infrastructures and their specific solution.
3. Strategies, present and future.
4. Objectives and targets.
5. Plan of operations for the Seventh and Perspective Plan.

B. Composition

1. Dr. Sirajul Haq Mahmud, *Chairman*
   Senior Chief,
   Health and Nutrition,
   Planning Commission,
   Islamabad.
2. Prof. Hamid Ali Khan,
   College of Physicians and Surgeons,
   Karachi.
3. *Prof. Khawaja Sadiq Hussain,
   Principal,
   King Edward Medical College,
   Lahore.
4. Col. M.B. Azami,
   Registrar,
   College of Physicians and Surgeons,
   Karachi.
5. Prof. S.M. Rab,
   Jinnah Postgraduate Medical Centre,
   Karachi.
6. Prof. Nasir uddin Azam,
   Principal,
   Khyber Medical College,
   Peshawar.

7. Prof. Mohammad Sharif, — *Chairman*
Principal,
Dow Medical College,
Karachi.

8. Prof. A.J. Khan, — *Member*
Principal,
Ayub Medical College,
Abbottabad.

9. Prof. Ata-ur-Rehman, — ,,
Jinnah Postgraduate Medical Centre,
Karachi.

10. Prof. Mohammad Saleem Cheema, — ,,
Principal,
De'Montmorancy College of Dentistry,
Lahore.

11. Brig. Iftikhar Ahmad Malik, — ,,
Army Medical College,
Rawalpindi.

12. *Dr. A.H. Siddiqui, — ,,
Bolan Medical College,
Quetta.

13. Mr. A. Sattar Gill, — ,,
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National Talent Pool,
Ministry of Labour, Manpower and
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14. Lt. Col. Said Ahmad, — ,,
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15. Dr. F.U. Baqai, — ,,
Baqai Hospital,
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16. Prof. Iftikhar Ahmad — ,,
President,
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17. Dr. S. Inam Kazmi, — *Member*
Chief,
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Planning Commission,
Islamabad.

18. Maj. Gen. M. Afzal Najib, — "
National Institute of Cardiovascular Diseases,
Karachi.

19. Prof. N.A. Jaffery, — "
Jinnah Postgraduate Medical Centre,
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20. *Prof. Jamil, Ahmad Khan, — "
Postgraduate Medical Institute,
Lady Reading Hospital,
Peshawar.

21. Prof. Farakh Ahmad Khan, — "
Postgraduate Medical Institute,
Mayo Hospital Campus,
Lahore.

22. Prof. Fazal Ellahi, — "
Director Medical Education,
College of Physicians & Surgeons,
South Central Lane,
Defence Housing Society,
Karachi.

23. Mr. M.A. Haleem, — *Member/Secretary.*
Deputy Chief,
Health and Nutrition,
Planning Commission,
Islamabad.

*Did not attend.

NURSING SERVICES AND EDUCATION

149—150

VIII. NURSING SERVICES AND EDUCATION

The Panel on Nursing Services and Nursing Education met on 5th Novembe 1986 at Islamabad. Mrs. Aisha Siddiqui, Principal College of Nursing was in chair. Nurses from all the four provinces and Azad Jammu and Kashmir were re resented. The list of participants is appended.

The following problems related to Nursing Services and Nursing Education were discussed. Subsequently, the under mentioned conclusions were agreed :

PROBLEMS

A. Nursing Services

(1) There is an acute shortage of nurses to staff the wards and specialised units like ICU, CCU, operation the atres and other special areas.

(2) Nurses are responsible for what happens within the wards without any delegation of authority.

(3) Salaries are generally low considering the challenges of duties and other alternate opportunities for females. There is non-existence of an appropriate career structure. No extra remuneration is given to nurses with extra-qualifications.

(4) There is disparity in the pay scales among nurses in various parts of the country.

(5) Physical facilities are either lacking or inadequate in the wards/units of the hospitals to allow proper patient care and teaching of student.

(6) Family accommodation to nurses within hospital premises is generally not available or inadequate. When provided accommodation, they are not connected with telephone exchange of hospital or residential telephone.

(7) There are many non-nursing duties which can be performed by non-nurses. These include giving a urinal, a bed pan, cleaning or furniture, tidying the bed, record keeping of linen store, ganitor's store and stationery items. These duties currently affect the performance of nurses and most of the old fashioned nursing duties are left to the ancilliaries. The change is required in the light of scientific developments and also accepting the reality by modifying the nurses role in the health care of the people.

(8) Nurses living outside the hospital have acute conveyance problems. These become worse during strikes/curfew etc.

(9) Non-availability of day care nursaries in the hospitals to look after the young children of married nurses forces them to stay at home.

(10) The image of nurses in the eyes of the public is gnerally poor. Families with reasonable means of living and or belonging to upper middle and higher class never like to send their girls to become nurses. The main reas on is that nursing is not recognised as a scientific discipline and or a professional cadre.

(11) The attitude of doctors is harsh and degrading as they are not yet recognised as professionals. Most of the senior doctors still equate them with paramedics.

(12) Nurses have long working hours on night duty without any overtime payment or relief. Due to this nurses are tired and exhausted.

(13) Due to shortage of trained nurses, hopsitals are running on the strength of students who are not supposed to be held responsible for errors committed by them.

B. Nursing Education

(1) Most of the school buildings are out-dated, and many have indadequate accommodation. They lack in proper academic areas. Students are generally herded together in hospitals which have inadequate conveniences. Inadequate domestic staff in hostels makes life difficult of the inmates. On many occasions, students, time is lost in cooking food.

(2) Due to shortage of applicants for training, real selection is not possible. There is no effort to publicise importance of nursing care for health care with the result that very few are attracted.

(3) Nursing subjects are still being taught in English in most of the nursing schools. The proficiency of nurse-students in English language is generally poor because of no choice at admission. Inspite of this, there are no arrangements to teach English to nurse-students in nursing schools.

(4) In nursing schools there is non-availability/inadequate teaching equipment/class room facilities, laboratories, transport, absence/out-dated books in the libraries and audio-visual aids.

(5) Nursing schools have no separate budget, perhaps, even a pin cannot be purchased by such schools.

(6) There is a general lack of equipment in the wards, which are used as laboratories to train nurse-students.

(7) Students are used as cheap labour in the hospitals. They hardly get any time to study, attend classes or for re-creation.

(8) There is a general shortage of teachers in nursing schools due to poor career structure and respect. The student/teacher ratio is generally poor even according to the standards laid down by Pakistan Nursing Council. Faculty, whatever is available is not dedicated. Part-time faculty is not interested because they are not properly paid and looked after. This results in weak training in the schools and imporper supervision of students in the wards.

(9) Sufficient transport facilities are not available to the nursing school. Therefore, educational field trips are missed.

RECOMMENDATIONS

A. Nursing Services

(1) There is an immediate need to increase the intake of nurses all over the country. For the Seventh Plan nurses be produced at the rate of 3 per 10 hospital beds and for the Perspective Plan the target should be 3 nurses for 8 beds, taking into account the special requirement for special areas of the hospitals. In a phased manner the output of nurses should be increased to around 4000, as soon as possible.

(2) Training of specialised nurses be started according to the needs. On an average about 500 specialised nurses will be required per year out of 4000.

(3) Till such time we enrol the required number of nurses, the shortage be met by auxiliary nurses who should have the same basic qualification as those of professional nurses to be subsequently given training to become professional nurses.

(4) Pay scales and working conditions be made uniform throughout the country for identical posts and qualifications. Nursing personnel with extra qualifications be granted advance increments in accordance with the qualifications. A proper career structure be provided to nursing services. Senior appointments as has been done in Punjab province be adopted by the Federal and other provincial governments.

(5) The job description and functions and tasks of nursing duties be developed for all categories of nurses. They should be asked to perform their duties according to new job descriptions.

(6) Non-nursing duties and some allied nursing duties be given to staff who should be specially trained for such tasks. The staffing pattern of the wards be re-arranged so as to have three levels of personnel *e.g.* professionals, auxiliaries and ancillaries. The current practice of dependence on ancillaries should be minimized and shifted to professionals and auxiliaries.

(7) Nurses posted in infectious diseases should be given suitable risk allowance

(8) Suitable residential accommodation within the premises of the hospital be provided for trained nurses-single and family accommodation as most of them work on split shifts.

(9) Night duty should be split into two shifts and should be given to resident staff nurses.

(10) As nurses are an important part of the health team and have to play a vital role in the delivery of health care, they should be involved in policy making and operational decision making in health and related sectors at all levels, in order to formulate strategies for increasing contribution to the implementation of health Plans. This will raise their morale and image.

(11) To overcome the actue shortage of nurses males should be encouraged to join nursing in order to utilize them in the rural health programmes where female nurses hesitate to go.

(12) To further overcome the shortage of nurses, married nurses may be engaged on contract and those who wish to work on part-time basis may also be engaged. Such nurses will be governed by separate service rules. Large hospitals should provide day care nursaries for young children of married nurses.

(13) Nursing administration should be delegated more authority. They should be mainly responsible for their own discipline, efficiency and budget. This should be delegated at all levels to hasten decision making for improving efficiency.

(14) Nurses should be involved in hospital planning so that the hospital units should have adequate facilities to carry out pattient care and teaching of students.

(15) All vacant posts of nurses should be filled without any further delay by offering advance increments on the basis of experience/qualifications.

(16) Large hospitals should run transport service for essential staff. This facility should be availed by the nurses living outside hospital premises.

(17) Efforts should be made in girls schools and through radio/television and press to properly project the image of nursing and their profession. The community needs to be properly educated about their importance and role in health systems.

(18) Enactment of a nursing law is considered necessary to protect and regulate nursing profession. This should also effectively regulate ban on nurses' emigration.

B. Nursing Education

(1) Nursing schools and colleges should represent the image of a proper educational institute. These should have the full components of academic institutions *viz.* academic block with proper class rooms, seminar rooms and conference hall, furniture, library with latest books and journals, adequate hostel facilities, faculty residences, recreational facilities and transport.

(2) All nursing schools should have a proper faculty who should have a good career structure. The existing deficiencies should be removed and student/teacher ratios be improved. There should be at least 1 teacher for 25 students as laid down by the Pakistan Nursing Council.

(3) According to the new job description of nurses, their course content should be decided and curriculum for basic and post-basic training revised.

(4) Admission in existing basic nursing schools be increased by suitably expanding them while more schools should be opened. Special control should be exercised by Nursing Council for training of nurses by the private sector.

(5) The entrance qualification of nurses be modified to have Inter-science passed students as a sufficient pool of such girls will be available in larger provinces, such girls could be attracted by motivating them to join nursing profession whose image and status with proper starting salary and career structure be promised like any other professional cadre.

(6) Selection procedures need modifications and these should be suitably amended to, at least, know the aptitude of the applicants and their ability in English language. English should be taught as a regular subject in all nursing schools.

(7) For practical training, they should be terated as students and not workers to substitute trained nurses in the ward. Areas should be designated in the wards to train nurses and it should not be on a pure and simple apprenticeship basis with senior girls/trained nurses. Teachers should properly supervise their training in the wards.

(8) There is a need to reorientate the curricula and training of all categories of nurses to primary health care approach. Necessary adjustments should be made to include PHC as a regular feature of their training.

(9) Examination of nurses should be conducted by the universities who should be the degree awarding bodies. Necessary adjustments be made in training programmes so that at the end of the successful completion of training a nurse is a university graduate and ranked like any other professional.

(10) Senior doctors should participate in the education programme of nurses. They should be involved in workshops/seminars and conferences which should be organised more frequently.

(11) Facilities for open houses in every school/college of nursing be created to allow students from general educational institutions to visit nurses hostels and schools . Opportunities should be provided to these young girls to meet professional nurses in their work environment as well.

(12) Nursing education and services should be separated from each other with full delegation of powers but there must be common meeting ground for proper training of students. More emphasis be given on post-basic education that includes sepcialities like Intensive Care Unit, C.C.U. techniques-Operation Theatre, Paeds, Psychiatric nursing and anaesthesiology etc.

(13) Nursing instructors should be able to prepare/use all the audio-visual aids-for which Nursing Colleges should be well equipped and updated with all the modern teaching facilities.

(14) The vaccum of specialised nurses be filled by setting up of new training institutes on the pattern of College of Nursing at the Pakistan Institute of Medical Sciences, Islamabad. The College of Nursing Karachi should expand to include training of specialised categories of nurses. More of similar institutions be set up in the country to meet the requirements.

(15) A beginning should be made to have properly qualified public health nurses to meet the ever increasing needs of the health systems.

(16) As the changes in medicine and technology are taking place, nurses may be oriented about these changes. This includes new equipment and machinery and techniques to operate this equipment.

(17) Regular in—service education programmes should be organized. Senior doctors/Professors should participate in the programme and funds may be made available.

18. To broaden the education and knowledge, all Nursing Instructors and people who participate in teaching may be exposed to attend short term courses/ attend seminars/workshops in other countries.

(19) To improve the nursing education, the functions of Pakistan Nursing Council be reviewed and it should be made into more potent body than hitherto.

(20) Leadership posts be created in Nursing Services and Nursing Education Basic and Post-Basic.

(21) Nursing Services be organized as under :

For 500 × Bedded
Teaching Hospital.

Nursing Services.

Chief Nursing Superintendent
Grade—19

Nursing Superintendent Grade 18.

Principal School for Nursing Grade 18.

College of Nursing

Principal College of Nursing Grade 19

Vice Principal Grade 18

(22) Short term refresher courses for Nursing services and Nursing Education Basic/Post Basic be offered frequently.

(23) Nurses to be given opportunity to attend National and International workshops/seminars.

(24) Ban on Nurses going out of the country as the shortage will never meet the target planned.

NURSING PANEL

1.	Mrs. Aisha Siddiqui Principal, College of Nursing Karachi.	*Chair person*
2.	Dr. Siraj-ul-Haq Mahmud Senior Chief, (Health and Nutrition) Planning and Development Division, Islamabad.	*Memb.r*
3.	Dr. S. Inam Kazmi, Chief (Health and Nutrition), Islamabad.	,,
4.	Mrs. Amtul Anis, Nursing Adviser, Health Division, Islamabad.	,,
5.	Miss Raeesa Zahur, Nursing Superintendent, Mayo Hospital, Lahore.	,,
6.	Mrs. K. Mushtaq, Assistant Director (Nursing) Punjab, Lahore.	,,
7.	Miss Irshad Begum Controller, Punjab Examination Board, Lahore.	,,
8.	*Miss Ghulam Fatima Huda, Nursing Superintendent, Civil Hospital, Karachi.	,,
9.	*Miss Ilmia Moghul, Controller, Sind Examination Board, Karachi.	,,
10.	**Miss Wannifred Warkinten Agha Khan School of Nursing, Karachi,	,,

11. Mrs. B.A. Shah, *Member*
Nursing Superintendent,
Lady Reading Hospital,
Peshawar.

12. Dr. M. Bashirul Haq, "
Deputy Chief (Health)
Planning & Development Division,
Islamabad.

13. Mrs. Sarwat Sultana, "
Controller of Examination,
Peshawar.

14. Miss Ferhana Josphine, "
Nursing Superintendent,
District Headquater Hospital,
Abbottabad.

15. Mrs. Sabira Khanum "
Nursing Superintendent,
Lady Reading Hospital,
Quetta.

16. Mrs. Anwar Aziz "
Principal,
Nursing School,
Mirpur.

17. Dr. Wajid Ali, *Member/*
Assistant Chief, Health, *Secretary*
Planning Division,
Islamabad.

*Did not attend due to Curfew.
**Did not attend.

PHARMACEUTICALS

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IX. PHARMACEUTICALS

The Sub Group on Pharmaceuticals met on November 25th, 1986, under the chairmanship of Dr. M. Naeem Khan, Chairman, Pakistan Council for Scientific and Industrial Research. The list of participants is annexed. The subject was discussed under the following broad categories :

(i) Registration and Licensing.

(ii) Import policy.

(iii) Export status.

(iv) Basic manufacture.

(v) Drug pricing.

(vi) Herbs/Medicinal plants.

(vii) Quality control.

Current situation

2. It is estimated that the total domestic demand for drugs and medicines as of 1986-86 is Rs. 4.5 billion. The drug market is growing at an annual rate of about 20 percent. There are 9,500 registered medical products out of which 6,500 worth Rs. 3150 million are manufactured locally while 3,000 worth Rs. 1,350 million are imported. Twenty-six firms belonging to multinationals control about 70 percent of the local manufacture. Dominant firms exercise considerable market power in the drug industry. Competition in pharmaceutical market does not eliminate great market power. Such firms are able to retain large share of the market despite charges which are often several time higher than prices charged for identical products by smaller firms. Acute competition can exist among market leaders with a considerable degree of market power enjoyed by these leaders as a group in relation to smaller rivals.

3. The total number of licensed manufacturing units in the country is 210. The sale of drugs is regulated by the provincial governments. At present, there are about 35,000 retail shops and 2,000 wholesale dealers in the country.

Registration and Licensing

4. Under the Drugs Act 1976 all drugs meant for manufacture, import export or sale have to be registered with the Drugs Registration Board. The certificate of registration, of products, unless suspended or cancelled, remains in force for a period of 5 years from the date of issue and is renewed, thereafter for a period not exceeding 5 years at a time.

5. Drug manufacturing licences are issued by the Central Licensing Board set by the Ministry of Health. Any person/party who fulfils the requirements for

getting licence as prescribed under the Drug Act 1976 is issued the necessary manufacturing licence. The duration of a licence for manufacturing drugs is for a period of two years which is renewable for a period of two years at a time. The Board, for the performance of its functions, meets at least once in three months.

6. Any party aggrieved by the Licensing Board in connection with the refusal of licence can lodge a complaint or appeal before an Appellate Board.

Import

7. Any person holding a drug manufacture licence for local manufacture can import raw and packing material for formulation of a drug registered in his favour from any competitive source. He can also import a finished product. Import of drug is subject to the provision of current Import Policy Order and the Drugs (Import and Export) Rules 1976.

Export

8. Drugs registered under the Drugs Act, 1976 can be exported subject to the condition that the exporter possesses a licence to manufacture or sell by way of retail sale or whole sale. The value of export of drugs is approximately Rs. 60 million per year.

Basic Manufacture

9. Pakistan is at present totally dependant on the imported raw materials for the manufacture of drugs. While granting licence to the manufacturers for drugs, a commitment is obtained from the concerned parties for undertaking basic manufacture. This commitment has not been fulfilled due to (i) lack of petrochemical base ; (ii) non-availability of medicinal herbs within the country ; (iii) size of production (iv) liberal import of finished drugs and lack of incentives to indigenous manufacturers and (v) heavy duty on import of equipment and machinery for manufacture of raw material.

Drug Prices.

10. Under the present policy, drugs which are manufactured by way of formulation in the country, as well as all imported finished drugs, are subject to price control. Price fixation is done by the Drug Registration Board (appointed under the Drug Act) as one of the conditions of drug registration. The Registration Board has also appointed a Pricing Sub-Committee which is entrusted with the task of price examination and recommends the price of the drug arrived at to the Board for ratification. In case the manufacturer does not agree to price so approved, he may appeal to the Appellate Board appointed for this purpose under the Drug Act.

Herbs/Medicinal Plants

11 The number of plants being used in traditional medicine is estimated to range between 25,000 to 27,000 species. However, perhaps only about 250—270 of these have been acknowledged through scientific investigations to have real therapeutic value when used in extract form by humans.

13. At present there is no control on the manufacture, sale, distribution, quality, efficacy etc., of traditional medicines because these drugs do not fall under the provision of Drug Act, 1976 which controls the manufacture of modern drugs. The lack of any control on these drugs has resulted in increasing trade of spurious/conuterfeit and dangerous drugs.

Quality control :

14. Although the manufacturers are primarily responsible for the quality of each product they market, yet the Government has appointed Drug Inspectors at the Provincial and Federal levels to keep a constant check on the quality of drugs. Drugs marketed in the country, are subjected to random checking. Necessary action including withdrawal of the substandard drugs, suspension of the manufacturer's license and prosecution are taken through the Provincial Quality Control Board and Central Licensing and Drug Registration Boards.

15. Federal Government is maintaining 2 drug testing laboratories *i.e.*, Central Drugs Laboratory, Karachi and at National Institute of Health, Islamabad. Punjab Government is maintaining one drug testing laboratory, at Lahore which is testing the samples drawn by the Provincial Inspectors of Punjab and N.W.F.P. Facilities of drug testing are also being developed by the Government of N.W.F.P. and Baluchistan. Three Drugs Courts, one each at Karachi, Lahore and Peshawar have been established to try case of contravention of provision, of the Drugs Act and Rules framed there under.

RECOMMENDATIONS

Registration

16. There is a need to rationalise the vast array of drugs and concentration of resources on meeting the requirements of drugs for the most common ailments. This rationalisation can be accomplished by:

(a) restricting import of drugs which have an adequate local manufacturing base and/or for which an effective substitute is available locally.

(b) eliminating irrational combination products, obsolete drugs, drugs not marketed in the country of origin and drugs having place be effects.

(c) Formulation of a separate Drug List for the public sector at each level of health delivery system.

Based on the pattern of diseases, a list of the essential drugs can be drawn up in consultation with the public health service, medical profession and pharmaceutical firms. In this context one can draw from the experience of countries like Bangla Desh, who have been able to reduce the number of drugs, without affecting the quality of health care.

Import Policy

17. It is obligatory that only those drugs should be imported which are not being manufactured/formulated locally. Scientific equipment and instruments for exclusive use of the phrmaceutical industry should be exempted from custom duty and sales tax. Import of raw material for exclusive use of pharmaceuticals like imported finished drugs should be exempted from Iqra and Import surcharge.

Export

18. The existing conditions are such that export of drugs is not profitable and this aspect needs to be studied in detail.

Basic Manufacture

19. There is a need to pursue a very active policy of encouraging local manufacture of drugs on the basis of following considerations.

(i) Local manufacture leads to foreign exchange savings.
(ii) Local manufacture helps to keep drug prices low.
(iii) There is a better control of drugs produced within the country.
(.v) The expansion of domestic industry provides more job opportunities and technical advances.

Local manufacture should, therefore, be encouraged even at the cost of increases in the price of the drug. Appropriate incentives should be provided on the semi basic manufacture/manufacture from intermediates. The policy regarding basic manufacture should allow the country to manufacture most, if not all, drugs by the year 2000.

Drug Pricing

20. The present pricing system does not include a proper scrutiny of cost analysis which is necessary according to standard cost accounting principles. The examination/scrutiny for the purpose of price fixation/revision should be done by a professionally qualified cost expert. The infrastructure for Drug Pricing needs strengthening and the administrative machinery for Registration and Licensing needs steamlining to avoid delays and ensure realistic appraisal of price fixation. The present procedure of fixation of " Maximum Retail Price " of the drug on the basis of present proforma used by Health Ministry should be revised and new procedure/proforma be devised by the said cost expert so as to bring control over weaknesses like prevailing monopoly on charging the imported materials on exaggerated costs through " Transfer Pricing " and on spending by companies on lux ury expenses on marketing and sampling costs.

21. The group was of the opinion that the prices of all drugs and medicines, other than essential and life saving, should be decontrolled. This will ultimately lead to a decrease in the prices of drugs. The public health system, however, is entitled to availability of essential drugs at reasonably low prices. Therefore it is necessary to control essential and life saving drugs.

22. The above proposal will ensure regulated prices for the essential and life saving drugs while freeing majority of the items from detailed control, costly procedural delays and higher mark ups. It will also promote more competition and efficiency. This will be a practical way of deregulating the prices of drugs and medicines in a phased and pragmatic manner.

23. Under the Drugs Act 1976 pharmaceutical firms are allowed to spend 5 per cent of their turn over on advertisement. This amount (*i.e.*, 5% turnover) can be in crores. If this is reduced, the prices of drugs can be brought down. The government should seriously think about provision of advertisement free drug information to the medical profession.

24. If the recommendations at Serial No. 21 & 22 are accepted the **Drug Act** 1976 will have to modified.

25. Although Pakistan is endowed with medicinal plants wealth these are still being imported in large quantities. A multi-directional effort on R. & D. work on medicinal plants is required to be undertaken to accomplish self-sufficiency in herbs and herbal preparations. To various area of research would involve.

(*a*) Cultivation, propogation, regeneration and preservation.

(*b*) Extraction of active constituents.

(*c*) Standardization of herbs and herbal preparation.

(*d*) Screening, toxicological and clinical studies.

26. The medicinal plants have been the oldest and constant source of medicament for the treatment of variety of diseases, it is imperative that the plant medicines be given its due place and a rational scientific basis be provided to it. However there is also a need to dispel a general view that traditional medicines are safe and effective because these have been tried by man over centuries. There is therefore an urgent need to enact suitable legislation to control the manufacture, sale etc., of traditional medicines to safeguard public health.

Quality control

27. The quality control facilities be strengthened and upgraded both at Federal and Provincial levels on a priority basis by adopting following measures.

(*i*) A quality control laboratory should be established at each provincia metropolis to fulfil the requirement of drug laws and the existing laboratories strengthened in terms of manpower and equipment.

(*ii*) An independant Drug Laboratory be established at the Federal level.

(*iii*) Quality Control Boards should include experts from all allied disciplines.

28. A good quality control laboratory would cost about Rs. 100.0 million. It is therefore imperative that an amount of Rs. 400 million be earmarked for quality control laboratories during the Seventh Plan. Further there is a need to establish an independant laboratory for evaluation of drugs. The laboratory which could be designated as " National Biological Evaluation Centre " (NBEC) will carry out research on pharmaco kienetics, pharmacodynamics, bioavalability and clinical studies. The funds for this centre could be provided from the research funds provided by the pharmaceutical industry.

29. As a long term measure for quality control there is a need to establish an independant Directorate of Drug Control on the pattern of FDA of U.S.A.

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HEALTH FINANCING

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X. HEALTH FINANCING

The Working Group on health financing met under the chairmanship of Mr. Fazalur Rahman Khan, Secretary, Ministry of health, Special Education and Social Welfare on 20th November 1986. List of participants appears at Annexure I. Terms of reference are given at Annexure II.

2. An overview of health financing system of public sector brought to light that health sector was not given due importance till mid-seventies. The low allocations in the development budget suffered another set-back upto mid-seventies which was low utilization of allocations. The first increase in development allocation was noticed in 1974 when it increased from Rs. 96 million in 1973 to Rs. 176 million in 1974. Second significant increase was in 1976. The utilization rate picked up simultaneously. From 1976 to 1979 there was no significant increase but in 1980, the development expenditure in health sector registered substantial increase. In early 1980's development expenditure was about 4% of ADP while in 1986-87 the allocation is 5.56% of ADP. The most significant achievement is that the utilization rate of allocations has picked up and has been more than 95 per cent since 1980.

3. The non-development expenditure has been increasing steadily but over the last three years the growth rate has been substantial and it has doubled in this short period of 3 years. In 1983-84 non-development expenditure was more than the development expenditure and this trend is continuing. As of 1986-87, public sector expenditure is more than 1% of GNP.

4. During the Sixth Plan, the private sector development has lagged behind the planned targets. Except for few large urban areas, expansion of private health sector has been slow. The expansion of hospitals has been slower than solo-clinics. According to the World Bank estimates, Pakistan was spending 3.2%of GNP on health. Since then the expenditure in the public sector has increased by 0.5 per cent of GNP and significant improvements have been noticed in the private sector spending. The current estimates indicate that Pakistan is spending around 4 per cent of GNP on health sector.

5. Changes in disease pattern have occured and are continuing. Chronic and degenerative diseases, hypertension, is chaemic heart diseases and accidents are replacing the common parasitic and infectious diseases. The emerging disease pattern will be more pronounced in next ten years. The changing disease pattern will increase the national spending on health and requires adoption of new technological advances. These technologies are difficult to maintain once they are acquired. According to national priorities in the next plan the infrastructure has to be expanded to provide reasonable care to the people. Thus the expenditure on health sector will increase which will mainly be of non-development in nature. In the long term perspective, the investment expendiutre may not increase but the non-development expenditure will continue to increase.

6. A number of structural adjustments in the health care system were discussed to narrow the gap between needs and resources. Salient features are as follows :—

(*i*) Shift to promotive and preventive medicine with less investment on curative services, particularly the provision of drugs other than primary health care ;

(*ii*) Improvements in the management of health care system backed by adequate training of health managers;

(*iii*) Initiation of health services research for improving the quality of services at cost effective basis;

(*iv*) Introduction of in built monitoring and evaluation system for timely remedial measures at appropriate level;

(*v*) Expenditure on large urban hospitals, specialities and super specialities may not be increased. Rather more resources be shifted for improving rural health services/ primary health care;

(*vi*) Decentralization of services with adequate resources and authority; and

(*vii*) Development of a hospital formulary to cater for the drug needs of masses, particularly for primary health care.

7. A view was expressed that peripheral/rural hospitals should be run on the lines of Mission Hospiatal, Texila. This is an innovative expenditure saving device by shifting the expenditure of diet, bedding, miscellaneous nursing care and part of drugs on to the patient without making him realise. A proper mix of health providers team will also be cost saving device. The specification of infrastructure can also be lowered without sacrifying functional utility thereby economising the development expenditure. Duplication of facilities should be avoided while planning new services. Where private sector is providing the services, pulblic sector facilities should not be built. Possibility of passing on some of the burden of health man power training to the private sector within the framework of enforced regulations be considered as an alternate to reduce public sector spending.

8. It was also expressed that the gap between needs and resources is not so wide as is being assumed. There are some inherent weaknesses/gaps in the health sector which need to be bridged for efficient utilization of available resources. The weaknesses are lack of supervision, missing link of monitoring and evaluation, centralization of power and slow pace of development of private health sector.

9. The need for standardization of design of various levels of health facilities to discourage unnecessary expenditure on infrastacture and maintenance was stressed to economise expenditure. Any proposal for fresh users charges should be weighed carefully because of past experience and poor quality of services in the public sector.

10. At this stage, the group discussed various alternates of generating new resources *e.g.*, social security, health insurance, users charges, cost sharing by municipalities/zilla councils, banking services, development of private sector etc.

11. The group discussed pros and cons of health insurance at this stage. Insurance wizards were of the view that health insurance could only work in a community where greater proportion of people are insured and have high literacy rate. However, health insurance for urban areas can be studied and has great potentialities in cost sharing of health expenditure.

12. The group supported expansion of employees social security scheme to units employing smaller number of persons and also to non-industrial units as the present system is working satisfactorily. The details need to be gone into for expansion of this system.

13. Banking Council makes available credit facilities from the commercial banks for the private clinics. Credit upto Rs.0.2 million is provided under small scheme loans. Loan of Rs.25,000 is available from banks for day to day improvements and Rs.50,000 on soft terms for a clinic in rural areas. Banks also provide loan upto Rs.0.3 million for construction of hospital/ clinic building. Mandatory targets are being set by each bank every year. These facilities are besides the line of credit of Rs. 200 million under samall business finance corporation. The group was of the view that commercial banks can have a more positive role than the practice hitherto in health sector development.

14. Users' charges were discussed and the group was of the view that this has a great potential which required detailed study. Insurance compared to out-of-pocket has more merits than demerits. The group suggested levying a health tax on the analogy of Iqra tax.

15. A participant advocated the improvement and rationalization of traditional medicine as it is cheaper way of providing primary health care, particularly in the rural areas.

16. Finance Devision informed that resource availability is limited. Major part of the recurring budget is consumed on subsidy, defence and debt servicing. The current budget requirement will be around Rs. 7-8 billion in the public sector by the end of the Seventh Plan by conservative estimates. Such an increase is unlikely to be supported from the current budget. Gurrently, rceipts from the health sector, are not more than 5 per cent of current brdget. The representatives of the provincial Finance Departments were hopeful that in the next few years users' charges could be increased without much resistance from the consumers. However, the group agreed that alternate sources of cost sharing of health services will have to be found out, even for the public sector.

17. The points which were generally agreed are as follows:

(*i*) Improve management of health care system to optimise the benefits;

(*ii*) Initiation of health services research to improve efficiency and cost benefit ratio;

(*iii*) Decongestion of hospitals through primary health care in urban areas;

(*iv*) Recurring bill of primary health care should be borne by the municipalities/Zila Councils/Union council or atleast partly shared by them;

(*v*) Extension of social Security scheme to nonindustrial sector and to the employers employing even upto two persons;

(*vi*) Coverage of public sector employees upto Basic pay scale 1—16 through social security;

(*vii*) Build more private wards/rooms in the public sector hospitals for cost recovery;

(*viii*) Introduction of users' charges.

(*ix*) Health insurance and Drugs should not be provided free by teritiary care facilities.

18. Inspite of above devices, recurring bill would be between Rs.6-8 billion in the last year of the Seventh Plan. Efforts will have to be made to recover 25 per cent of recurring expenditure through users' charges by 1993 to improve the resource availability.

19. Summing up, Chairman remarked that two main themes have emerged from the deliberations:

(*a*) How to generate new funds?
- + Social Security scheme
- + Health insurance
- + Users' charges
- + Rationalization of pharmaceutical industry and drug bill
- + Passing on the burden of primary health care to local governments.
- + More incentives for private sector for sharing of burden of health care.
- + Sharing burden of health manpower training with private sector.

(*b*) Better utilization of avialable resoureces by:
- + Improving efficiency of health care system
- + Health services research
- + Avoiding duplication of services;

20. It was finally agreed that a sub-committee headed by Dr. Siraj-ul-Haq Mahmud be constituted with a representative from Health Division, Finance Division, Central Board of Revenue and one each from each province. The committee will suggest concrete measures of cost sharing and improved distribution of available resources.

Annexure-I

LIST OF PARTICIPANTS

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Annexure-II

TERMS OF REFERENCE

1. Efficiency of administration, budgeting and cost control in Government Hospitals.

2. Forecasts of future levels of capital and current costs in the seventh plan and upto year 2006.

3. Policy relevance of current and projected patterns of expenditure.

4. Mobilization of additional fufnds *e. g.* by health insurance, social security etc.

5. Viability and extent of users' charges.

6. Improving the efficiency of use of existing, and projected resources by using different strategies.

MID-PLAN REVIEW OF THE SIXTH PLAN

179—180

HEALTH SECTOR

MID PLAN REVEIW

First three years of the plan have successfully changed the direction by giving due importance to preventive and promotive aspects and primary health care. A Basic Health Unit and or a Rural Health Centre is now available in 68 per cent of the union councils while 75 per cent of the childern have been fully immunized against six preventable diseases of childhood.

2. Sixth plan aimed at providing 6 per cent of the capital outlay for health sector. From less than 4 per cent, it has moved to 4.7 per cent in the third year of the plan while 5.56 per cent has been allocated in the fourth year. For the curren budget, sixth plan projected an annual growth rate of 20 per cent. This targe has been surpassed and the revenue budget has grown at the rate of 23 per cent during the first three years of the plan. Sixth plan also aimed at providing jobs to 50 per cent of the doctors in the public sector and the balance in the private sector. Satisfactory progress has been made in this regard and this is being achieved in the fourth year of the plan by providing 1800 new jobs from the regular budget and 1500 additional jobs from the special fund earmarked for the employment of the unemployed educational youth. Rs. 200 million line of credit for doctors desirous of settling in private sector has been allowed during the fourth year of the plan to facilitate about 2200 doctors to be self-employed.

3. Two sub-sectors have not moved as planned. These are traditional medicine and nutrition. In the first no satisfactory progress has been made due to lack of proper projectization of the programmes while the latter provides promise during the remaining part of the plan.

4. There are many other areas where progress has been below satisfactory level. One such areas, particularly, to be mentioned is the management training to health professionals and creating a cadre of health managers, where no progress can be reported.

5. On health indices, some perceptible achievements have been meade. Infant mortality has declined by 15-20 per cent. Eight thousand mothers dying due to delivery related complications are now being saved every year.

Financial

6. In the first year of the plan an allocation of Rs. 1620 million was made. This was an increase of 40 per cent over the revised estimates of 1982-83. This sharp increase, however, could not be maintained and Rs. 1706 million were spent during the second year of the plan. The third year of the plan showed a slight upward trend again with an allocation of Rs. 1895 milloin. The total spending during the first hree years is Rs. 5098 million with a likelihood of Rs. 6260 million being spent in the last two years of the plan. Thus the total estimated expenditure

of health sector during the sixth plan is likely to be around 87 per cent of original plan allocation. The total estimated expenditure of Rs. 11,358 million is going to equalise with the net plan allocation of health sector Rs. 11,375 million.

7. The above mentioned figures includes the expenditure of Pakistan Medical Research Council which is also reflected under Science and Technology Chapter besides and the medical rehabilitation of the disabled which is reflected as well under Social Welfare and Special Education Chapter.

8. The most encouraging feature of the Plan is that for the first time the recurrent budget is more than the capital outlay. In the previous plans, the revenue expenditure was less than the development expenditure but this phenomenon has now been reversed. The development and non-development expenditure ratio of 1: 0.8 has chnaged to 1: 1.4 during 1985-86. While capital outlay has increased; the non-development expenditure has increased much more sharply. This trend can be seen from the following figures :—

(Rs. in million)

Budget	Expenditure		
	1983-84	1984-85	1985-86
Development	1620	1706	1895
Non-Development	1680	1986	2638
Total ..	3300	3692	4533

9. Region-wise allocations and financial utilization during 1983—86 and expected allocations during 1986—88 are given at annexures I—VI. Comparison of financial outlays during Fifth Plan and Sixth Plan is at Annexure-VII.

Physical

10. Based on the progress of the first three years of the Sixth Plan, a trend has been established which will ensure a primary health care facility to nearly all. A Basic Health Unit/Rural Health Centre with out-reach services, will be available to 96 percent of the union councils by the end of the Plan.

Physical Infrastructure

(*a*) *Public Sector*

11. The following table gives the likely achievement during the Sixth Plan period :—

Facility	Target	Achievement	% Achievement
(i) Doctors residences at existing BHUs	1715	1715	100
(ii) BHUs	2600	2152	83
(iii) RHCs	355	206	58
(iv) Teaching beds	3500	3500	100
(v) Hospital beds in DHQs and THQs	4700	5149	110

12. Almost all the targets of manpower, as laid down in the Sixth Plan will be met except short-fall in training of paramedics and specialists. Agency-wise targets, achievement during 1983—86 and likely achievements during 1986—88 are given at Annexures-VIII-XV.

(*b*) *Private Sector*

13. The existing concessions have not proved conducive to promote the development of private sector the way it was envisaged in the Sixth Plan. Therefore, the growth of the private sector has been much slower than the one proposed in the Sixth Plan.

14. The estimated achievements during 1983—86 are as follows :—

A.	Hospital beds	3000 (Plan target 20,000)
	Investment @ Rs. 0.2 million/bed ..	Rs. 600.0 million (i)
B.	Doctors settling in private sector ..	4000 (Plan target 10,000)
	Absorbed in hospitals @ 1/10 beds ..	300
	Solo clinics etc	3700
	Investment @ Rs. 0.05 M/clinic ..	Rs. 185 million (ii)
C.	Total investment (i) + (ii)	Rs. 785 million

15. Estimated expenditure in the private sector on health care during 1985-86 is as follows :—

	(Million Rs.)
(i) Development (clinics + beds)	600.00
(ii) Drugs	3000.00
(iii) Hospital beds (13,000 beds @ Rs. 250/bed/day at 80% occupancy)	950.00
(iv) Solo clinics (10,000@Rs. 5 thousand/month)	600.00
(v) Specialists of the Public Sector 3000 @ Rs. 10,000 million..	360.00
(vi) Traditional medicine/indigenous/unqualified allopathic practitioners@ Rs. 2500/month 60,000	1800.00
Total ..	7310.00

16. On the basis of new concession like soft loans, the private sector is likely to pick up and the investment expenditure is likely to be around Rs. 2.5 billion during the Plan period.

17. On the basis of the under construction hospitals, it is estimated that private sector achievement of hospital beds will be around 8000. The doctors setting up private practice will be around 7500.

18. Besides, there is a large corporate sector. Employees Social Security Institutions, Departmental and local bodies health care systems which remain unaccounted in the above expenditure. The total health expenditure is now estimated to be around 4 per cent of G.N.P.

Employment of doctors

19. At the beginning of the Sixth Five year Plan it was estimated that 5-6 thousand doctors were un employed. During the first three years of the Plan 11,550 doctors have been produced and another 8000 will be produced during the remaining two years of the Plan.

20. During the first three years of the Plan a number of measures were introduced to improve the unemployment situation of the doctors. These include following :—

(i) Creation of posts for male doctors-one for each Basic Health Unit ;

(ii) Creation of the post of second male medical officer in Rural Health Centre ;

(iii) Introduction of second shift in urban hospitals ;

(iv) Improving the staffing pattern of tehsil/taluka and district hospitals by making an effort to provide doctors on the basis of the patient load ;

(v) Improvement of emergency units of various hospitals ; and

(vi) Liberal loaning facilities for setting up private practice.

21. In addition to the above mentioned measures, the creation of new facilities opened avenues for employment of doctors.

22. At the beginning of the Plan there were less than 5000 general duty doctors in the public health system. This increased to 12,511 on July 1, 1986. An addtional 1500 posts for doctors alongwith supporting staff have been created in September 1986, thus raising the total number of posts to 14011. Thus the public sector alone has provided more than 9,000 jobs for doctors. The private sector absorbed about 4000 doctors. About 200 doctors every year have been employed by the semi-public sector like Railways, PIA, WAPDA, Employees Social Security Institutions and other similar bodies. Considering a high attrition rate for female doctors and normal rates for male doctors about 300—400 doctors were getting out of the job market every year. Therefore, the net impact of the various measures introduced in the Plan is that the problem of unemployment of doctors did not aggravate further than what it was at the beginning of the Paln. The unemployment problem is mainly in Sind due to larger intake and comparatively slower expansion of health facilities.

23. For subsequent Plans, the problem will not be of the same magnitude as the intake has been reduced in various medical colleges. Seats were reduced by the Government of the Punjab for the admission year 1984-85 and this policy continued through 1985-86 and 1986-87. The admissions in medical colleges of the Punjab has been reduced from 1700 in 1983 to 1085 in 1986. The admission seats in Sind are around 1600 in 1986 as against 1760 in 1983. NWFP has reduced seats from 406 in 1983 to 320 in 1986. Baluchistan has reduced admissions from 180 to 147 in the corresponding period. The total seats in all medical colleges have been reduced from 4200 to 3365 in the first three years of the Plan. This will seriously affect the availability of doctors in subsequent Plans and is also against the Cabinet decision of 5th October 1982 where it was decided to freeze the number of seats in medical colleges.

24. Another factor which requires attention for corrective measures is that the admission policy in medical colleges of the larger provinces, particularly punjab is in favour of males. In 1986 admissions, a girl getting 827 marks could not be admitted while the last boy admitted had 731 marks. This needs immediate attention and sex discrimination in favour of boys needs to be done away with.

Users Charges

25. Some user charges were introduced with the launching of the Sixth Five Plan. Government of the Punjab during 1985-86 increased the fees for out patient treatment from Rs. 1.00 to 5.00 and also introduced a bed charge of Rs. 10.00 per day per patient. Every patient being admitted bad to pay Rs. 150/- as advance for his/her stay in the ward. After the introduction of the bed charge a lot of criticism was raised in the press and the whole situation has to be reviewed. Bed charge of Rs. 10/-per day per patient has been withdrawn with effect from 1-7-1986 by the Government of the Punjab. Though in monetary terms the collection has increased but in percentage terms it still remains 4-5 per cent of the current budget.

Targets in Human Terms

26. On the basis of the expected performance, the following targets in human terms are likely to be achieved :

Indicator	Unit	Target	Achievement		% achievement
			1983—86	1986—88 expected	
(i) Immunization (children) ..	Million	24	16.450	8.000	102
(ii) Diarrhoeal diseases control (ORS packets) ..	Million	25	29	20	196
(iii) Third degree mal-nutrition ..	Million	1.25	0.20	0.10	24
(iv) TBAs (dais) ..	No.	30,000	18,950	10,000	97

27. Some of the important projects of Health during the Sixth Five Year Plan appear in the subsequent paragraphs :—

Accelerated Health Programme

28. To reduce the infant deaths and deaths of pre-school children, Accelerated Health Programme was started in 1982. This includes the following :—

(*i*) Immunization of children below the age of 5 years against six preventable diseases viz. diphtheria, whooping cough, tetanus, measles, poliomyelitis and tuberculosis ;

(*ii*) Control of diarrhoeal disorders by oral rehydration therapy ; and

(*iii*) Improved maternal care by trained birth attendants (dais), at least one per village.

Rs. 650 million have been incurred since 1982. Rs. 118 million were incurred during 1982-83 and Rs. 532 million during the first three years of the Plan. The programme will continue with Rs. 100 million each year during the last two years of the Plan. This is a programme which is totally funded by our own resources and has shown excellent results. So far 16.450 million children have been immunized against a planned target of 24 million. The coverage of children fully immunized against six preventable diseases has increased from 2 percent in 1982 to 75 percent by June, 1986. 29 million packets of ORS have been distributed against a planned target of 25 million and 18,950 birth attendants have been trained aginst a planned target of 30,000.

29. Immunization alone is now saving 100,000 lives of children with a protection of nearly 45,000 children from becoming disabled. Care during pregnancy/delivery through trained TBAs and protection of women of child bearing age against Tetanus will result in prevention of about 8,000 maternal deaths every year. Accelerated health programme has also a significant impact on reducing the infant mortality. It is estimated that infant mortality rate has been reduced by 15—20 percent through three components of accelerated health programme.

Rural Health Programme

30. 1112 Basic Health Units and 132 Rural Health Centres were added during the first three years of the Plan and the total number of BHUs and RHCs on 1-7-1986 was 3089. During the remaining two years of the Plan 1040 BHUs and 74 RHCs will be added. The provision of Rural Health facility in each union council will increase from present 68 percent to 96 percent by the end of the Plan.

Availability of Doctors in the Rural Areas

31. Doctor's residences are being added in the existing BHUs and RHCs. About 1500 additional jobs of doctors have been created in the rural areas and the total number of positions of doctors is now 4000. At the beginning of the

plan one doctor was available for 50,000 persons in the rural areas. It is now estimated that a doctor is available for every 18,000 persons in the rural areas.

Eye Ward, Mayo Hospital, Lahore

32. Eye Department, with 200 beds, providing the latest equipment to deal with almost all the complications of eyes has been completed and it is now fully functioning. This gives a three times increase in the number of beds in the Mayo Hospital for eye diseases. It has been completed at a cost of Rs.51 million. This department was upgraded to an Institute of Ophthalmology on 14 12-1985 by the Government of the Punjab.

Punjab Medical College Faisalabad

33. Punjab Medical College and Teaching Hospital Faisalabad will be, completed by the end of the Plan at a cost of Rs. 430 million . The hospital will have 700 beds. The work was started in March 1978. The college part has already been commissioned.

Ayub Medical College, Abbottabad

34. The work on the new campus of Ayub Medical College and Hospital, Abbottabad was started from 1984-85 . The hospital, the college hostels, nursing school, paramedical school will be completed by 1988. This hospital willl have 600 beds and will be completed at a cost of Rs. 636 million.

Bolan Medical College and Hospital, Quetta

35. The suspended work on the Bolan Medical College will be restarted during 1986-87. The college part will be commissioned by end 1986 and the hospital with 650 beds will be commissioned by June 1989. The cost of the project is estimated at Rs. 750 million.

Islamabad Hospital, Islamabad

36. Islamabad Hospital has been completed at a cost of Rs. 600 million. It will have 600 beds, outpatient services, diagnostic facilities including C.T. Scanners, residential accommodation and nursing school. Outpatients of the hospital and C.T. Scan have been commissioned, on trial basis since 18-12-198 .

Children Hospital, Islamabad

37. A 200 bedded children Hospital Islamabad to serve as a referral hospital for children diseases with latest equipment has been completed at a cost of Rs. 240 million. The hospital has been built under Japanese grant. It has started functioning on trial basis since 18-12-1985.

Nuclear Medical Centre, Islamabad and Lahore

38. The diagnostic facilities at Nuclear Medical Centres at Islamabad and Lahore have been commissioned. Linear accelerator has been installed and commissioned at Islamabad. This provides latest treatment for cancer patients and is the first machine to be installed in the country. The indoor facilities are in an advanced stage of construction and the two projects will be completed at a cost of Rs. 107 million. During the Plan, a nuclear medical centre will also be set up at Quetta while existing ones at Karachi, Jamshoro, Multan, Larkana, Peshawar will be expanded.

Sheikh Zayed Hospital, Lahore (outside ADP)

39. Sheikh Zayed Hospital, Lahore has been built at a cost of Rs. 285 million. This is a first rate hospital and has some of the finest medical facilities available anywhere in the world. The hospital with 350 beds was commissioned in October 1986.

Traditional Medicine

40. Provision of Rs. 375.00 million was made in the Sixth Five Year Plan for traditional medicine *i.e.* Tibb, Homoeopathy and Ayurvedic systems of medicine. The progress made during the Plan is as under :—

41. *Health Division.*—An allocation of Rs. 2 million was made for Traditional Medicine Research Institute in the ADP 1985-86, which could not be utilized.

42. (*i*) *Punjab.*—Two Directorates, one for Tibb and the other for Homoeopathy, each headed by an Assistant Director (BPS-18) have been established under the Director of Health Services.

43. (*ii*) Eighty Tibbi Dispensaries have been established in the Distt/Tehsil Headquarters Hospitals and some special institutions *viz.* Services Hospital Lahore, Nishter Hospital Multan and B.V. Hospital Behawalpur. Each Dispensary is staffed by a qualified tabib, a dawasaz, and a dawakob.

44. (*iii*) The Provincial Government intends to make a start by adding Homoeopathic outpatient units in the already established hospitals during the current Plan.

45. *Sind.*—(*i*) 21 Unani Dispensaries are already working and 8 are under construction.

46. (*ii*) It is now proposed to establish six Homoeopathic dispensaries.

47. *N.W.F.P. and Baluchistan.*—There are no dispensaries/outlets of traditional medicine in NWFP and Baluchistan. These Provinces are contemplating to take necessary steps in this direction.

48. *Azad Jammu and Kashmir.*—There are 11 Unani Dispensaries working under the Health Department. It is proposed to establish a Tibbia College and 10 more dispensaries during the current plan period. All these are financed out of the current budget.

49. *Financial Aspects.*—Total estimated expenditure on traditional medicine during 1983—86 will amount to Rs. 13 million *i.e.* 3.5 per cent of the total allocation of Rs. 375.00 million during the Sixth Plan period.

50. *Manpower.*—There are 10 recognized unani and 13 homoeopathic teaching institutions in the country. There is only one Tibbia College in the Public Sector. The total number of practitioners of traditional medicine is 51,036. About 50 per cent parctitioners are expected to be in the rural area.

51. The progress will continue, more or less, at the same pace for the remaining part of the Plan as the traditional medicine appears to be reasonably well set in the private sector. There are further actions to strengthen the private sector signifying little interest in the public sector.

Rural Health Programme

52. In an evaluation of the Rural Health Programme, it was observed that the recurring expenditure of the basic health units is generally on the low side. Some of the technical staff posted at rural health centres are not provided with residential accommodation. The beds at rural health centres are generally underutilized due to non-availability of nursing facilities, diet, drugs and medicines. Laboratory and operation theatre facilities at rural health centres are under utilised due to lack of training of the staff, non-existence of referral system and professional follow-up. Family planning services are not provided by the health outlets. Training of the paramedics poses problems due to non-availability of text books, non-existence of regular schools and buildings, part-time tutors, lack of teaching aids and English as medium of instructions.

53. To improve the effectiveness of the rural health programme, the following adjustments were approved by ECNEC on 5-9-1985 on the basis of the findings of the evaluation :

(*a*) Each union council be provided with, at least, one rural health centre or a basic health unit by June 1988, the latest. This lead to the revision of the targets.

(*b*) Each BHU should provide out-reach services through mobile teams of 3-4 persons and be responsible for the following, in addition to curative services :

(i) full immunization of children ;

(ii) active case detection of malaria and treatment ;

(iii) immunization of expectant mothers with tetanus toxoid ;

(iv) all nutritional aspects of vulnerable groups particularly growth monitoring and appropriate advice ;

(v) treatment of diarrhoea by oral rehydration therapy ;

(vi) case detection, treatment and follow-up of tuberculosis ;

(vii) training place for birth attendants ; and

(viii) school health services.

(*c*) The staff of BHUs will be trained in child spacing techniques and the full range of contraceptive devices be supplied.

(*d*) The Malaria Control Programme microscopist will work in the laboratory of the Rural Health Centre.

(*e*) Residences for staff will be provided where deficiencies exist.

(*f*) Telephones in the Rural Health Centres be provided where lines are already laid ; and

(*g*) Ambulances be provided to all Rural Health Centres.

54. On 31st December 1985, Prime Minister announced economic and social development programme for the nation. The programme set out in the Prime Minister's address to the nation included rural education, supply of electricity to 90 per cent of the villages, supply of potable water to most of the population and setting up of a basic health unit in every union council, in addition to setting up of rural health centres. These targets are to be accomplished during the next four years or by June 1990. Rs. 70 billion will be spent on these develop ment projects. For the health sector, Rs. 5.71 billion have been earmarked.

55. In the light of the reviews already undertaken of the basic health units and rural health centres, certain adjustments are required to make them more effective so that better facilities are made available to rural population. This will minimize their travel to urban areas and reduce the untold miseries.

56. The new approach has been discussed with the Federal Health Ministry and the Provincial Governments and there is, by and large, general agreement to the approach proposed.

"Considering the general scarcity of diagnostic and referal facilities in the rural area and keeping in view the priorities for the Seventh Five Year Plan, it is considered desirable to strengthen the maternity child health care components of basic health units as well as of Rural Health Centres by providing special beds and a labour room, space for monitoring growth of children, immunization and for practical demonstration for special feeding formulae and health talks. Rural Health Centres should have

a proper laboratory, X-ray facilities, a dentist and more beds so as to make them reasonable sized hospitals which will be staffed by qualified nurses. The number of beds may be increased to 20—25 with residential accommodation for nurses and provision for ancillary facilities.".

57. The main features will include the followings :

(*i*) Maternity and child health care components of Basic Health Units as well as of Rural Health Centres be expanded by providing beds and a labour room, space for monitoring growth of children, immunization and practical demonstration area for special feeding formulae and health talks.

(*ii*) X-ray be provided and laboratory services be expanded at rural health centres.

(*iii*) A dentist be provided at rural health centres.

(*iv*) Bed strength of rural health centres be increased to 20—25 with provision for nursing services (preferably male nurses).

58. The details of additional facilities to be provided in existing BHUs and RHCs according to the above mentioned guidelines will be as follows :

Rural Health Centre :

(*i*) Dental unit with dental surgeon ;

(*ii*) X-ray facilities ;

(*iii*) Labour room where not provided ;

(*iv*) Improvement and expansion of laboratories where already provided otherwise provision of adequate laboratory services ;

(*v*) Immunization and demonstration rooms ;

(*vi*) Increase in bed strength to 20—25 beds ;

(*vii*) Residential accommodation :

— Third Medical officer's residence

— Dental Surgeon's residence

— Nursing staff and paramedics quarters

— Ancillary staff

(*viii*) Tube well and overhead tank ;

(*ix*) Spetic tank and soakage pit ;

(*x*) Kitchen ;

(*xi*) Garage :;

(*xii*) Ambulance ;

(*xiii*) Telephone ;

(*xiv*) Boundary wall where not provided ;

(*xv*) Stand-by generator.

Basic Health Unit :

(*i*) Medical officers room ;

(*ii*) Immunization room ;

(*iii*) Practical demonstration room for special feeding formulae, health talks and monitoring growth of children.

(*iv*) Reasonable laboratory ;

(*v*) Labour room ;

(*vi*) Two maternity beds ;

(*vii*) Residential accommodation for

— Medical officer
— Additional paramedics (1-2)
— Ancillary staff quarters.

(*viii*) Tube-well and over-head reservoir ;

(*ix*) Septic tank and soakage pit ;

(*x*) Stand-by generator.

59. Presently, 2800 union councils have either a Basic Health Unit or Rural Health Centre. Some of the union councils have more than one such facility as it was, hitherto, difficult to exercise strict control of not allowing setting up of such facilities in the already served union councils. The strict monitoring of the programme under Prime Minister's programme allows setting up of such facilities in union councils without such facilities.

Disabilities

60. These programmes now form a component of the Social Welfare and Special Education Sector. It is expected that the entire allocation made for rehabilitation of the disabled will be consumed by that sector in the last year of the Plan.

Nutrition

61. In the first three years, progress has been very slow in developing nutrition programmes. The main activities to combat mal-nutrition were :

(*a*) Provision of dietary supplements from health outlets to mothers and and children at risk through World Food Programme.

(*b*) Supply of iodated salt in areas having high endemicity of goitre *viz* Northern Area and Chitral.

62. One of the main reasons for slow progress was that no agency seemed to be responsible for these activities. After a protracted dialogue at National level with full participation of provinces, a concensus has been achieved. Accordingly a Nutrition Cell has been created in the Planning Commission to provide necessary support to various technical ministeries and coordinate among provinces, Federal Government, international agencies and bilaterals. One of the major tasks of this cell would be to assist in developing a viable programme in nutrition. For coordination Nutrition Syndicate has been created which derives membership from all participating ministries and provinces alongwith NGO'S.

Issues and Problems

63. Some of the areas on which little progress has been made during the Sixth Five Year Plan are given in the subsequent paragraphs. These are extracts taken from the Sixth Plan.

1. **Health Manpower**

(a) *Training of doctors.*—The training of doctors is weak in primary health care and will be adjusted accordingly. Pakistan Medical and Dental Council will prepare the methodology to train general physicians. The output of specialists will be doubled from 135 to 250 per year. Training positions will be created in all teaching hospitals and registrars posts will be tenure appointments. A post-graduate cell in each medical college will be created. Uniformity and quality will be maintained by the College of Physicians and Surgeons. No significant progress has been made in these aspects.

(b) *Dentists and dental services.*—School age population will be provided dental services. Appropriate dental units will be created at tehsil/taluka and district headquarter hospitals. Department of dentistry in medical colleges will be redesignated as dental schools/colleges and weaknesses removed. Training of para-dental staff will be started in all teaching institutions. A beginning will be made towards manufacture and maintenance of dental equipment. Except for provision of dental care at some Rural Health Centres, the progress is reported to be poor.

(c) *Pharmacists.*—Hospital pharmacies upto tehsil/taluka level will be managed by pharmacy graduate. The progress to be poor in implementing this action of the Plan.

(d) *Nurses.*—Nursing services will be improved by delinking service from education and trainees awarded degree in B.Sc. nursing. A public health nurse will be deployed in each district. Low staffing tatio of nurses in hospital will be removed. Punjab province has however delinked services from education. In general, very limited progress has been made in this important programme.

2. **Accidents**

An autonomous body, an Institute of Traumatology, constituted for this purpose will study the magnitude of the problem of accidents and their management. Nothing has been done so far.

3. Cancer

A national advisory committee for cancer to review the existing facilities for treatment of cancer in the country and formulate a national cancer control programme and monitor its implementation will be set up by the Government. No progress is reported so far.

4. **Mental Health**

Mental health services will be integrated as a component of primary health care to provide treatment of priority mental disorders. Experimentally this approach has been tried and proven in Rawalpindi District but needs to be further expanded.

5. Drugs

The prices and number of drugs will be rationalized. The main aim of such rationalization would be (i) to minimise immitative products which add nothing to therapy (ii) to eliminate combination products which are therapeutically undesirable or ineffective (iii) to eliminate drugs with unacceptably high toxicity and (iv) to reduce the commercial pressures on the part of the manufactures to produce trivial new drugs.

A drug schedule will be formaulated for different types of health facility. Sale of drugs and medicines will not be allowed without prescription of a registered medical practitioner by Pakistan Medical and Dental Council. Licences for dealing in drugs and medicines will be restricted to persons possessing a degree or diploma in pharmacy.

Attempt will be made to expand the production of intermediate and basic chemicals required for pharmaceutical manufacture.

The progress is not satisfactory in implementing above components of the Plan.

6. Planning and Management

Planning units will be developed or strengthened with properly trained manpower in the Health Division and the provincial health departments. Similar units will also be set up for district or division (group of districts) and for major hospitals. For proper management, the entire professional and technical staff for health delivery system will be trained in the management of health services. No perceptible action has been taken so far.

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency : *Health Sector*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Esimated Expenditure 1983-86) (Col. 4 6+8).	Likely Expenditure during last two years of the Plan (1986-88).	Total Estimated Expenture during Sixth Plan (1983-88) (Col. 9+10).	Sixth Plan Allocation.	Percentage Utiii-zation. (1983-88) (Col. 11 of Col. 12).
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
i	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health programme ..	325	316	401	360	479	473	1,149	2,747	3,896	5,660	69
2.	Hospital beds	565	555	611	660	702	691	1,906	1,123	3,029	3,545	85
3.	Health Manpower development.	218	223	204	221	284	270	714	1,074	1,788	975	183
4.	Preventive programme ..	425	400	307	392	350	332	1,124	508	1,632	1,490	109
5.	Traditional medicine	1	1	5	5	9	7	13	19	32	375	8
6.	Medical Research (1)* ..	6	6	12	12	16	15	33	58	91	85.	106
7.	Nutrition	18	6	5	5	24	6	17	93	110	250	44
8.	Programme for disabled. (2) ..	7	—	—	—	3	—	—	500	500	500	100
9.	Miscellaneous	55	63	55	51	28	28	142	138	280	120	233
	Total ..	1,620	1,570	1,600	1,706	1,895	1,822	5,098	6,260	11,358	13,000	87.4

* Includes dental services.

(1) Includes Pakistan Medical Research Council which is also reflected under Science and Technology Chapter.

(2) Includes expenditure for disabled which is reflected under Social Welfar and Special Education.

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency : *Federal*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Estimated expenditure 1983—86 (Col. 4+6+8)	Likely expenditure during last two years of the Plan (1986—1988)	Total estimated expenditure during Sixth Plan (1983—88) (Col. 9+10)	Sixth Plan Allocation	Percentage utilization (1983—88) (Col. 11 of Col. 12)
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health programme ..	54	54	104	64	71	55	173	226	399	822	49
2.	Hospital beds	323	316	335	385	353	335	1,036	360	1,396	1,477	95
3.	Health Manpower development.	69	65	46	46	66	52	163	500	663	57	1,163
4.	Preventive programme ..	315	314	224	298	307	287	899	450	1,349	1,231	110
5.	Traditional medicine	—	—	—	—	2	—	—	6	6	223	3
6.	Medical research	6	6	12	12	16	15	33	58	91	85	107
7.	Nutrition	17	5	3	3	22	4	12	85	97	250	38
8.	Programme for disabled ..	7	—	—	—	3	—	—	500	500	500	100
9.	Miscellaneous	11	11	6	6	5	5	22	24	46	44	105
	Total ..	802	771	730	814	845	753	2,338	2,209	4,547	6'885	66

It also includes FATA, AJ&K and Northern Areas.

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency : *Punjab*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Estimated expenditure 1983—86 (Col. 4+6+8)	Likely expenditure during last two years of the Plan (1986—1988)	Total estimated expenditure during Sixth Plan (1983—88) (Col 9+10)	Sixth Plan Allocation	Percentage utilization (1983—88) (Col. 11 of Col. 12)
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health Programme ..	141	135	148	153	193	193	481	1,296	1,777	2,715	66
2.	Hospital beds	139	141	154	153	236	236	530	530	1,060	716	148
3.	Health Manpower Development.	95	109	99	116	155	155	380	380	760	598	127
4.	Preventive Programme ..	81	58	43	57	9	9	124	—	124	155	80
5.	Traditional medicine	—	—	4	4	4	4	8	10	18	88	20
6.	Nutrition	—	—	1	1	1	1	2	5	7	—	—
7.	Miscellaneous	33	41	40	35	10	10	86	80	166	44	377
	Total ..	489	484	489	519	608	608	1,611	2,301	3,912	4,316	91

*Includes dental services.

Note :—The Projected allocation for 1986-87 and 1987-88 given in the Three Year Public Sector Priority Programme (1985—88) may please be kept in view.

Annexure IV

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency : *Sind*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Estimated expenditure 1983—86 (Col. 4+6+8)	Likely expenditure during last two years of the Plan (1986—1988)	Total estimated expenditure during Sixth Plan (1983—88) (Col. 9+10)	Sixth Plan Allocation	Percentage utilization (1983—88) (Col. 11 of Col. 12).
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health Programme ..	35	33	63	60	109	109	202	582	784	854	92
2.	*Hospital beds	33	32	31	34	40	41	107	78	185	638	30
3.	Health Manpower development.	45	40	50	51	40	40	131	70	201	247	81
4.	Preventive programme ..	5	5	22	20	17	15	40	28	68	42	162
5.	Traditional medicine	1	1	1	1	3	3	5	3	8	35	23
6.	Miscellaneous	5	5	5	6	6	6	17	16	33	18	183
	Total ..	124	116	172	172	215	214	502	777	1,279	1,834	70

*includes dental services

Note :—The Projected allocation for 1986-87 and 1987-88 given in the Three Year Public Sector Priority Programme (1985—88) may please be kept in view.

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency : *N.W.F.P.*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Estimated expenditure 1983—86 (Col. 4+7	Likely expenditure during last two years of Plan (1986—1988)	Total estimated expenditure during Sixth the Plan (1983—88) (Col. 9+10)	Sixth Plan Allocation	Percentage utilization (1983—88) (Col. 11 of Col. 12).
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health Programme ..	82	81	70	68	87	90	239	522	761	883	86
2.*	Hospital beds	54	52	68	67	62	62	181	95	276	350	79
3.	Health Manpower Development.	9	9	9	8	17	17	34	120	154	57	270
4.	Preventive programme ..	13	12	10	9	12	15	36	22	58	25	232
5.	Traditional medicine	—	—	—	—	—	—	—	—	—	21	0
6.	Nutrition	1	1	1	1	1	1	3	3	6	—	—
7.	Miscellaneous	3	3	4	4	1	1	8	10	18	14	129
	Total ..	162	158	162	157	180	186	501	772	1,273	1,350	94

*Includes dental services.

Note :—The Projected allocation for 1986-87 and 1987-88 given in the Three Year Public Sector Priority Programme (1985—88) may please by kept in view.

Annexure IV

MID-PLAN REVIEW OF SIXTH PLAN

Financial (ADP)

Executing Agency: *Baluchistan*
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector	1983-84		1984-85		1985-86		Total Estimated expenditure 1983—86 (Col. 4+6+8)	Likely expenditure during last two years of the Plan (1986—1988)	Total estimated expenditure during Sixth Plan (1983—88) (Col. 9+10)	Sixth Plan Allocation	Percentage utilization (1983—88) (Col. 11 of Col. 12)
		Allocation	Utilization	Allocation	Utilization	Allocation	Utilization					
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Rural Health Programme ..	13	13	16	15	19	26	54	121	175	386	45
2.*	Hospital beds	16	14	23	21	11	17	52	60	112	364	31
3.	Health Manpower Development.	—	—	—	—	6	6	6	4	10	20	50
4.	Preventive Programme ..	11	11	8	8	5	6	25	8	33	37	89
5.	Traditional medicine	—	—	—	—	—	—	—	—	—	8	0
6.	Nutrition	—	—	—	—	—	—	—	—	—	—	—
7.	Miscellaneous	3	3	—	—	6	6	9	8	17	—	—
	Total ..	43	41	47	44	47	61	146	201	347	815	43

*Includies dental services.

Note :—The Projected allocation for 1986-87 and 1987-88 given in the Three Year Public Sector Priority Programme (1985—88) may please be kept in view.

Annexure VII

FINANCIAL OUTLAYS

	Sub Sector	Fifth Plan Expenditure	Sixth Plan Allocation 1983—88	Sixth Plan Expenditure 1983—88	Expenditure 1983—86
1.	Rural Health Programme ..	1,250	5,660	3,896	1,149
2.	Preventive Programme ..	704	1,370	1,632	1,124
3.	Hospital beds including teaching hospitals	1,256	3,295	3,029	1,906
4.	Health Manpower Development	1,167	975	1,788	714
5.	Medical Research	79	85	91	33
6.	Misc. Programmes	128	240	280	142
7.	Nutrition Programme ..	—	250	110	17
8.	Traditional Medicine ..	—	375	32	13
9.	Programme for Disabled ..	—	500	500	—
	Total ..	4,584	13,000	11,358	5,098

Annexure VIII

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *Health Sector*
Sector : *Health*

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (193—(88)	Sixth Plan target (1983—88)	Percentage Acheivement (Col. 14 of Col.15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	1,390	1,090	1,910	1,508	2,330	2,100	4,698	6,600	11,298	11,770	96
2.	Rural Health Centre.	No.	31	34	31	50	38	48	132	74	206	355	58
3.	Basic Health Unit ..	No.	410	322	410	440	370	350	1,112	1,040	2,152	2,600	83
4.	Doctors	No.	3,570	3,550	4,000	4,000	4,200	4,000	11,550	8,000	19,550	21,000	93
5.	Nurses	No.	900	800	900	900	1,050	1,080	2,780	2,220	5,000	5,000	100
6.	Paramedics ..	No.	5,000	4,500	7,000	4,500	4,805	4,570	13,570	10,000	23,570	38,000	62
7.	TBAs	No.	12,750	6,000	12,000	6,750	4,200	6,200	18,950	10,000	28,950	30,000	97
8.	Immunization	(000 Children)	9,000	3,450	9,000	9,000	4,000	4,000	16,450	8,000	24,450	24,000	102
9.	Oral rehydration salt.	(000 packet).	10,200	7,000	9,000	12,000	10,000	10,000	29,000	20,000	49,000	25,000	196

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *Punjab Province*
Sector : *Health*

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (193—(88)	Sixth Plan target (1983—(88)	Percentage Acheivement (Col. 14 of Col.15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	1,068	778	1,246	880	1,585	1,485	3,143	3,698	6,841	4,555	150
2.	Rural health centre ..	No.	12	17	20	35	16	35	87	33	120	141	85
3.	Basic Health unit ..	No.	280	220	348	388	254	238	846	551	1,397	1,556	90
4.	Doctors	No.	1,500	1,495	1,700	1,700	1,810	1,715	4,910	3,450	8,360	9,035	93
5.	Nurses	No.	400	360	400	400	480	535	1,295	1,020	2,315	2,000	116
6.	Paramedics ..	No.	2,500	2,365	3,500	2,440	2,649	2,427	7,232	5,200	12,432	17,300	72
7.	TBAs	No.	6,750	4,500	6,000	4,100	1,000	2,010	10,610	4,200	14,810	16,000	93
8.	Immunization ..	(000 Children)	6,770	2,030	6,770	6,770	1,587	1,587	10,387	3,174	13,561	12,628	107
9.	Oral rehydration salt.	(000 packet).	4,500	4,200	4,000	8,040	4,550	4,550	16,790	9,100	25,890	12,000	216

Includes achievements of federally funded projects located in Islamabad.

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency: *Sind Province*

Sector : ***Health***

(Million Rupees)

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Likely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—(88)	Percentage Achievement (Col. 14 of Col. 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	202	202	250	232	180	180	614	960	1,574	1,835	86
2.	Rural health centres	No.	2	3	2	2	1	1	6	20	26	36	72
3.	Basic health unit ..	No.	20	5	20	20	30	30	55	190	245	624	39
4.	Doctors	No.	1,640	1,641	1,700	1,730	1,820	1,736	5,107	3,500	8,607	9,290	93
5.	Nurses	No.	300	270	3,000	290	330	320	880	720	1,600	1,450	110
6.	Paramedics ..	No.	1,000	920	1,500	844	870	870	2,634	1,970	4,604	8,590	54
7.	TBAs	No.	2,500	750	2,500	1,050	1,200	1,200	3,000	2,000	5,000	4,700	106
8.	Immunization ..	(000 Children)	800	670	800	800	827	827	2,297	1,904	4,201	5,429	77
9.	Oral rehydration salt.	(000 packet)	2,700	1,800	2,000	2,000	2,500	2,500	6,300	5,000	11,300	5,000	226

Includes achievements of federally funded projects located in Sind.

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *N.W.F.P. Province*
Sector : ***Health***

(Million Rupees)

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Likely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—88)	Percentage Achievement (Col. 14 of Col 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	110	110	230	212	220	120	442	658	11,00	2,080	53
2.	Rural Health Centre.	No.	10	14	4	4	10	1	19	6	25	92	27
3.	Basic health unit ..	No.	70	72	10	2	44	42	116	181	297	271	109
4.	Doctors	No.	300	297	450	435	435	420	1,152	800	1,952	1,620	120
5.	Nurses	No.	140	120	140	120	150	135	375	300	675	730	92
6.	Paramedics ..	No.	900	806	1,000	810	838	825	2,441	1,800	4,241	8,020	53
7.	TBAs	No.	2,000	450	2,000	1,200	1,000	1,000	2,650	500	3,150	2,400	131
8.	Immunization ..	(000 Children)	1,040	600	1,040	1,040	920	920	2,560	1,840	4,400	3,109	141
9.	Oral rehydration salt.	(000 packet)	1,500	840	1,500	1,200	2,000	2,000	4,040	4,000	8,040	3,500	230

Includes achievements of federally funded projects located in N.W.F.P.

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *Baluchistan* Province
Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—88)	Percentage Achievement (Col. 14 of Col. 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	—	—	40	40	20	20	60	920	980	1,780	55
2.	Rural Health Centre.	No.	5	—	3	3	4	4	7	7	14	27	52
3.	Basic Health Unit ..	No.	24	16	20	18	20	20	54	77	131	32	409
4.	Doctors	No.	110	117	150	135	135	129	381	250	631	560	113
5.	Nurses	No.	60	50	60	90	90	90	230	180	410	500	82
6.	Paramedics ..	No.	350	197	750	191	193	193	581	470	1,051	2,140	49
7.	TBAs	No	1,000	150	1,000	200	280	1,270	1,620	2,500	4,120	4,800	86
8.	Immunization ..	(000 Children)	240	110	240	240	326	326	676	652	1,328	1,224	108
9.	Oral rehydration Salt.	(000 Packats)	1,150	160	1,150	480	550	550	1,190	1,100	2,290	2,000	114

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *Azad Kashmir*

Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—88)	Percentage Achievement (Col. 14 of Col. 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	—	—	70	70	245	245	315	174	489	890	55
2.	Rural Health Centre.	No.	1	—	2	2	4	4	6	8	14	31	45
3.	Basic Health Units..	No.	6	—	3	3	5	5	8	13	21	56	37
4.	Paramedics ..	No.	145	123	150	130	170	170	423	350	773	900	86
5.	Training of TBAs ..	No.	200	100	200	100	600	600	800	200	1,000	700	143
6.	Immunizations ..	(000 Children)	150	40	150	150	250	250	440	250	690	708	97
7.	Oral Rehydration salt	(000 Packet)	125	—	125	120	130	130	250	260	510	600	85

Annexure XIV

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *FATA*

Sector : *Health*

(Million Rupees)

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—(88)	Percentage Achievement (Col. 14 of Col. 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	—	—	—	—	10	10	10	100	210	420	50
2.	Rural Health Centre.	No.	1	—	—	—	1	1	1	—	1	28	4
3.	Basic Health Unit ..	No.	10	9	9	9	17	15	33	5	38	58	65
4.	Paramedics ..	No.	55	48	50	40	40	40	128	100	228	680	36
5.	TBA's	No.	200	50	200	50	70	70	170	300	470	700	67
6.	Immunization ..	(000 Children)	—	—	—	—	55	55	55	100	165	617	27
7.	Oral rehydration Salt.	(000 Packet)	100	—	100	40	70	70	110	340	450	500	90

MID-PLAN REVIEW OF SIXTH PLAN

Physical (ADP)

Executing Agency : *Northern Areas*
Sector : *Health*

(Million Rupees

S. No.	Sub-Sector/Item	Unit	1983-84		1984-85		1985-86		Total Achievement (1983—86) (5+7+9)	Lilely Target during the last two years of Plan (1986—88)	Total Estimated achievement during Sixth Plan (1983—88)	Sixth Plan target (1983—88)	Percentage Achievement (Col. 14 of Col. 15)
			Target	Achievement	Target	Achievement	Target	Achievement					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Hospital beds ..	No.	—	—	74	74	70	40	114	90	204	210	97
2.	Rural Health Centre	No.	—	—	—	4	2	2	6	—	6	—	—
3.	Basic Health Unit ..	No.	—	—	—	—	—	—	—	23	23	—	—
4.	Paramedics ..	No.	50	41	50	45	45	45	131	110	241	370	65
5.	TBAs	No.	100	—	100	50	50	50	100	300	400	700	57
6.	Immunizations ..	(000) Children	—	—	—	—	35	35	35	70	105	285	39
7.	Oral rehydration Salt.	(000 Packet)	125	—	125	120	200	200	320	200	520	400	130

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