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CONSTRAINTS IN THE PROVISION OF HEALTH CARE  
AT THE LOCAL LEVEL

by

Dr J.K. Harfouche\*  
WHO Consultant

Services which provide health care to pre-school children at the local level comprise MCH centres, health centres and static sub-centres, mobile or semi-mobile health units or teams, dispensaries, hospitals and out-patient departments. Health care to pre-school children is also channelled through social/educational supportive services, namely, nursery schools and kindergartens. Special problem children with physical, mental or social disability also have varying types of services to meet some of their needs.

Constraints in the delivery of health care at the local level provide evidence of the crucial problems of adaptation, which require special consideration. Prototypes of services which were visited in Egypt, Iran, Iraq and Syria will be utilized to illustrate some of the common constraints.

Ambulatory Health Services

Major constraints relevant to ambulatory health services relate to their patterns; distance from homes of consumers, distribution and coverage;

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\* Professor of Maternal and Child Health, Chairman, Department of Community Health Practice, School of Public Health, American University of Beirut, Lebanon.

functions, i.e. health supervision; growth monitoring; immunization or the need for protection from communicable diseases; health and nutrition education; manpower utilization; record keeping and analysis; and operations research.

Patterns of local health care systems can have a serious impact on the effectiveness and efficiency of the delivery of services. Some of the major shortcomings are fragmentation and separation between preventive and curative services or other services as family planning (where acceptable), supplementary feeding programmes and nutrition education; and poor referral systems between maternity hospitals and MCH or health centres. Most MCH and health centres lack domiciliary midwifery service for natal and neonatal care of infants born at home. They also lack ambulatory rehydration units. Nutrition Rehabilitation Centres are practically non-existent.

Some of the attempts that are being tried to improve health service patterns and ensure better continuity of health care include: a) integration of curative services, family planning (where accepted), supplementary feeding programmes and nutrition education with the preventive services of MCH centres. Thus, the old prototype of MCH centre, providing only well baby care, is either dying out or non-existent; b) integrating MCH centres with health centres, especially in rural areas, to provide total health care to pre-school children and their families; c) up-grading dispensaries and converting them to health centres or sub-centres; d) integrating existing disease control centres i.e. trachoma, TB, malaria eradication, skin diseases, bilharzia and ancylostoma control centres with health centres; e) affiliating static sub-centres, mobile or semi-mobile health units or teams to health centres, in order to overcome the constraints of distance to reach larger numbers of deprived rural pre-school children; f) integrating health services with community development services, including welfare, educational and agricultural services, for a total attack against the triad of disease, ignorance and poverty. Combined Units for Services in Egypt, Abu-Ghraib Rural Health Centre in Iraq, and Health Corps Rural Services in Iran are examples which illustrate this growing trend; g) in a few instances (i.e. Egypt) pilot projects and experimental services were initiated to develop prototypes of primary health care systems adapted to local needs and resources for replication on a nation-wide scale.

Distance, unpaved roads and poor means of transport constitute real constraints in the delivery of health care to the rural population, in general, and to pre-school children in particular, because they are difficult to displace. In 1962, an evaluation of rural health centres in Egypt revealed that the distance between villages was a real constraint to the provision of health care. The utilization rate of health centres was inversely proportional to the distance between the village and the centre. Moreover, the low utilization rate was, especially, evident in the case of preventive and public health services, and slightly better for curative services. These findings led to the establishment of "rural health units"; each to serve only 5 000 people and to be located not further than 3 kms. from the furthest member of the rural population.

Maldistribution of health services providing care at the local level is a common feature in the four countries. This feature adds to the adverse effects of marked shortage of services on coverage. Most services are located in capital cities, much less common in large towns of the provinces, and very scarce in rural areas. Most of the pre-school children who are covered by existing MCH centres fall within the age range of 1-12 months, the second highest frequency of coverage is in the age range of 1-2 years. Infants in the neonatal period (birth - 28 days) and toddlers between 2-5 years of age are the least covered and face critical neglect, especially in rural areas. In Egypt, coverage rates of less than 30% of pre-school children were reported by some rural health centres, and a target was set to raise coverage to 50% in 1973. In Iran, the 264 MCH centres operated by the MCH Department had covered in 1972 close to 2% of the total pre-school population in the country. In 1970, the 76 MCH centres in Iraq (21% located in Baghdad city) had achieved a coverage rate of 4.5% of the pre-school population. In Syria, it was estimated that only about 5 - 10% of annual live births are registered at existing MCH and health centres.

Most MCH and health centres provide integrated preventive and curative services. Health supervision starts with the care of expectant mothers, and is intended to continue, thereafter, from birth through 5 years of age. However, under heavy pressure most of the care is provided to infants under 2 years of age, and becomes increasingly deficient between 2 - 5 years. In only one health centre a public health nurse screened well children and referred the sick ones to the attending paediatrician, in order to spare his time for diagnosis and treatment or for consultation on any observed growth deviation or abnormality.

A time schedule for periodic check-up is available in all centres. During the first year of life, the child is supposed to report at monthly intervals; every 3 months during the second year, and every 6 months, thereafter, through the fifth year. Most centres have an appointment system, and close to 70% or 80% of mothers were reported to keep appointments. Sick children are brought in for diagnosis and treatment without appointment, and according to the need as determined by their mothers.

Body weight and length (or height) are mostly recorded by the nurse/midwife, nurse or assistant nurse on most periodic check-up visits, but only very few centres keep a growth chart in the health record of individual children. If kept at all, growth charts are scarcely analysed or utilized by staff as an educational tool. No local growth charts were developed, as yet, in any of the four countries which were visited.

Immunization of pre-school children is mostly carried out by MCH and health centres, mobile or semi-mobile health units or teams; dispensaries and out-patient departments immunize a very small number of children, if any, because their staff are mostly disease-oriented, and very limited time could be spared for immunization in the face of large numbers of sick children who frequent these services for severe illness.

Smallpox vaccination became compulsory many years ago (1945 in Syria). Recently, vaccination for TB (Iraq and Egypt), poliomyelitis, diphtheria, pertussis and tetanus became compulsory. Some attempts are being made (Syria) to make measles vaccination compulsory. The problem, however, lies in enforcing the law by educating parents to accept the practice, and to provide

adequate staff for coverage. Figures obtained in 1971 indicated an immunization coverage rate for DPT and poliomyelitis ranging from 5%-50% of the pre-school population. In most countries, however, smallpox vaccine attained a coverage rate of 90%-95%. Coverage rate also differed with the order of the dose of poliomyelitis or DPT vaccines. For example, in 1972 one of the MCH centres in Baghdad city (Al-Athamieh) achieved a coverage rate for infants who had attained their first birthday during the year, which was as follows: polio 1st dose, 96.9%; 2nd dose, 79.5%; and DPT 1st dose 91.0%; 2nd dose, 83.0%. In Syria, it was estimated that in 1971, over 10% of pre-school children had received the first dose of poliomyelitis vaccine, and close to 10% continued the 2nd and 3rd doses. The first dose of DPT was provided to 2.2%; the 2nd and 3rd doses to only 1.7% of the total pre-school population. In all countries, pre-school children in rural areas are the least covered by immunization. Recently, Health Corps efforts in Iran have improved the situation to a considerable degree.

Breast-feeding is promoted by most MCH and Health centres. Mothers were reported to be good lactators, and about 75% - 90% of them breast-feed their infants completely to the age of 4 - 6 months, and some continue to be partially breast-fed till the age of 1 1/2 - 2 or 3 years. Breast-feeding meets the nutritional and emotional needs of the young infant, and should be maintained and promoted.

Supplementary feeding is encouraged from 3-4 months of age onward. Most centres have a supplementary feeding programme associated with varying degrees of nutrition education (only Syria of the four countries has none). Old Cairo MCH Centre has a kitchen for demonstration and nutrition education. In Iran mothers receive 1800 gm of skimmed powdered milk per month from the third month of gestation up till the end of lactation. In Iraq CSM is kept in large quantities at some MCH centres and is distributed to all expectant mothers and to all infants over 5 months of age. The staff of one centre raised several complaints with regard to storage difficulties associated with CSM and emphasized the need to evaluate the supplementary feeding programme as a whole. The staff also held

the view that babies get frequent diarrhoea after receiving CSM, largely due to poor personal hygiene on the part of mothers, poor housing conditions and lack of refrigeration. It was also stated that the availability of CSM had an antagonistic effect on breast-feeding.

The practice of wet-nursing is still continued in some countries (Egypt, Old Cairo MCH Centre), but is hazardous to the young infant and associated with high death rates.

Poor utilization of health manpower and deficiencies in implementation of the health team concept were especially noted in the delivery of health care at the local level. Some of the visited MCH and Health Centres were not only understaffed, but existing auxiliary personnel performed tasks other than the ones for which they were appointed, as indicated by their titles. Vaccinators do not actually give vaccinations; instead they are responsible for registration of admissions, filing, weighing, testing urine of expectant mothers, and distributing CSM. The nurses aide vaccinates, gives injections, and is responsible for dressings. The medical assistant distributes drugs, instead of assisting the physician. The health visitor either does not conduct home-visits or is only able to conduct a limited number, because most of her time is absorbed in other tasks, such as supervision of vaccinators, checking reactions to smallpox vaccine, and administering BCG vaccine. In some centres, the nurse only functions as vaccinator.

In most centres records are poorly kept, and scarcely analyzed for evaluative purposes.

Evaluative studies and operations research are either very limited in scope, or not conducted at all. They are much needed to improve health care delivery at the local level. In Egypt, an "Experimental Pilot Project" comprising 2 Combined Health Centres and 5 Health Units in Guiza Province is used for operations research. In Iran, the fourth and fifth development plans gave high priority to health and medical research, with emphasis on applied research oriented to solve existing health problems, and those likely to emerge as a result of industrialization and rapid urbanization.

### Health Care in Hospitals

Hospital care to pre-school children is provided mostly by three types of hospitals with in-patient and out-patient departments:- Maternity Hospitals, Children's Hospitals and General Hospitals.

Marked shortage and maldistribution of maternity and children's hospital beds limit coverage of the pre-school population, especially in the provinces and remote rural areas. Moreover, most hospitals are understaffed, face a heavy demand, have a rapid turn-over, their physical premises are either very old or not fully accommodated for the care of the newborn (full-term and premature) and sick children, and lack ambulatory rehydration units in their out-patient sections. Plans are underway to increase bed capacity for all age-groups, by constructing new hospitals at central level and in the provinces; completing, equipping and operating hospitals that are under construction; expanding and up-grading existing hospitals; and attaching maternity units to rural health centres.

In Children's Hospitals pre-school children constitute 70% - 80% of the hospitalized population. The average duration of hospitalization is about 16 days, ranging from less than 2 days to 12 months. In one hospital the mortality rate was 3.2% for the year 1971. The major causes for hospitalization are diarrhoea and dehydration, lower respiratory diseases, severe PCM, congenital malformations, infections, and accidental injury or poisoning.

Mothers are admitted to hospital with their sick pre-school children for two major reasons:- a) they insist on staying with the sick child, even if they have a large family to look after; and b) because they assist the nursing staff in feeding and bathing their sick children. Due to lack of beds in most hospitals, mothers sit and sleep on the floor, next to the cribs of their children, and are served 3 meals a day by the hospital.

Despite assistance provided by the mothers, the house staff are annoyed with them, and the practice is likely to be discontinued. They are accused of overcrowding the small ward units, of being dirty and chaotic, and of failing to observe hygienic measures. Due to marked shortage of staff, residents and nurses actually have no time to give them health and nutrition education, even if they were properly oriented for this task. In brief, under the prevailing limitations of poorly accommodated and understaffed hospitals, and health personnel inadequately prepared to appreciate the problems of hospitalization arising from the separation of the sick pre-school child from his mother, a favourable practice may have to be abandoned.

Out-patient sections or departments of children's hospitals are faced with a heavy load of sick children. In Cairo, Kasr-El-Eini has a daily attendance of 2 000 - 2 500 sick children, and about 80% - 85% of them are in the pre-school period. In 1970-71, the total number of admissions amounted to 546 343 children. Some out-patient departments provide well-baby care to a small number of children (50 - 80) which ceases by the age of one year. Immunizations are carried out on a very limited scale, but no home-visits are conducted since out-patient departments are primarily geared for sick children.

#### Special Problem Pre-school Children

Physically, mentally and socially handicapped pre-school children are still badly neglected in all countries. Most of the existing services have a limited coverage and are mostly designed to meet the needs of children over 6 years of age, and adult population groups. Socially handicapped children are on the increase as a result of industrialization, urbanization, modernization, and liberalization of women and human behaviour. Institutional and substitutional care systems existing in some countries, on the whole, provide poor quality care, need continued evaluation and improvement. There is an urgent need to review the situation of handicapped pre-school children in its totality in the various countries, and to introduce the necessary policies and measures for their proper care, in the light of local needs and available resources.



Social/Educational Services for Pre-school Children

In the light of new social policies, labour laws, increasing participation of married women in the labour forces and rapid changes in structure and functions of the extended family, there is a pressing demand for supportive social/educational services to assist mothers in rearing their children. These services have also the advantages of reaching pre-school children in groups for channelling preventive health services, supplementary feeding programmes and nutrition education. Kindergartens have also the advantage of bridging the gap of formal pre-primary educational system(s), which is beyond the material and human resources of the visited countries, and an unconceivable dream in the face of present demographic and developmental limitations.

In the face of pressing demand, the number and enrolment of nurseries and kindergartens are expanding rapidly. Quantitative expansion is not paralleled by quality in the standards of health care, physical premises, staff, and transport systems. In some countries, criteria for group care have not, as yet, been established, and are poorly implemented in countries where they exist. In some countries, like Iraq, evaluative studies have clearly indicated that "kindergartens have become a refuge for poor categories of teachers, and their benefit is greatly reduced to the extent that they may be regarded as symbolic and superfluous, if not an actual source of harm and damage". Nurseries have the reputation of being costly, poorly housed and staffed, with low standards of health care.