INTEGRATED MATERNAL 
AND CHILD HEALTH 
AND FAMILY PLANNING

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Concept and Rationale

The health system as such in developing countries was often adopted from or based on imported models and not adapted to the local situation. The history of health services has been a movement in which vertical health programmes based on disease control and treatment have predominated. Control of malaria, tuberculosis, trachoma and later on the addition of family planning, nutrition supplementation are some of the examples of vertical programmes introduced in India during the 1950's and 1960's. While these programmes were useful in the short term in controlling the targeted specific diseases, three fundamental problems emerged. First, there were serious overlaps between the multitude of vertical programmes while, at the same time, there were very limited resources for tackling other health problems and diseases. Secondly, while vertical services were popular with providers they were inconvenient to consumers who were constantly required to leave work and travel distances to receive piecemeal services. Thirdly, it became clear that for the sustained implementation of vertical programmes a basic health service infra-structure was essential. This need stood out as the prime reason for the failure of the Malaria Eradication Programme in the 1960's(1). The maintenance phase of the programme, when all new cases should be diagnosed and treated as they occurred, failed because the basic services did not have adequate coverage.

Most of the vertical programmes are in the area of Maternal and Child Health and Family Planning (MCH/FP). Before the advent of the concept of Primary Health Care (PHC), MCH/FP was thought of in terms of preventive care and often limited to pre-natal care, well baby clinic, including services for immunization, health and nutrition education and family planning. The different components were usually provided on different days, often by different staff, sometimes in different facilities. Pre-natal and curative care was provided in separate clinics or even locations by health personnel, while delivery of pregnant women took place commonly at home assisted by traditional birth attendants, family members or neighbours. This system, however, resulted in many mothers and their children having to make more than one trip to a clinic at a distance of several kilometres in order to obtain all the services they needed. With the implementation of primary health care, the situation has already begun to change, and community health workers and staff from primary health centres and subcentres are attempting to reach the unreached. In 1974 at the Joint Government of India and WHO meeting, in which the author had an opportunity to contribute, the job descriptions of various health functionaries were re-structured and the designation of multi-

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purpose worker, female and male, was created. They were assigned integrated functions within their services. However, the problem of verticalization was not simple to solve.

With advances in the development of appropriate technologies and approaches in MCH/FP, there has also been a tendency in many countries for programmes to become compartmentalized with separate managerial structures for components such as antenatal care, family planning, provision of immunization, diarrheal disease control, growth monitoring, nutrition supplementation and control of acute respiratory infections, etc. The management and supervisory structures down to the primary health centres, subcentres and village levels tend to be vertical and technology oriented. This tendency has several causes among which are inequalities in the resources available in terms of funds, transport and manpower for the different programme components, the inner desire of programme managers to build their own programmes and not fully appreciate the integrated nature of MCH/FP from the perspective of the family as a biological and social unit.

The ‘Child Survival Revolution’, unfortunately, is centred around verticalization. The revolution is based on widespread use of simple and less expensive technologies such as growth charts, oral rehydration salts, promotion of breast feeding and immunization. Food supplements and family planning and female education were added to the list of interventions. In mid 1987, the concept of ‘Child Survival Revolution’ was accepted by some agencies and a Task Force was formulated. Large resources were then directed to these special and priority programmes, most of which were operated vertically.

It is well known that the major health problems of mothers and children are related to three synergistic conditions: malnutrition, infection and the consequences of unregulated fertility. These conditions do not exist in isolation from the other problems of the underprivileged, including social and environmental conditions. Since these main conditions and health problems are so closely interlinked, it follows that if interventional activities in relation to each of these three conditions are integrated, the overall results will be more than the simple sum of its parts.

Short-comings of Verticalization

The verticalization of MCH/FP programmes has resulted in insufficient management, wastage of resources, fragmentation of gaps in services and confusion at the level of community and within the health care system. It runs contrary to the principles of primary health care in that it perpetuates a “top-down” medically oriented approach to health issues. Vertical programmes have major short-comings. They are not feasible, their sustainability is doubtful, they fail to address the basis of ill health and their “top-down” strategies doom them to failure. Their limited services adversely affect their acceptability as well as utilization and eventually their cost-effectiveness.

In the process of verticalization the strengthening of primary health centres and district hospitals does not receive necessary attention. Even supervision for other health conditions is neglected. Without supportive supervision and a strong back-up, the health delivery system becomes weak and deteriorates.

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In many countries special programmes are supported with external assistance in
terms of a fleet of vehicles, vaccines, cold chain and external experts. This creates a dependancy syndrome whereby the sustainability of the programme on a long-term basis is doubtful.

The vertical approach appeals particularly to funding agencies which require tangible results within a short time to present to their governing bodies. There is, therefore, limited time in which communities, districts or national groups can participate, if at all. Community participation is sometimes replaced by community manipulation to ensure that the packages are accepted. In these programmes not infrequently, a new category of health workers without any career structure has been created and this will result in dissatisfaction and staff problems.

The real problem with the vertical approach is its narrowness in dealing only with selected diseases through which it fails to appreciate and address the synergism of various causes of morbidity and mortality. Thus, as shown in Zaire, a malnourished child who is immunized for measles will succumb to pneumonia or some other disease and hence, the measles vaccination will have had little effect on the overall mortality in the population(3). Studies carried out in Brazil in which the relative costs of three immunization strategies employed in 1982 are worth mentioning. The strategies were: (i) routine vaccination carried out in static centres; (ii) routine vaccination supplemented with periodic vaccination in remote areas by mobile teams from some static centres; and (iii) mass campaigns of short duration. While mass campaigns were the cheapest per vaccination administered, only 25% vaccination in the priority age groups under one year could be achieved, compared to over 50% in the routine vaccination strategy. These, and other considerations, particularly sustainability are strongly in favor of the second strategy(4).

By integrating a family planning programme with the child care activity in a project in Tunisia, it was observed that more women were contacted, acceptance rate of family planning increased and the number of new acceptors also increased over the years. Child health clinics were good support for the proper follow-up of mothers who came at regular intervals. The use of existing personnel after training allowed the scheme to be replicated(5).

What are the Gains from Integration?

The word ‘integration’ is being used in many different contexts and with different meanings. It has undoubtedly contributed to the frequent debate. The concept of integration as applied to social programmes in general, and MCH/FP and health programmes in particular indicates a normal, harmonious co-operation towards common goals(6).

There are numerous advantages in the integration of health care, such as:

(i) Increase in utilization and coverage of essential health services; (ii) equity in distribution and use of health resources in relation to health needs and priorities; (iii) efficiency of services delivery; (iv) sustainability of health services, health programmes and levels of improved health; (v) convenience of services leading to increased community and consumer acceptability. From the view point of the individual woman and her family it seems natural and logical that if some health functionaries who look after her during pregnancy and delivery and who care for her young children also help her with all essential MCH/FP services. This also reduces the total
number of consultations which she has to seek; (vi) similarity of backstopping and technical skills required to provide various services to children and mothers; and (vii) increased effectiveness, impact and overall quality of services.

Dimensions of Integration

Integration in MCH/FP has several important dimensions. Overall, it implies an integrated concept of health in terms of preventive and curative aspects and concerns with physical, mental and social health. Its various dimensions are: (i) integration of essential elements of MCH, FP and their related health service programmes; (ii) integration of management and support function including planning, financing, training, research, delivery of services, supervision, evaluation and health information system; (iii) integration of various functions of the different health personel/workers, wherever and to extent possible e.g., traditional birth attendants, sanitarians, health educators, male and female multi-purpose workers, doctors and others; and (iv) integration of the organizational components with different sponsors, (Government, private and NGOs) and with institutions/clinics/centres at various operational levels such as community, health sub-centres, health centres, districts, provinces and the country.

Integration of Services

Integration of services implies a revision of existing local content of priority health care services for women, newborns, infants and children, as for example, integrating nutrition surveillance, nutrition supplementation, Vitamin A prophylaxis, prenatal and post-natal care, family planning, immunization, oral rehydration—education and treatment, acute respiratory infections management, and treatment of illnesses of children and mothers into a comprehensive MCH clinic service in place of separate clinics on different days. Change in the system of service delivery from programme specific clinic sessions to integrated services allow parents to receive all services needed at one clinic visit as it happens in Botswana, Costa Rica, Kenya, Malaysia, Tanzania and Zimbabwe. In Zimbabwe these clinics are popularly called by the health personnel as “Supermarket”. They are more attractive for the clients and have resulted in increased utilization of health services. The staff members get less bored and are more productive in providing multiple services during the day. The client load has become consistent from day to day enabling the clinic sessions to be more efficiently staffed.

In Botswana, regulated patient flow in daily integrated MCH/FP services reduced waiting time to a minimum. At the integrated clinics the waiting time was 34 minutes as compared to 145 minutes at the non-integrated clinics—and hence the parents came to the clinic at their convenience. In these clinics, patient flow was regulated through reduction of the number of “station”-stops to a minimum and this helped to save time. One medical/health staff completes all the necessary tasks for each client in a single contact before getting a next client. There are some separate “stations” such as those dispensing, injections, dressing, etc. to which some clients could come directly and where no examination is needed. Additional equipment was provided at the bottle-neck sites. The difference between the integrated clinics and non-integrated ones were very striking(7).
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Integration in Management and Supportive Functions

Within a district health system, most of the distorting forces are imposed from the higher levels. The health centres may be operating fully integrated MCH clinics daily, but the nurse-midwife operating them might be different for different services. To correct this situation, different kinds of activities or services should be carried out by the same health person as far as possible. The principle behind the multi-purpose health worker scheme in India is exactly the same.

Integration in Supervision

Professional staff from the central, state, district and health centre level visit their vertical programmes for purposes of monitoring and supervision. More often than not it is individual programme activity that is supervised in a piecemeal fashion, resulting in unnecessary visits. A well organized comprehensive and integrated team visit will enhance coordination and will favour integration. This can also accelerate decision making through consultation and reduce the cost of multiple visits.

Integrated Training

Training is an important aspect in the process of integration. It can use the problem solving approach to learning, focusing on the health centre and district health team members who are jointly responsible for managing and providing health care. The potential future team members such as midwifery, nursing, medical and public health students, should be given sound training in the principles and practice of integrated care.

Integration of Health Information System

Different Divisions/Units in the Ministry of Health (MOH) at Central or State level often require health facilities to complete several separate monthly reports on overlapping sets of activities. The MOH is often under pressure from external agencies to produce summaries of each of these reports separately. However, it may well be possible to achieve considerable savings in time for the health centre staff by integrating the reporting process at the health centre and within a district and perhaps even the state and national levels and focus more clearly on the appropriate monitoring, evaluation and use of this information.

How to Integrate MCH/FP Care?

The real focus of integrated MCH/FP must be the integration that occurs at the level of individual and family. In other words, every contact of the mother and/or child with the health services or community health workers, is an opportunity which must be fully utilized to promote preventive, curative and rehabilitative aspects of all the priority components of maternal and child health care and to view the problems or the individual in relation to the family and the community(8). The priority for each component of integrated MCH/FP care and the strategy for its delivery, particularly through primary health care, should be based on assessed local needs, socio-cultural characteristics of the population and available resources.

Action at the Health Centres and District Levels

Integrated planning of health services is an important aspect of integration. The planning must include identification of
health and service needs, job analysis and reallocation of tasks and responsibilities of various workers at the different levels of primary health care. Each health worker handles multiple essential MCH/FP services instead of one or two special activities.

Integration at the health centre and district level is possible through training. Unfortunately, many of the current training programmes of health staff in the area of MCH/FP have tended to be purely medical in orientation and focussed on the operation of technologies and procedures. A major element in redressing the difficulties arising from the tendency towards verticalization is the reorientation of the mid-level managers and those who deliver primary health care, *i.e.*, the team members at primary health centres and districts in integration of various priority and essential services for children and women. The training programme should initiate a process of reorientation and restructuring of MCH/FP related training curricula for medical, nursing, midwifery and public health students. Emphasis should be placed on integrated interventions, and orientation not only with respect to individuals or the family but also with respect to the planning, organization and management of the MCH/FP activities at the district and health centre levels. The training of health teams in problem solving management can result in better equipped health teams in the health centres and the districts.

During the course of the rapid evaluation of the MCH/FP component in primary health care in different country programmes, it has become apparent that there are major gaps in the dissemination of recent information on simplified but scientifically sound MCH and family planning technologies, approaches, procedures and practices at different levels of the health system. Recent progress in this field has lead to the development of training course of the distinct teams on integrated interventions in MCH/FP. This includes (*i*) extensive experience with the application of the risk approach in MCH, (*ii*) the refinement of problem solving approach to training of district or health centre teams emphasizing self-learning in the area of integrated intervention in MCH/FP care, (*iii*) the application of the rapid evaluation methodology for the organization and performance of MCH/FP services, and (*iv*) development of appropriate technologies for maternal, neonatal, infant and child health care at various levels of services in different functionaries including traditional birth attendants.

The administrators, in health and health related departments and all health personnel working at the health centre and district levels should have an agreement for integration and the community to be affected should also be prepared for a change. The patient load, time spent at the health centre/clinic based on a patient flow study, functions of each of the staff members involved in the centres/OPDs/clinics and equipment needs should be studied prior to the integration of services. The OPDs should be rearranged to provide as many services as possible at the main “station” in each flow. The clinic design and facilities should be studied to see how best to organize the flow in one way.

**Action at the Policy Making Level**

In view of the numerous benefits of integration, and the short as well as long term disadvantages of verticalization, it is most relevant that the Central and State Government should formulate a policy and
decide to integrate all programmes addressing children and mothers. The integration should include various dimensions referred to earlier, such as integration of planning, administration, management, budget, services, supervision, training, logistics, transportation, recording and reporting and monitoring and evaluation at the various levels from the top to the health centre and subcentre levels.

Role of Pediatricians, Obstetricians and their National Societies in Development of Integrated MCH/FP

Pediatricians, obstetricians and their national societies in close collaboration with the district, state and central ministry of health staff have a great role to play in integrating the fragmented services for children and mothers. Their role is in (i) setting an example for integration of services in their Clinic/OPDs/Centres, (ii) training medical, nursing and health functionaries at health centres and districts as well as students of medical and nursing colleges on integration, and (iii) promoting and advocating integrated interventions in health care to the top policy and decision makers in the Government.

The need-based problem solving training on integration in MCH/FP in medical and nursing schools will ensure better outcomes on a long term than what is happening at present. There is a distinct role for pediatricians and obstetricians who are teaching in medical schools, in influencing their local faculties and medical councils in restructuring the education to need-based and problem solving. It is a herculean task, but, persistent efforts will be definitely rewarding. Successful experiences will be convincing proof to the decision makers and administrators who may be otherwise reluctant or resistant to a change.

REFERENCES


