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MATERNAL HEALTH

Maternal health has traditionally been confined to considering women in childbearing ages. Advances in understanding of the determinants has led the public health community to expand the concept and to examine other conditions which, through prevention and promotion at early and appropriate moments, can lead to positive outcomes. This involves incorporating a life cycle and gender sensitive approach, considering sexual and reproductive rights, and emphasizing health and its attainment for individuals and families. To operationalize this vision requires an examination of policies, strategies and programmatic actions, capacity building with institutions and persons, the development of knowledge and an integrated approach to planning, implementation and evaluation. The actual situation presents challenges. In a number of countries in the Americas with significant overall health gains over the past decades, inequities persist, and maternal health continues to be a privilege of selected sectors of the population, demonstrating inherent problems at the individual, family and community levels and within the health services systems.

Throughout its existence, the Pan American Health Organization has worked in partnership with the countries of the Region and with other international agencies and nongovernmental organizations to reduce the risks to maternal health. Activities have included family planning, maternal child health programming, quality of care efforts, development of norms and protocols, the development of knowledge, dissemination of information, direct technical cooperation and the development of networks to share experiences and information which will promote the health of mothers, children, families and communities.

This document will examine the evolution of maternal health in the Region within a Panamerican context. Recommendations for actions and programmatic approaches which could focus actions towards making maternal health achievable are suggested, along with their expected results and the role of the Pan American Health Organization in supporting the process.The Subcommittee on Planning and Programming is asked to examine the document and, in the light of experiences of the Region, provide feedback and guidance for the development of this important area.

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1. Introduction

There is compelling evidence that maternal health should be a priority, not only for the individuals and families involved, but also for any government which is interested in having healthy, happy citizens. During the past 50 years, there have been significant changes in the Region in the basic functioning of society, in public health, and in access to health services as well as in the development of models for providing these services. Maternal health has benefited as well showing important advances in mortality reduction, access to family planning services and nutrition information and services among other gains. An important shift from reactive and illness-oriented towards more comprehensive approaches which include prevention and health promotion has occurred. This involves the recognition of the myriad of factors involved in achieving health which go beyond the biological and involve social, economic, cultural, ethnic and work related elements. It requires the incorporation of newer modes of analysis which bring an holistic view of humans and their society, moving beyond the traditional boundaries to look at factors such as gender and poverty and their implications in the determination of health. Simultaneously, the changes occurring in the population—increases in absolute population numbers, rapid urban development due to both economic and conflict produced migrations, concurrent changes in lifestyles and the development, availability and distribution of new technologies—are presenting acute challenges to already challenged systems.

Since 1840 when midwives, analyzing case data recognized that reproductive efforts contributed significantly to maternal morbidity and mortality, initiatives have existed to improve maternal health. The evidence available to analyze the situation of maternal health can be categorized as follows: (a) that which concentrates principally on recognized individual occurrences or behaviors whose precedence is an epidemiological collection system which, in general, has been designed to demonstrate the predominance of illness or mortality patterns; and (b) data which is collected to monitor the system of health care delivery which tends to reflect aspects such as access and coverage, number and type of activity realized, logistics, resource mobilization and utilization, and which, recently, in the light of health reforms, has emphasized the structural and financial efficiency measures. To obtain a complete view of maternal health and its variables, it is necessary to employ not only these measures, but to incorporate information obtained through qualitative measures which may provide complementary data on personal, social, cultural, ethnic and environmental elements.

Changes in the health of the population in the countries of the Region are evidenced by demographic shifts, increases in life expectancy, and epidemiological data. These manifest a transition away from infectious diseases towards a pattern of chronic problems and demonstrate advances in the state of public health in the Region. This data, however, reflects composite patterns that can mask a range of unsolved problems that

through averaging. For example, in a number of countries with significant gains over the past decades, maternal health continues to be a privilege of selected sectors of the population, demonstrating inherent problems at the individual, family, community levels and within the systems of health services.

Maternal health services have traditionally been oriented towards women in childbearing ages, emphasizing the programmatic aspects of prenatal control, birth coverage, and family planning. Advances in understanding of the determinants involved has led the public health community to expand the concept, and to examine underlying and previously existing conditions which, through prevention and promotion at early and appropriate moments, can lead to positive outcomes. The proposed vision involves incorporating a life cycle and gender sensitive approach, considering sexual and reproductive rights, and emphasizing an holistic concept of health which includes health promotion and protection for its attainment with individuals and families, giving special attention to populations presently underserved.

2. Maternal Health Framework

Since the middle of the last century, efforts of the health sector to improve maternal health have been evidenced. In the past 50 years, advances have multiplied as knowledge and technology and their globalization have increased. The 1950s brought new technologies in contraception and family planning and initiated efforts associated with control of the global population size. Practically as a result of the ideological objection to the latter, in the following decade, the focus turned to maternal and child programs where the emphasis was on child survival and health with very little attention being paid to the aspect of maternal health. The 1970s brought the idea of levels of care and culminated with the universal adoption of the Primary Health care strategy and the goal of Health for All which incorporated elements of prenatal control and attention at delivery. With the structure of services reflecting various levels, access increased. Infant mortality showed significant decreases, but maternal mortality continued high. In the 1980s a sensitization of the interrelationship between maternal and child health was emphasized, and many of the goals from the World Summit on Children referred to maternal health and nutrition. A consciousness also began to be seen in terms of gender and social inequalities in the Region, with their impact on development. The initiation of the Safe Motherhood initiative in 1987 attempted to call attention to the importance of maternal health and the tragedy of women needlessly dying in childbirth. This movement called the attention to quality of care, maternal care models, improving statistics and epidemiological surveillance, extending coverage of prenatal and delivery services and strengthening family planning.

In the last decade, significant international efforts have supported attention to maternal mortality and reproductive health. The International Conference on Population and Development, the Fourth International Conference on Women, the International

Convention on the Rights of Women, and the International Conference on Sustainable Development have all addressed aspects which emphasize the problem of women in society and reproductive health concerns. They have advanced towards a more integral view of maternal health, its relation to women's development and rights and to the development of society.

Maternal health as an outcome is the result of a complex process of individual, societal and health sector developmental aspects. Its seeds are sown very early on, even in the pre-conceptional stages, and at each juncture of the life cycle the effect becomes cumulative. There is a need for a recognition of the role that maternal health plays in the development of children, and also in the social and economic development of the family and thus of the community. This implies a shift, from maternal health solely as the responsibility of the woman involved, to envisioning it as a social responsibility shared with her partner, family, and community.

To operationalize this vision within the health sector requires an examination of policies, strategies and programmatic actions, capacity building at the institutional and personal levels, development of indicators and knowledge, and an integrated approach to planning, implementation and evaluation. Nutrition, prevention of disease, counseling, education of the women, direct monitoring and services for the pregnant women, availability of skilled delivery care and logistics to support this continue to be important. What needs to be incorporated are the many aspects: threats and events which take place outside of the gestational period and which have significant implications for healthy outcomes of pregnancy Planning for maternal health before pregnancy by individuals and the health care system will contribute to avoiding health problems related to childbearing and therefore to maternal health long past the childbearing years. It will also lessen the burden of disease attributed to maternal morbidity and mortality and, as will be discussed, of the costs involved in certain child and family problems directly related to maternal health. A large percentage of the knowledge needed to make a significant impact is already available. It now seems appropriate to pause and reflect and to both develop innovative answers to the actual context and renew the commitment to catalyze progress in maternal health in the Region.

3. Situational Analysis

3.1 *Maternal Health*

Within the Region, advances in maternal health have been notable in this century. Maternal mortality has dropped, the crude birth rate has fallen, life expectancies have risen, more people have access to reproductive health services of all kinds, including counseling and family planning. Countries have advanced in the registration of death statistics. National plans have been developed on maternal mortality, adolescent health,

cancer prevention, and safe motherhood. Conventions have been ratified on indigenous health and the rights of women. Accomplishment of the goals established, however, remains elusive. Challenges remain and are difficult to attack. Great disparities exist, such as those in access to information and quality services in health which are often a reflection of socioeconomic inequities. Several examples will make the point. Women continue to die in childbirth of problems for which exists the knowledge and technology to prevent, but which for many reasons are not available to or are not being utilized by those in need. Populations particularly affected include indigenous groups and rural populations. Anemia, a problem which is found in up to 60% of women in some countries, is often associated with decreased immune reaction thereby leaving the woman susceptible to suffering more severe problems of infections or in greater danger of not being able to survive a hemorrhagic incident.

Data show the seven leading causes of female deaths to be: cardiovascular disease, neoplasms (mainly cervical and breast cancers), infections and parasitic diseases, unintentional and intentional injuries, and digestive disorders, and maternal mortality.

Problems resultant from the position of the female biologically and the characteristics of her position in society pose particular risks. In realizing their roles in society, women's rights are often compromised. This affects many aspects, from the basic ability or right to seek care, the possibility of exercising their rights in free and informed decision making on the number and timing of their children, to the disadvantage of being economically dependent on income provided by others. This gender inequality begins early in life when girls have less access to education. Research has demonstrated that there is a direct link between basic education and reduction in fertility rates, nutrition of sons and daughters, and overall health status of the family members. For example, the illiterate population in women 15 years of age and older is said to be as high as 42% in Haiti, a fact which carries repercussions for developmental possibilities, employment, social progress and economic security.

Even in the pre-conceptional phases there are warnings for maternal health. Malnutrition and poor health are endemic among the poor, and therefore disproportionately affect women who comprise the largest percentage of this group. Women as childbearers then pass these disadvantages on to their children through low intrauterine growth rates, which in turn contributes to poor birth outcomes and increased infant mortality. Often when newborns die, the woman is put in the position of having to replace the child with a quickly repeated pregnancy. Short intergenesic spaces lead to problems both for the mother and child.

Recent studies are demonstrating an amazing correlation between intrauterine conditions and lifetime propensities for different diseases. Birth weight as a proxy for the maternal conditions during pregnancy has been used to demonstrate propensity to

allergies, diabetes, hypertension and high cholesterol, brain, liver and kidney functioning, and susceptibility to developing breast cancer and obesity at certain stages of adult life. In addition, complementary studies on nutritional stresses experienced at different times during pregnancy have evidenced high correlation with the tendency to become obese. Many of these effects, although correlated with intrauterine events, do not appear until mid-life. In some countries, malnutrition in the pregnant population has been diminished through a strict implementation of norms for prenatal nutritional evaluation accompanied by supplementary feeding. A three generational study in INCAP demonstrated the efficacy of protein-caloric supplements in pregnant women. The offspring of these women were larger at birth and had less infections than others. The exceptional finding was that, without further interventions, the second generation, i.e., the grandchildren of the woman supplemented, were shown to have the same advantages. Pregnancies complicated by maternal ill health tend to be associated with newborn morbidity and later childhood mortality. Maternal health also significantly impacts on early infant development. The data show, for example, decreased cognitive development in children born of an anemic woman.

Developmental studies have shown that attitude formation is initiated in the early years of the person's lifetime. Long before children arrive to school age, they have learned about relationships between men and women and formed attitudes regarding behavior and lifestyle, including those related to gender roles and sexual and reproductive health. Behavior patterns which are fixed by 7 years of age are significantly influenced by parental attitudes and behavior, especially the parent with whom the child spends more time, usually the mother.

Studies on adolescents have shown that the level of knowledge on health subjects is dismally low, putting young men and women in danger of developing habits which put their health at risk. Present figures show that, of adolescent girls at the start of their reproductive lives, 33% live in poverty and of the 50% sexually active at age 17, only 10% use any form of birth control. Increasingly, with sex desegregation in the data collected, women are showing similar risk patterns as men. These are particularly noteworthy in the areas of tobacco, alcohol, drugs and unsafe sexual practices. As added difficulties, many of these habits become long-term risks, and are potentiated by their multiple presence and interactions. For example, alcohol consumption is often correlated with traffic accidents and interpersonal aggressions; unsafe sexual practices can lead to sexually transmitted infections, unwanted pregnancies, abortion and suicides.

Violence is being recognized as a public health problem in the Region. Increasingly, we are seeing reports of pregnancy-related violence. The data is limited, but portends serious consequences. Worldwide, one in every four women is physically or sexually abused by her partner during pregnancy. In this Region, Nicaraguan studies have demonstrated an incidence of 13% and US studies show from 3%-11% in pregnant

women. However, when data is desegregated by age, we find that among teenagers, the rate rises to 38%. Once again, this action has long lasting effects. It has been shown that children of battered women are more likely to be malnourished, not immunized and to have had a bout with diarrhea not treated with oral rehydration salts (ORS). In studies in the Region, the children of women who were physically and sexually abused by their partners were three times more likely to demonstrate low birth weight due to fetal growth retardation and six times more likely than other children to die before the age of five.

As the girl child nears reproductive age, many of the risks accentuate. This is another area which clearly demonstrates inequities. In the countries of Latin America and the Caribbean, one of every 130 women is exposed to a lifetime risk of dying from complications related to pregnancy and birth, whereas in Canada the risk is 1:7750.

For many women, their partners and families, pregnancy is a critical transition which brings with it great stress irrespective of whether the pregnancy is desired. There is a need to recognize this important event in the life of the woman/family not only as a biological process, but also a psycho-socio-cultural event. Implications would involve attention to the mental health aspects of maternal health, including males, families and communities in efforts to use information and counseling to improve maternal health, yet attention in most services is still focused on prenatal services directed at the biological reproductive processes.

The available data on abortion continues to present this aspect as an important contributor to maternal mortality. It has been recognized as a public health problem, accounting in the Region of the Americas for an estimated 16% of maternal deaths, and in some countries it appears as the principal cause of adolescent female mortality. Several trends are notable: in areas where access to family planning information is scarce or logistics of supply are inadequate or inconsistent for the demand, abortion, often self-induced, increases, with its consequent risks for women's health. In several countries, abortion and/or suicide become answers for women who fear punishment or social ostracism as a result of their pregnancy, or the answer of choice for women trapped in situations of extreme poverty or abuse. Penalization of abortion complicates the ability of the system to respond in a humane manner to citizens with serious threats to their health.

In this century, there has been a notable increase in the participation of women in the workforce, albeit, with a predominance of that in the informal sector. While this has provided to some a degree of economic autonomy, it often reinforces the poverty cycle due to its informal character. It increases the exposure to new risks for maternal health, such as that of women exposed to toxic materials through agricultural work or in industrial or "maquiladora" jobs without environmental quality controls, or earlier initiation of unprotected sexual activities.

Sexually-transmitted infections are of grave concern for maternal health. More and more, in the case of HIV/AIDS, the number of infected women in relation to men is growing and, of great concern, the incidence is appearing at even earlier ages. Again, the domino effect. This is of primary concern for the woman herself, of course, but with the disease appearing at earlier ages, coupled with earlier initiation of sexual activity, the risks increase that this woman will be involved in vertical transmission to her offspring. Another example: decisions to terminate the pregnancy are exceptionally costly, not only to the people directly involved, but to the health care system and to society, and the knowledge exists to be harnessed in promotion and prevention. Congenital syphilis is another case in point, the presence of which is often used as a proxy for the quality of prenatal care. Its incidence is 100% preventable with basic activities of prenatal control and epidemiological surveillance and control, yet in at least one country, its incidence is registered at 4%, implying an even higher prevalence in reality.

The majority of deaths related to pregnancy are from direct obstetrical causes, i.e., complications directly related to lack of access or utilization of services, services without the ability to respond to the emergency situations, omissions, incorrect treatments, or others. Of these, hemorrhage continues to figure predominantly. Skilled attention at birth is known to make a difference not only in assuring the health of the mother, but also that of the child. Studies have shown that 4%-12% of all deliveries result in some degree of asphyxia which carries the threat of neuro-developmental disabilities, childhood death, decreased quality of life for the families, and increased burden of disease for the system.

Maternal health is often thought to end when the childbearing years have ended, however, many women take into their aging process, sequellae from this experience. Lack of quality care brings physical, psychological and social problems. This is a phenomenon which presently gets little attention, but many women are left with reproductive, urinary and gastrointestinal problems, depressions, and sexual difficulties which detract from the quality of her life.

3.2 *Health Systems*

Within the Region of the Americas, there is a great variety in situations. The presence of health and social sector reforms in the majority of the countries of the Region is producing changes in the systems of providing services as well as the mix of services and the decisions made regarding program priorities, providers and capital allocation. Periods of uncertainty are common, especially in developing the processes which have involved the decentralization and management of funds at the local (municipal) levels. Setting priorities in this environment often requires establishing new criteria and a redistribution of resources. We know that the organization and management of health care systems plays an important role in achieving equity in maternal health care both from a gender and a socioeconomic perspective. Although maternal mortality has been on the

agenda of the authorities, progress has slowed giving evidence that the traditional answers alone that continue to reinforce the episodic approach to eliminating risks specific only to the gestational period cannot answer today's challenges. Prenatal coverage does not reach many of the populations at risk. Many women continue to give birth without skilled attendance, and postpartum follow-up, even in institutions, is deficient. This is another example of knowledge availability, but policy and resource priorities being placed elsewhere.

Accompanying the sector reforms is an emphasis on efficiency, cost-effectivity and quality. This has brought improvements in wastage, excesses and in the development of operations closer to the populations served. It has also brought impacts on maternal health in different ways. Decision making regarding technology and its availability, for example, is a concern in the distribution of resources. The demand for the latest available technology has been seen to override coverage criteria for basic services. In some cases, an exaggerated concern for cost control at the expense of other criteria has resulted in priorities being based on their potential for demonstration of immediate results or those which can easily be quantified. Since many of the changes related to maternal health take time to demonstrate results through behavior and attitude change processes, they are given less attention.

Health costs are an important factor in the decision to utilize services. Experimentation with different forms of cost recovery for health services has been identified in some places as a deterrent to seeking services, especially in the poorer populations. This reinforces discrimination against women who form a majority of the poor, in a now recognized phenomenon called "feminization of poverty". Women are not only poorer, but they also spend a greater percentage of their disposable monies than men on health-related activities, in spite of the fact that they begin with less income. Some countries, most notably, Bolivia, Ecuador and Peru, within their sector reforms, are implementing a universal coverage for delivery. It is too soon to determine the effectiveness of these measures in reducing maternal mortality, but it is evident that cost was a deterrent for many if one considers the increase in institutional births since the implementation of these measures.

An important element is availability and access to quality of care. In all countries the problem of access and quality is closely connected with the elements of poverty and gender, reflecting a situation whereby the poorest are less protected, as evidenced in mortality and morbidity statistics, demographic and access data. Women have less public resources for achieving health, and the relative cost for them is higher both in terms of efforts needed to obtain it and in the out-of-pocket costs spent on health. Several studies in the Region have demonstrated that women will not use services if they perceive that they have been treated without respect, that the services are not able to respond to their needs, or that they are not of acceptable quality. The availability of quality care is one of

the key elements demonstrated to be responsible for the avoidance of delays and loss of opportunities in seeking attention, the use of prenatal control or percentage of the population using family planning methods, elements directly correlated with saving maternal lives.

One of the important elements in assuring quality is capacity building for health personnel as part of the system. In the area of the human resources, motivation and morale are fragile given the instability of the job market due to public sector cutbacks, political changes of authorities, and low salaries to name some of the factors. As a result of this situation, turnovers and absenteeism are frequent with the corresponding effects on program continuity and the quality of attention to the population.

The changes involved in institutional and provider/population roles and relationships can be confusing for providers and consumers alike. Participation and ownership are key. To better interface with the population, some countries are developing programs which incorporate social communication methodologies for health promoting activities and the development of self-responsibility in care. Attempts at developing participatory approaches, empowerment and self-sufficiency, however, also have the potential to be used to abdicate institutional or government responsibilities, at the cost of both equity and social responsibility.

In the process of introducing structural reforms in the sector, many educational and health promoting activities have been separated from the curative activities. Without the ability to show rapid results they then become likely targets for reduction since, in moments of scarce resources, the curative and illness related aspects are in greater immediate demand. Unfortunately, this reinforces the idea that health services are reactive and curative, and minimizes the importance of health promotion and prevention, and the construction of a culture of health with full population participation. Systematically incorporating prevention and promotion activities into present day programs could produce considerable savings in health care costs in the future.

4. Lessons Learned

There are no easy answers. Maternal health, as has been seen, is complex. Maternal mortality and morbidity avoidance are not all of maternal health. There is a need to be conscious of the other elements which threaten the health and development of mothers, their children and their families. Constraints are abundant within the contexts, health systems, and the people involved. There are, however, a number of lessons learned from the actions implemented across the Region by experimental projects, national attempts and NGOs and others.

(a) **Achieving maternal health is a life-long process,** therefore an integral maternal health package should include activities directed towards promotion of health and prevention during the entire life cycle so that women can lead healthy, happy lives and thereby contribute to that of their family and the community in which they live. Comprehensive maternal care involves a lifelong approach which includes, for example: (i) activities with the young child to create a culture of health and positive attitudes towards social responsibility and avoidance of risky behaviors; (ii) sexual and social responsibility education as part of the normal process in the development of the adolescent boy and girl so as to prepare them to avoid the pitfalls of violence or sexually transmitted diseases which could result in possible bodily and psychosocial harm, not only to the protagonists but also to future generations; (iii) family planning activities as a means of choosing if and when to have children as well as the numbers desired; (iv) access to and delivery of quality prenatal, birthing and postpartum care or attention to complications of unsafe abortion, including counseling; and (v) sharing of information and decision making so that the woman and her family can better assume a participatory role in achieving a healthy outcome of the pregnancy.

(b) **Policy and legislation must be accompanied by enforcement mechanisms.** Since the first human development report was published in 1990, identifying the important factors in advancing the human development index (HDI), there has been an awareness of the important role of policy decisions in the development of people's health. Many of the countries, as a result of their participation in international forums, have made concerted efforts to propose legislation, standards or guidelines which promote a more holistic and integrated vision of the development of health throughout the life-cycle of women and men. Efforts must go even further. The mere existence of legislation to promote maternal health is not enough. If inadequate implementation, monitoring and evaluation or enforcement mechanisms are not in place, the normative effectivity is diluted.

(c) **Emphasizing quality of care is critical.** Efforts at improving quality in health services have served to galvanize efforts through which all of the instances involved in the planning, delivery and evaluation of care can be mobilized. Quality of care involves many issues: Coverage, access, appropriateness to culture, adequate logistics and supplies, including emergency blood replacement, availability of skilled personnel, clinical norms and guidelines for each level of service, transportation mobilization plans for emergency situations, adequate referral systems, and other elements according to the structure and functioning of each system.

(d) **Models of health services delivery which provide integral attention to the woman's needs are perceived as worthwhile and useful by participants.** Care must be taken to provide adequate capacity building within the system and its personnel. An important element has been attention to ensuring the capacity to respond to emergencies during the 24-hour timeframe and specifying and enforcing the distinct functions of the different levels of the system with a good referral system. Experience has shown that a combination of basic services and targeted support schemes are necessary to produce significant changes. Some countries, most notably Chile, Cuba, and those of the English-speaking Caribbean, have managed to increase coverage and the satisfaction of users and to significantly reduce maternal mortality through strategic placement of qualified personnel (nurses, midwives and doctors), while strengthening the system with adequate logistics, and structured and supported programs at the Primary Health care levels. Personnel training efforts must include content related to knowledge and skills for attention to maternal health concerns, and in attitudes and interpersonal relationships to assure quality of care.

(e) **Health literacy and people participation are key to changing attitudes and behaviors.** The incorporation and utilization of techniques from social communication are strategies which should support all of the programs relating to maternal health. Integration of information regarding potential and real problems should be part of health education programs in health services and schools, and can be included as part of general prenatal information to take advantage of the link being forged between the individual and the health system. When the community is involved in these efforts, the results can be significant: (i) people are more aware of what they themselves can do for health; (ii) individuals tend to assume more responsibility with their partners/community towards health promoting activities and the utilization of services; and (iii) communities have achieved important outcomes such as the reduction of maternal mortality and decreased infectious problems through conscientization, solidarity, and environmental activities.

5. Recommendations for Future Actions by PAHO

Throughout its existence, PAHO has worked side by side with the countries in the development of activities related to maternal health. Present state of knowledge demonstrates a much wider impact than that of the health of the individual, and forms the basis for redoubling and focusing efforts in order to produce the desired outcomes. There is no doubt that systematic and committed actions in the area of maternal health in the Region could make an impact on maternal health. It is of interest, not only in humanitarian terms, but also, as has been shown in the economic and developmental

interests of the countries. Within that framework, it is suggested that PAHO can best support the country by strengthening health related activities such as the following:

- Develop a framework for care which systematically incorporates the knowledge and technology available to improve maternal health programs.

  - Implement an approach which recognizes the long-lasting and intergenerational implications of maternal health and includes early interventions to create healthy attitudes and a conscious public participating in promoting maternal health.

  - Understand that pregnancy is an event in the life of people which comprises psychosocial, cultural and ethnic elements—which are as important as the biological ones—that should result in a healthy mother and child. These elements must be incorporated into programs and plans.

  - Develop and implement quality of care approaches to mobilize efforts for the delivery of services relevant to producing maternal health.

  - Create an integrated focus to the delivery of care which incorporates health promotion and prevention activities as well as specific services.

  - Include male involvement, families and communities in bringing about maternal health since they are directly affected by poor outcomes, and in this way counter the tendency for placing the entire burden of responsibility on the women alone.

- Examine existing normative frameworks (legislation, standards, etc.) to assure that adequate attention has been given to monitoring and evaluation mechanisms.

  - Assure that quality of care, full participation, and adequate provision to deliver the different components of integrated maternal attention are covered in the policy framework, including skilled attendance at birth and provisions for attending obstetric emergencies.

  - Develop and disseminate knowledge to better inform policy decisions.

  - Strengthen the information systems which provide data for decision making.

  - Develop indicators which reflect the new paradigm and the holistic view of maternal health.

- Undertake population-based studies and future simulation exercises of the cost benefits and risks involved with the different types of health services coverage which affect maternal health.

- Implement gender desegregation of data to guide policy decisions and options, integrate components, advocacy information systems, indicators.

• Review and restructure existing programs to include activities targeted at reducing underlying conditions which predispose to poor outcomes in maternal health and to strengthen the application of known effective strategies.

- Expand the focus of maternal health programs to include effective interventions such as basic emergency care, anemia reduction, sexual education, STI prevention, and diagnosis of violence.

- Study the data for the planned population to ascertain the prevalence of abortion in order to make informed decisions regarding the availability of care and de-penalization questions.

- Begin to incorporate measures from the preconceptional period which promote health and prevent problems which later affect the woman's and family's abilities to enjoy a healthy pregnancy.

- Identify underserved populations such as indigenous groups and rural residents and develop plans to ensure delivery of basic services.

- Incorporate in diagnostic tools the information on psychosocial and cultural aspects which could identify preventable aspects of potential problems, e.g., domestic violence. Create partnerships with educational authorities to assure that information on life skills and healthy attitudes which promote maternal health outcomes are being incorporated.

- Strengthen primary health care interventions for promoting participation and cost effectiveness and for problem identification and action in the resolution of simple problems and stabilization of emergencies with referral.

- Incorporate health communication techniques to educate individuals, families and the community as to their rights and responsibilities in contributing towards healthy outcomes for every pregnancy, and include these as part of all programming.

- Evaluate the formation, distribution and utilization of the different categories of human resources and their primary functions in the delivery of care.

  - Examine the principal function of each member of the health team and the most appropriate utilization of their skills.

  - Consider the need to provide skilled attendance at each level taking into account the particular contexts, for example urban vs rural and involving both incentives and resources.

  - Include curriculum content on professional responsibilities, ethics, health care management and the importance of maternal health to development in all health professional studies.

  - Promote new options in the health professional careers within the public health system to stimulate commitment and quality.

6. Expected Results

- A change in the vision of maternal health from a women's issue to a family and community public health, equity, human rights, and developmental issue.

- A policy framework which stimulates increased integration of strategies within the social sector directed towards the elimination of inequities, and at least some interim measures for compensation targeting during the transition period towards this goal.

- Intersectoral, interdisciplinary and programmatic synergy and activities to produce focused collective efforts for improving maternal health.

- More women being able to exercise their rights and decide freely and responsibly on matters related to their sexuality and reproductive health free of coercion, discrimination, and violence.

- Action plans with activities directed towards the prevention and promotion aspects, monitoring, and delivery of quality services.

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