

## Health and Nutrition Concerns of Women in Reproductive and Postreproductive Years in India

**ABSTRACT :** Unacceptably high rates of maternal mortality and morbidity in most of the developing countries all over the world is a matter of grave concern. The problem needs to be viewed as an unmitigated disaster affecting no less than 15 million women in a year out of which more than 0.5 million actually die. Problems of elderly women are compounded because of their postmenopausal status. In fact, this post reproductive period of life is a juncture of readjustments as it brings in its wake characteristic problems needing nutritional, medical, social and often psychological care.

To set the ball rolling on enhancing women's status, it is worthwhile to ensure their access to a life of good quality. Of the factors that make a quality life, health and nutritional care stand out as the ingredients basic to human advancement, for they make a human being grow and develop to his/her true potential. In India, pregnancy and child birth are one of the leading causes of death for women of reproductive age. Likewise, women in advancing age become vulnerable to the physiological and psychological problems that vehemently affect their quality of life disastrously. Health and survival of women in reproductive and post reproductive years affect the well being of societies. When women survive and thrive, the societies prosper. Thus addressing issues related to the adult and elderly women can immensely help in ensuring country's development and decreasing inequity and exclusiveness.

### ***Vulnerability of Mothers in Developing Countries:***

Coming face to face with ground realities that prevail in the developing world, the most important issue that is linked to women health is physiological and nutritional stress of being expectant mothers taking up the perilous journey to propagate the race. By considering the nutritional intake and health care of a young girl, a nutritionist or health practitioner can ensure safer physiological events in the later reproductive phase. However, in the low income rural Indian setting, many undernourished girls remain stunted during their growth periods leading to their pelvic bones remaining small. Later on, in the active reproductive and child bearing age, it leads to difficult and risky child birth or parturition

resulting in death<sup>1</sup>. Therefore, mothers are most at risk of death during pregnancy, delivery, and the 42-day period following childbirth.

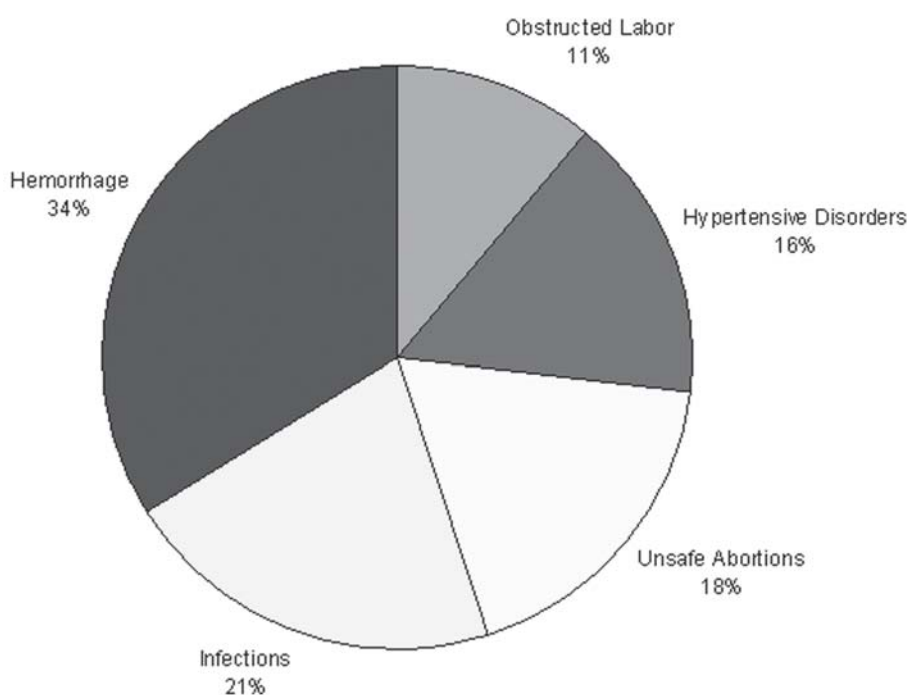
A pathetic portrayal of the situation comes in the words of Fred Sai<sup>2</sup>, a former President of International Planned Parenthood Foundation: "*No country sends its soldiers to war to protect their country without seeing to it that they will return safely, and yet mankind for centuries has been sending women to battle to renew the human resource without protecting them*". Evidence shows that motherhood can be safer for all women if the indifference in creating the maternal health and obstetric care and inequities in its availability are removed. Over the past decade, experts have largely come to agree on a set of lifesaving strategies that can work even in low-resource settings.

***Disparities in Maternal Mortality in Developing Countries:*** According to the estimates developed by WHO, UNICEF and UNFPA<sup>3</sup>, 515,000 women die annually from maternal causes. 99% of these deaths occur in the less developed world, making maternal mortality the health indicator that reveals the largest disparity between developing and developed countries. The situation is most dire for women in sub-Saharan Africa, where one of every 13 women dies of pregnancy-related causes during her lifetime, compared with only one in 4085 women in industrialized countries. *In India, conditions are no less dismal as 1 of every 400 women dies of pregnancy related causes during her life time.* These deaths are only a part of landscape which has bigger dimensions. For every woman who dies, approximately 30 more women suffer injuries, infection, and disabilities during pregnancy or childbirth taking the morbidity toll to at least 15 million women a year. The cumulative total of those affected has been estimated at 300 million, or more than a quarter of adult women in the developing world. These pregnancy-related health problems include severe anemia, infertility and damage to the uterus and reproductive tract sustained during childbirth. In India, many women are too ashamed to speak about these and other conditions or to seek treatment for them. This "culture of silence" is exacerbated in settings where women are not empowered to make choices and act freely to take care of their health<sup>4</sup>. As per special bulletin on maternal mortality, maternal mortality rate (MMR) in India as a whole and states wise in 2004-06<sup>5</sup> stood as:

Maternal mortality rate in India = 254, Statewise breakup: Assam – 480, Bihar/Jharkhand – 312, Madhya Pradesh/Chhatisgarh – 335, Orissa – 303, Rajasthan – 388, Uttar Pradesh/Uttranchal – 440, Andhra Pradesh – 154, Karnataka – 213, Kerala – 95, Tamil Nadu – 111, Gujrat – 160, Haryana – 186, Maharashtra – 130, Punjab – 192, West Bengal – 141, Other – 206

**Causes of Maternal Deaths:** The majority of maternal deaths occur after childbirth, mostly within 24 hours. About a quarter take place during pregnancy, and about 15 percent happen at the time of delivery. The most common medical cause is hemorrhage; a swift and severe loss of blood before, during, or after delivery<sup>6</sup>.

Hemorrhage is considered a “direct” cause of death, because it is directly associated with pregnancy and childbirth. Four-fifths of maternal deaths are due to direct causes; hemorrhage, infection, complications related to unsafe abortion and hypertensive disorders. Figure 1 shows how much each of these direct causes contributes to maternal mortality. The remaining 20 percent of maternal deaths have indirect causes, conditions that are aggravated by pregnancy, such as malaria, diabetes, viral hepatitis, rheumatic heart disease and anemia, all conditions aggravated by pregnancy. Other indirect causes include ectopic pregnancy, embolism and anesthesia-related deaths. Most of the deaths from the direct causes could be prevented if women received skilled care at critical moments during pregnancy and childbirth.



**Fig 1:** Direct causes of maternal deaths (WHO, UNICEF & UNFPA (Geneva: WHO, 2001)<sup>3</sup>

**Consequences of Maternal Mortality and Morbidity:**

Maternal morbidity and death is fraught with dangerous consequences, for a vast majority of women who die from or are seriously injured by maternity-related causes are in the prime of life, their illnesses and deaths have dire social and economic outcomes for both families and communities. Families forgot a woman’s crucial role in household management and care for children and other family members. Consequently, families that lose mothers are likely to suffer declining nutritional status. Surviving children may have lower rates of school enrollment. Maternal disabilities related to pregnancy and childbirth, such as anemia and malnutrition, also influence child health. Babies born to malnourished mothers are more likely to have low birth weights, which are associated with developmental delays, disabilities and even death<sup>7</sup>.

Research has shown that newborns whose mothers die are less likely to survive. Insufficient maternal care during pregnancy and delivery is largely responsible for the estimated 8 million stillbirths and newborn deaths and occur around the world each year. These deaths occur just before or during delivery or within the first week of life.

**Ageing and Post Reproductive Stress in Women:** As for ageing in the context of women, they ought to be treated as an especially vulnerable group because of two realities. For one, the women have a longer life expectancy than men though they have higher morbidity rates, thereby

implying that they live more to suffer more sickness. Further, the problems of elderly women are compounded because of their postmenopausal status. In fact, this post reproductive period of life is a juncture of readjustments as it brings in its wake characteristic physiological and psychological problems needing medical, nutritional, and often psychological-psychiatric attention. Some of the problems accompanying postmenopausal status can be summed up as under:

*Physiological :-* Hot flashes in the chest and face, sweating of palms and forehead, headaches and dizziness wrinkling/dryness of skin, loss of muscle strength and tone, brittle bones and increased

risks for osteoporosis, risk of heart attacks and malignancy and sexual dysfunction.

*Psychological*: -Irritability, mood swings, anxiety/tension, fatigue, low self esteem, depression, forgetfulness and sleep disturbances.

*Biological reasons*: Most of these problems are attributed to hormonal changes, especially the reduced level of estrogen and a consequent rise in pituitary hormone<sup>8</sup>. It has been pointed out that unfavorable lipid profile, mostly with respect to TG and LDL cholesterol, occurs in postmenopausal women, possibly owing to a slackening of homeostatic control of metabolism by the neuroendocrinal mechanisms as a consequence of menopause<sup>9,10</sup>.

***Role of Phytoestrogen Rich Herbal Preparations in the Management of Post Reproductive Health*** : Whereas some women seek to supplement their declining estrogen level through medical intervention with Hormone Replacement Therapy (HRT), others choose to be benefited from natural plant estrogens known as phytoestrogens. Incidentally, interest in the physiological role of a number of bioactive compounds present in plants has increased dramatically over the last decade, of which *phytoestrogens* remain of utmost interest<sup>11</sup>. Though weaker than human estrogen; when supplemented in diet through food stuffs rich in them, the phytoestrogens seem to increase body estrogen activity considerably<sup>12</sup>

Duncan<sup>13</sup> have stated that phytoestrogens are oestrogenic compounds found in plants, consisting of isoflavones, lignans and coumestans. Epidemiological studies provide evidence for a protective role of isoflavones, and to a lesser extent lignans, and other members against the development of numerous chronic diseases, including coronary vascular disease (CVD), osteoporosis and certain cancers. As a matter of fact, structural similarity of phytoestrogens to the endogenous estrogen has given credence to the hypothesis that phytoestrogens exert hormonal effects and their wide availability and appropriateness put them on a pedestal as a prudent dietary alternative to *none too side effect free* HRT therapy. *Phytoestrogens*' is an area of active and advancing research with high potential to affect human health favourably.

Also known as plant chemicals or phytochemicals, isoflavones a type of phytoestrogens are primarily found in soybeans and foods made from them. In particular, the significant therapeutic properties of soybeans have been generally attributed to soy isoflavones. Soy isoflavones play an important role in reducing plasma cholesterol levels and cancer prevention, particularly, of tumours under

endocrine control (breast and others) as well as in prevention/ treatment of post menopausal symptoms of osteoporosis<sup>14</sup>.

***Lack of Awareness and Neglect at Critical Care Points Make a Big Difference*** : As a matter of fact, effective health systems make obstetric care available to all women, including surgical and technical interventions required to treat life-threatening conditions during pregnancy, delivery and after childbirth. Antenatal care, among other services can play a role in detecting and treating some complications of pregnancy. The existence of skilled care, however, does not guarantee its use<sup>15</sup>. Women face multiple delays in seeking and receiving lifesaving care when they need it. Though these delays are common and all too rampant yet their crystallization and categorization as *Critical Care Points* can go a long way in bridging the hiatus in the health care of women on their journey to procreation.

*Realizing Serious Signs and Symptoms*: Many women fail to seek care because they and their families or caregivers do not recognize the signs of life-threatening complications of pregnancy and childbirth. (*First Delay*).

*Deciding to Seek Care*: Even when women recognize life-threatening complications, they may fail to seek care quickly enough. (*Second Delay*).

*Reaching Appropriate Care*: Physical, financial and sociocultural barriers often prevent women and their families from getting to care in time (*Third Delay*).

*Availing Care at Health Facilities*: Even when women with complications arrive at a health care facility, they may not receive the care they need quickly enough to save their lives. (*Fourth Delay*).

Women will stop dying in childbirth when they are able to plan their pregnancies, give birth under the supervision of a skilled attendant and have access to high-quality treatment if pregnancy complications occur. These improvements are feasible even in low-income settings, but require continuous and focused improvement of health systems by the state or society.

***Conclusion***: There is a wide disparity in maternal mortality and morbidity in developed and developing nations. Indeed, the irony is that despite medical and allied facilities remaining available, mothers continue to die due to subtle reasons that occur due to lack of action at critical care points. Like wise, post reproductive years of ageing women especially become troublesome due to cessation of reproductive hormone secretion. However, in addition to hormone replacement therapy (HRT), herbal preparation based strategies providing intervention with phytoestrogen

containing soy and other herbal foods can help. The society needs to be aware and intervening to ensure the health and empowerment of women. □

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