

Chapter-1

INTRODUCTION

Chapter-I

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The stern figures of the global burden of pregnancy-related deaths are now so well known. Every year, approximately eight million women suffer pregnancy-related complications 289000 women die due to complications in pregnancy and childbirth, and 6.6 million children below 5 years of age die of complications in the newborn period and of common childhood diseases. Worldwide, the majority of maternal and newborn deaths occur around the time of birth, typically within the first 24 hours after childbirth. In developing countries, one woman in 16 may die due to pregnancy-related complications compared to one in 2800 in developed countries. Many of these maternal and neonatal deaths more than 80% of could be prevented or avoided through actions that are proven to be effective affordable and by providing optimal care at health facilities, even in the poorer countries of the world. For example, surveys conducted in Egypt and elsewhere have shown that the quality perinatal care provided to the women is a key determinant in the maternal outcome and that simple change in practice can save many lives.

The data are stern enough and they tell only part of the story rather than illustrating the suffering and distress and the real underlying causes why women continue to die in a world where the knowledge, services, and resources are available or attainable.

While it is important to monitor the levels of maternal mortality at global, national and regional levels because simple statistics will not help us in identifying factors responsible for such deaths and in identifying what can be done to prevent such deaths. Now it is necessary to understand why the problem persists and what can be done to deflect maternal deaths and cases of severe morbidity.

However, progress in improving health outcomes for mothers and children has been slower in comparison. Unlike coverage rates quality of care provided to mothers, newborn & children in health facilities is not routinely measured & reported. Therefore, improving the quality of health facility-based healthcare services and making quality an integral component of scaling up intervention to improve health outcomes of mothers, newborn, and children is of utmost importance.

Despite substantial progress is made in reducing maternal & child mortality, neither the goals of MDG 4 (Millennium Development Goal) nor MDG 5 target will be met. According to W.H.O, it is estimated that 5.9 million children under five will die in 2015, and there will be 303,000 maternal deaths. The rural population are likely to lack access to quality healthcare are most. Maternal and Neonatal deaths remain a concern to our country.

It is again a pathetic paradox to see why women do not seek health facilities, even when they are available free (or are they not?) during their pregnancy, despite suffering and death, during delivery or even afterward. It is equally unfortunate to know that many mothers do not seek health facilities either for themselves, or for their children, even when they see other children dying early, and even if they are told that diseases and death can be prevented. Their reluctance to utilize the services, their indifference to their risk or to their children, or their inability to obtain or their ignorance of availability of the services, might be attributed broadly to social, cultural and economic factors.

Motherhood is a special and sacred fulfilment in a women's life. But this period is associated with certain complications and many women die in the process of childbirth, especially in developing countries. The health problems of mothers may have an effect on child's health because the health of children lies much more in the nutrition and health of women.

Uttar Pradesh is the largest state in India in terms of its population which have become a cause of concern in many quarters. It is evident that state healthcare services, especially relating to maternal and child health interventions are being designated as inadequate to the extent. Performance of these services has to be improved a lot to catch up the race with other states.

The Infrastructure of health at Village is also in very bad shape and every stakeholder is keeping themselves away from ground reality. Inefficacious administration and faulty policies are going to take a long time for making positive changes but rural people can be made aware about their entitlements and rights so that they can demand timely fulfilment of these entitlements and rights. Development of health services for maternal and newborn in rural areas is possible only when masses will come forward and demonstrate against ongoing irregularities in the health system. A dedicated response is needed to stimulate delivery of maternal health services in rural areas as well as mobilize marginalized sections of the society.

Panchayati Raj Institutions also have greater role & responsibilities towards healthy motherhood and childhood but they have failed in delivering their duties and achieving their goals as mandated in the constitution of India. Prevailing condition of maternal health and child health in rural India is not so good and millions of Indians are living in the frustrated environment.

The estimates for 1990–2015 presented in the report Trends in maternal mortality analyses by the Maternal Mortality Estimation Inter-Agency Group (MMEIG) examine the global, regional and country progress of maternal mortality. This report represents that over the past 25 years globally, the MMR fell nearly by 44% i.e. 216 maternal deaths per 100 000 live births in 2015, from an MMR of 385 in 1990. The annual number of maternal death decrease by 43%. Approximately 99% (302 000) of the global maternal deaths in 2015 occur in developing regions. At the country level, Nigeria and India are estimated to account for over one-third of all maternal deaths worldwide in 2015, with an approximate 58 000 maternal deaths (19%) and 45 000 maternal deaths (15%), respectively. An estimated global total of 10.7 million women have died in the 25 years between 1990 and 2015 due to maternal causes.

Statement of the Problem

Several health programmes and policies related to maternal and infant health are introduced by the government to improve the health status of pregnant women, Lactating mother and infant. But still the ratio of and perinatal mortality are high in India as compared to their ratio in developed countries. Moreover, high rate of incidence of perinatal mortality is found in rural areas as compared to urban areas. Lack of Quality Care is the main reason of high rate of this incidence. Hence, it requires a scientific research to know the real situation of the maternal and infant health status. The present study aims to investigate & explore quality measures for perinatal care.

Perinatal Care

The Health of women during pregnancy refers to the maternal health, childbirth and the postpartum period. While motherhood is often a positive and

fulfilling experience, for most women it is associated with suffering, ill-health and sometimes even death. Maternal healthcare is a concept that comprises preconception, perinatal care. Goals of preconception care include providing care before pregnancy, by promoting healthy behaviour, screening, and interventions for women of reproductive age to reduce risk factors and maximize health outcomes. Perinatal care is a comprehensive care that women receive and provide for themselves throughout their pregnancy. Women who begin perinatal care early in their pregnancies have better birth outcomes than their counterparts who receive little or no care during their pregnancies. The major direct causes of maternal morbidity and mortality include haemorrhage, infection, high blood pressure, unsafe abortion and obstructed labor.

Perinatal care is the care of women and a foetus or newborn given before, during, and after delivery from the 28th week of gestation through the 7th day after delivery.

The terms maternal and perinatal encompass a continuum of health states—from the most positive (complete physical, mental, and social well-being) to the most negative—and a huge number of clinical conditions.

Perinatal care units often involve a team of specialists, with multidisciplinary care for the expectant mother and foetus, as well as care for the newborn baby after birth. Common specialties involved in perinatal care may include cardiology, neurology, genetics, general surgery, orthopaedics and radiology. Such a multidisciplinary approach enables comprehensive and fully coordinated care for the mother and the foetus or newborn baby. Regarding perinatal conditions, we focus on those for which interventions can be directed to the baby through the mother during pregnancy or delivery. Formal definitions of perinatal conditions tend to vary by data source. Taken literally, they refer to conditions that arise in the perinatal period (Murray and Lopez), which are not the same as events that occur in the perinatal period—that is, from 28 weeks of gestation to the end of the seventh day of life. For example, death resulting from conditions that arise in the perinatal period can happen at any age, although it tends to take place during the neonatal period (up to 28 days of life). By contrast, perinatal deaths include both stillborn babies and those who are born alive but die before the end of the seventh day. Early neonatal deaths only include live births.

Status of Perinatal Care at International and National Level

At least half of all stillbirths occurred in the intrapartum period. Among the 133 million babies born alive each year, 2.8 million die in the first week of life. The patterns of these deaths are similar to the patterns for maternal deaths; the majority occurring in developing countries. Quality skilled care during pregnancy and childbirth is a key to the good health of the baby and the mother. In the regions with the highest neonatal mortality rates, access to postnatal care is abysmally low. In the majority of countries with data in sub-Saharan African and South Asia, fewer than half of mothers and babies receive a postnatal health check.

Complications during labor and delivery are responsible for approximately a quarter of all neonatal deaths worldwide. Yet in 2012, one in three babies — an estimated 44 million — entered the world without the help of a skilled healthcare provider, putting them at even greater risk during this most vulnerable time. Only about half of women worldwide receive the recommended minimum of four antenatal care visits. One-third of women globally deliver their baby without the help of a doctor, nurse or midwife. The global rate of women delivering with skilled attendance has risen by a mere 12 percentage points since 1990 — from 57 to 69 per cent. Globally, only 59 per cent of children under age 1 have their birth registered at the time of birth. In the high mortality regions of South Asia and sub-Saharan Africa, only about one-third of infants are registered. Children must be registered at birth if they are to have assured access to services, such as healthcare and education.

The annual report, produced by UNICEF, tracks the world's progress in fulfilling the promise of MDG 4 and sustaining the progress beyond 2015.

The global child survival landscape remains uneven, with steady gains in some areas and persistent gaps in others. The latest data shows that more children are living to celebrate their fifth birthday. Between 2005 and 2013, the rate of reduction in under-five mortality more than tripled compared to 1990-1995.

However, the global advance in child survival continues to elude many of the world's youngest and most vulnerable children. Of the 6.3 million children who died before age 5 in 2013, 16 per cent took their first and final breaths on the day they were born. Altogether, 44 per cent died during the first 28 days of life. In 2013 the

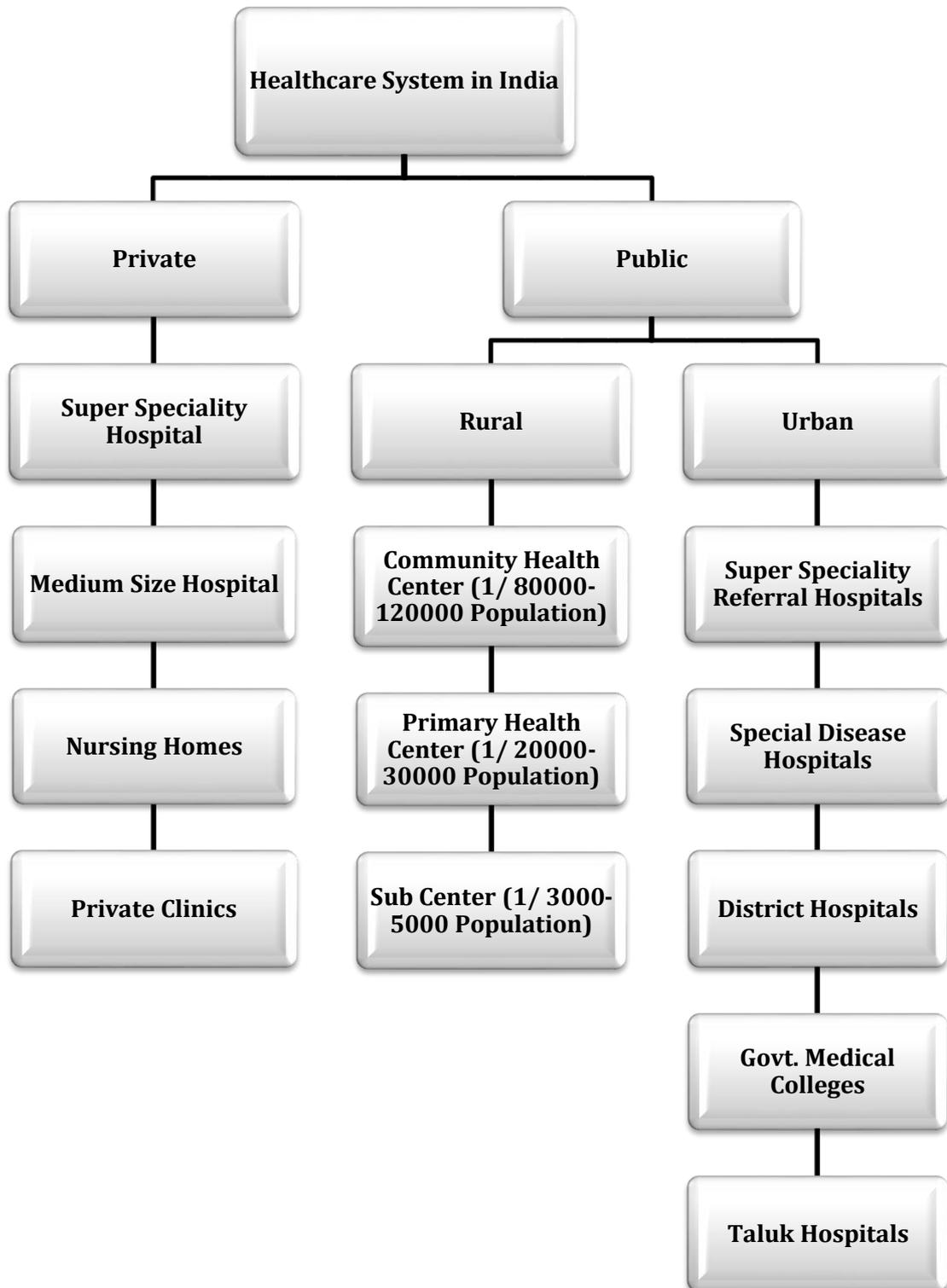
world suffered the loss of 2.8 million newborn babies. These staggering statistics are all the more tragic given that low-cost, evidence-based solutions are increasingly available, even in some of the most remote places. In 2013, almost 1 million newborn died on the day they were born, accounting for 16 per cent of all under-five deaths and more than a third of all neonatal deaths.⁴ A total of 2 million newborn died within the first seven days after birth, representing 73 per cent of all neonatal deaths (figure 16). Between 1990 and 2013, 86 million newborn babies born worldwide died within their first 28 days of life.

Reasons of the Perinatal Deaths

Perinatal mortality refers to the no of deaths in the first week of life and no of foetal deaths (stillbirths). Causes and determinants of neonatal deaths and stillbirths differ from those causing and contributing to early neonatal and child deaths. Neonatal deaths and stillbirths emanate from poor maternal health, ineffective care during pregnancy, improper management of complications during pregnancy and delivery, poor hygienic conditions and the first critical hours after birth, and absence of newborn care. Various factors such as lack of effective & efficient antenatal care & the poor accessibility of quality obstetric services by rural population, women's status in society, their nutritional status at the time of conception, early childbearing, too many closely spaced pregnancies and adverse practices, moderate levels of healthcare such as poor cord care, discarding colostrum as a first feed and feeding other food, are deeply rooted in the cultural fabric of societies and unawareness of the benefits. In many societies, neonatal deaths and stillbirths are not comprehended as a problem, largely because they are very common. Health workers at the primary and secondary level of care often lack the skills to meet the needs of newborn infants and maternal health's since the recognition of opportunity is only just emerging in countries, and their experience in this area is therefore limited. Babies die after birth because of obstetric complications before or during delivery have difficulty adapting to extra uterine life or because of harmful practices after the birth of the baby that lead to infections. Around 1% of infants have a major congenital anomaly. These anomalies are more common in developing countries rather than in developed countries, especially those caused by diseases such as syphilis, or by nutrient deficiency, which leads to neural tube defects and cretinism. Low birth weight has

also been one of the causes of neonatal deaths. It is associated with the death of many newborn infants, but is not considered a direct cause. Around 15% of newborn infants weigh less than 2500 g, the proportion ranging from 6% in developed countries to more than 30% in some parts of the world. The main “culprit” of infant mortality is preterm birth and the complications stemming from it, rather than low birth weight. There is, however, no doubt that maternal health and nutrition at conception are important determinants of weight at birth, neonatal health and frequency and severity of complications, and that maternal infections such as malaria and syphilis conducive to deplorable pregnancy outcomes and thus to mortality. Complications during birth, such as obstructed labor and foetal malpresentation and lack of quality care, are common causes of perinatal deaths. Common cause of neonatal death is neonatal tetanus in settings where lack of hygiene at birth and inadequate cord care are prevalent, as many women are not immunized against tetanus and cannot protect the baby at birth; poor feeding practices cause diarrhoea and poor growth; an unhygienic environment causes sepsis. Furthermore, not all institutions offering maternity services meet minimum standards for safe childbirth and newborn care: absence of health-care providers, out-dated knowledge and inadequate skills, lack of essential medicines, supplies and equipment, overcrowding and inadequate hygiene are far too common and also many health institutions are not even having the basic facilities like safe drinking water, toilet facility etc. Developing Countries are facing a major challenge to build effective healthcare systems that can meet the needs of the increasing number of mothers and their infants.

Structure of Healthcare Services in India



India has a mixed health-care system, dichotomous of public and private health-care service providers. Majority of private health-care providers are concentrated in urban India, providing secondary and tertiary care health-care services. The public health-care units in rural areas have been developed as a three-tier system based on the population norms. One Community health centres (CHCs) with a population of 120,000 people and in hilly/difficult to reach/tribal areas with a population of 80,000. A Primary Health Centre (PHC) is established in a plain area with a population of 30,000 people and in hilly/tribal areas with a population of 20,000, and is the first contact point between the village community and the medical officer. A sub-centre (SC) is established in a plain area with a population of 5000 people and in hilly/difficult to reach/tribal areas with a population of 3000, and it is the most peripheral and first contact point between the primary and the community health-care system.

As per the Rural Health Statistics (RHS) 2016, as on 31.3.2016 the status of public health facilities function in the country is as under:

Currently there are 773 district hospitals, 1065 Sub-divisional Hospitals (SDHs), 5,510 Community Health Centers (CHCs), 25,354 Primary Health Center (PHCs) and 1, 55,069 Sub-Center (SCs) in the country.

There is a dearth of 35110 Sub-centres (20%), 6572 PHCs (22%) and 2220 CHCs (30%) across the country as per the Rural Health Statistics (RHS) 2016.

First Referral Units (FRU) provides extensive obstetric care services including like caesarean section, early neo-natal care, emergency care of unwell children, full sequence of family planning services, safe abortion services treatment of STI/RTI availability of blood storage unit and referral transport services. Number of FRUs has increased significantly from 940 in 2005 to 2724 in 2016 (up to 31.12.2016).

Quality Care

The concept of quality of care is complex and multidimensional. The definition of quality of care is highly varied- ranging from excellence to expectations or goals which have been met to “degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are compatible

with current professional knowledge”. At a population level, quality of care can be defined as “competence to access effective care on an efficient, accessible and equitable basis for the optimization of health benefit/well-being for the whole population”. All dimensions of quality of care reduce to two questions. First, can

Individual get the care they need when they need it (i.e., is the care accessible)? Second, when they get care, is it effective both in terms of clinical effectiveness and interpersonal relationships? This definition of quality of care is appropriate when applied at an individual level.

Quality of Care is defined as ensuring that all mothers and newborn can use the preventive, curative, reliable & accessible quality health services they need and also ensure that these quality health services do not expose the user of these services to financial hardship.

The purpose of quality indicators is to support continuous improvement in care, often called quality improvement. As global experience increases with healthcare processes, some authorities prefer the term “process improvement”. Issues of structure or resources are important in lower- and middle-income countries, but the limiting factor is usually financial, with few options for other approaches to improvement. Better outcomes are certainly the goal of quality improvement, but these outcomes are achieved by improving the processes that lead to the outcome of interest. Some important points are mentioned here by focussing on which we can ensure quality care (1) Review current norms and practices, (2) Set standards, (3) Regularly compare practices with standards, (4) Assess result, (5) Modify and improve the programme according to what has been learnt.

In 2013, WHO conducted a comprehensive review of studies on quality improvement globally to identify facilitators and barriers to good quality of care for maternal and newborn health. There are several definitions and models of quality of care. For the purpose of the review, evidence was collected on the three levels of health systems suggested by Donabedian:1 structure (setting, material and human resources and organizational structures, standards and regulations), process (giving and receiving care) and outcomes (improvements in health outcomes, health behaviour, patients’ knowledge and patients’ satisfaction). The data from the review of published and unpublished systematic reviews were analysed within the WHO

organizational management framework for health systems. Priorities, facilitators and barriers to improving the quality of care were identified and grouped into eight interrelated domains: the six domains of the WHO framework (information, patient and population engagement, leadership, organizational capacity, regulations and standards and models of care) and two other domains (communication and satisfaction).

Health Programmes and Schemes Related to Perinatal Care

National Health Mission (NHM)

The National Health Mission (NHM) comprises its two Sub-Missions, the National Rural Health Mission (NRHM) and the newly launched National Urban Health Mission (NUHM). The main programmatic components constitute Health System Strengthening in rural and urban areas- Reproductive-Maternal, Neonatal-Child and Adolescent Health (RMNCH+A), and Communicable and Non-communicable Diseases. The NHM anticipates achievement of universal access to equitable, affordable & quality healthcare services that are liable and responsive to people's needs.

Janani Suraksha Yojana (JSY)

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) a government funded nationwide scheme offering conditional cash transfers was made operational since 2005, being implemented with the aim of reducing neonatal and maternal mortality by assisting institutional delivery among the poor pregnant women. This scheme, the most comprehensive such programme in the world (covering 11 million beneficiaries each year), has led to a quantum jump in the institutional deliveries.

This programme, was launched on 12th April 2005, by the Hon'ble Prime Minister, is being implemented in all states and UTs with special focus on low performing states.

JSY is a 100 % centrally sponsored scheme. The success of the scheme would be determined by the promoting institutional delivery among the poor pregnant women.

Important Features of JSY

The special focus of the scheme is on the poor pregnant woman and on the states having low institutional delivery rates namely the states of Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Rajasthan, Orissa and Jammu and Kashmir. While these states have been named as Low Performing States (LPS), the other remaining states have been named as High Performing States (HPS).

Eligibility for Cash Incentives

LPS States - All pregnant women delivering in Government health centres like Sub-centre, PHC/CHC/ FRU / general wards of District and state Hospitals or accredited private institutions.

HPS States - BPL pregnant women, aged 19 years and above

LPS & HPS - All SC and ST women delivering in a government health centre like Sub-centre, PHC/CHC/FRU/ general ward of District and state Hospitals or accredited private institutions.

Scale of Cash Assistance for Institutional Delivery:

Category	Rural Area		Total Rs.	Urban Area		Total Rs.
	Mother's Package	ASHA's Package		Mother's Package	ASHA's Package	
LPS	1400	600	2000	1000	200	1200
HPS	700	200	900	600	200	800

JSSK Programme (Janani Shishu Suraksha Karyakram)

In India every year about 56,000 women die due to complications during pregnancy and childbirth. Similarly, more than 13 lacs infants die every year, and out of these approximately 9 lacs i.e. 2/3rd of the infant deaths take place within the first four weeks of life. Out of these, approximately 7 lacs i.e. 75% of the deaths take place within a week of the birth and a majority of these occur in the first two days after birth.

In order to reduce the maternal and infant mortality, Reproductive and Child Health Programme under the National Health Mission (NHM) is being implemented to promote institutional deliveries so that skilled attendance at birth is available and women and new born can be saved from pregnancy related deaths.

Several initiatives have been launched by the Ministry of Health and Family Welfare (MoHFW) including Janani Suraksha Yojana (JSY) a key intervention that has resulted in phenomenal growth in institutional deliveries. More than one crore women are benefitting from the scheme annually and the outlay for JSY has exceeded 1600 crores per year.

In perspective of the difficulty being faced by the pregnant women and parents of sick new- born along-with high out of pocket expenses acquired by them on delivery and treatment of sick- newborn, Ministry of health and Family Welfare (MoHFW) has taken a major initiative to evolve a consensus on the part of all States to provide all services completely free and cashless to the pregnant women including caesarean operations and normal deliveries and sick new born (up to 30 days after birth) in Government health institutions in both rural & urban areas.

Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011.

The following are the Free Entitlements for pregnant women:

- Free and cashless delivery
- Free C-Section
- Free drugs and consumables
- Free diagnostics

- Free diet during stay in the health institutions
- Free provision of blood
- Exemption from user charges
- Free transport from home to health institutions
- Free transport between facilities in case of referral
- Free drop back from Institutions to home after 48hrs stay

The following are the Free Entitlements for Sick newborn till 30 days after birth. This has now been expanded to cover sick infants:

- Free treatment
- Free drugs and consumables
- Free diagnostics
- Free provision of blood
- Exemption from user charges
- Free Transportation facility from Home to Health Institutions
- Free Transport between facilities in case of referral
- Free drop Back from Institutions to home

Key features of the scheme

The initiative entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section.

The entitlements include free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, and free blood wherever required. This initiative also provides for free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborn accessing public health institutions for treatment till 30 days after birth. This has now been expanded to cover sick infants.

The scheme aims to eliminate out of pocket expenses incurred by the pregnant women and sick newborn while accessing services at Government health facilities.

The scheme is estimated to benefit more than 12 million pregnant women who access Government health facilities for their delivery. Moreover it will motivate those who still choose to deliver at their homes to opt for institutional deliveries.

All the States and UTs have initiated implementation of the scheme. Launched in 2011 compliments JSY and is aimed at mitigating the burden of out-of-pocket expenses incurred by pregnant women and sick infants. It ensures that every mother and infant (up to one year of age) is entitled to get a range of services (drugs, food, transportation) free of cost at public health facilities.

Perinatal and Referral Transport

National Ambulance Service (NAS)

One of the major achievements of NHM is the patient transport ambulances operating under Dial 108/102 ambulance services. There was no framework available either emergency response systems or assured transport for sick mothers and newborn in the public system when NRHM was launched in 2005. Now 31 States/UTs have the facility where people can dial 108 or 102 telephone number for calling an ambulance. This scenario has changed completely in the last few years. 108 is predominantly an emergency response system, primarily designed to attend to patients of critical care, trauma and accident victims etc. 102 services essentially consist of basic patient transport aimed to cater the needs of pregnant women and children though other categories are also taking benefit and are not excluded. Presently, over 20000 ambulances are in operation in the country under NRHM. JSSK entitlements e.g. free transfer from home to facility, inter facility transfer in case of referral and drop back for mother and children are the key focus of 102 service. Most states have developed well-functioning referral transport systems coordinated by efficient call centres. This is a remarkable success of NRHM.

Reproductive and Child Health (RCH) Programme

RCH was formally launched in 1997. The RCH programme incorporates the earlier existing programs i.e. National Family Welfare Programme and Child Survival and Safe Motherhood Programme (CSSMP) and added two more components one relating to sexually transmitted disease and the other relating to reproductive tract infections. The main objective of this programme is to reduce infant, child and maternal mortality rates. This is to be achieved through improvement and expansion of Maternal Child Health (MCH) services at village, sub-center, PHC and CHC levels; improving the access to MCH services at village and sub-center level, focusing on high IMR districts and improvement in support systems such as training, supply, communication, monitoring, and evaluation.

Integrated Child Development Scheme (ICDS) aims to improve the health and nutritional status of the children and women of poor sections. Children up to the age of six years, pregnant women and lactating mothers are the main beneficiaries of the project through Anganwadi centres. Under this scheme, the facilities such as supplementary nutrition diet, health check-ups, primary healthcare/consultation services, vaccination, nutrition and health education, and pre-school informal education are provided.

Operational definitions

The perinatal period: The perinatal period begins at 22 completed weeks (154 days) of gestation and ends seven completed days after birth.

Perinatal mortality: Perinatal mortality refers to the number of stillbirths and deaths of neonate in the first week of life (early neonatal mortality).

Quality Care: Quality care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are compatible with current professional knowledge.”

Foetal deaths (stillbirth): Defined by the Registration of Births, Deaths and as a child whose heart has not beaten after it has been completely evicted or extracted from its mother or with no signs of life at or after 28 weeks of gestation.

Live births: Live birth refers to the complete evulsion or extraction from its mother of a product of conception, regardless of the duration of the pregnancy, which, after such separation, shows breathes or any other sign of life - e.g. heart beating, pulsation of the umbilical cord or movement of voluntary muscles - whether the placenta is attached or the umbilical cord has not been cut. Each consequence of such a birth is considered live born.

Mothers: Mothers is defined as the number of women having a pregnancy which resulted in a livebirth or foetal death.

Maternal death: A maternal death is defined as the death of a woman during pregnancy or within 42 days of termination of pregnancy, inspite of the duration and the site of the pregnancy, from any complication related to or aggravated by the pregnancy or its management.

Maternal Mortality Ratio: The **Maternal Mortality Ratio** (MMR) is the **ratio** of the number of **maternal** deaths during a given time period per 100,000 live births during the same time-period.

Late maternal death: Death of a woman within one year of giving birth or otherwise ending a pregnancy. These deaths are not included in the calculation of the maternal mortality ratio.

Classification of maternal deaths

Direct deaths are those which result from obstetric complications of the pregnancy state (pregnancy, labor and puerperium) including deaths from interventions, omissions, or inappropriate treatment, resulting from a chain of events any of the above.

Indirect deaths are those which result from pre-existing disease or disease that developed during pregnancy and was not due to direct obstetric causes, but which may have been aggravated by physiological effects of pregnancy.

Incidental deaths are those due to conditions occurring during pregnancy, where the pregnancy is unlikely to have contributed significantly to the death, although it is sometimes possible to postulate a distant association.

The Need for the Study

As Mother and children constitute 60 per cent of the total population, they are considered as “At Risk” group and much attention needs to be given. Perinatal period is very important and defines the development of the unborn child right from the initial embryo stage to the final birth. The women of child bearing age need to be considered as “Special” and close attention should be given from the time of conception to birth and immediately after birth. Proper nutrition, exercise and pre-natal check-ups are extremely important. Necessary immunization and pre-natal testing are undertaken in this period to ensure both mother and child are in good health.

The major causes of neonatal deaths are Infections (33%) such as Pneumonia, Septicaemia and Umbilical Cord infection; Prematurity (35%) i.e. birth of newborn before 37 weeks of gestation and Asphyxia (20%) i.e. inability to breathe immediately after birth and leads to lack of oxygen. The prominent causes of death among infants are perinatal conditions (46%), respiratory infections (22%), diarrhoeal disease (10%), other infectious and parasitic diseases (8%), and congenital anomalies (3.1%)

Newborn are most vulnerable during the first hours and days of life, yet this critical window of opportunity is being missed. Quality care is grossly lacking even for babies and mothers who have contact with the health system.

With millions of women and children still at risk of dying of preventable causes, maternal, newborn and child survival must remain at the heart of the post2015 global development agenda. The world cannot abandon its promise to women and children.

Now is the time to scale up progress. The Every Newborn Action Plan represents a global consensus on the actions that need to be taken to scale up progress on newborn survival.

The world has the knowledge and solutions to save more women, newborn and children from dying of causes that are easily avoidable.

Better data are needed to help guide programmes. Although information on the use of basic services increased greatly over the past decade, more effort is needed to understand the quality of care available to women across the continuum of pregnancy, delivery and the postnatal period. Efforts to expand the availability and quality of population and health facility data must include a concerted effort to register every newborn and count the deaths of every mother and newborn, including stillbirths.

The purpose of this study is to help generate information that can be used by health professionals, healthcare planners and managers to save more mothers and neonate by improving the quality of care provided. Major gaps exist between coverage and the quality of care provided in health facilities which are as follows: Users' and community perception; lack of adequate information; lack of effective interpersonal communication; insensitive attitude; power difference between health worker and patient or caregiver or between men and women, No assessment of user perspectives in audits; uncaring and disrespectful behaviour of providers; cultural insensitivity; high costs; long waiting times, Variable fidelity to standard guidelines; incomplete or out-of-date standards; lack of adaptation of standards to local systems of care (community, clinic, hospital), Shortages of healthcare professionals, drugs and equipment; gaps in skills and knowledge; irregular, long working hours; providers' attitude towards change; inefficient care processes, Few antenatal care visits; lack of coordination across system levels (community, clinic, hospital) and phases of care (e.g. antenatal care, labor, delivery, postpartum, child services). These gaps are diminished by continuous improvement in care, often called quality improvement. Better outcomes are certainly the goal of quality improvement, but these outcomes are achieved by improving the processes that lead to the outcome of interest. If every mother and newborn receives quality care throughout the perinatal period the preventable deaths of mother and newborn are avoided.

Management of Thesis

This Study is organized into seven chapters.

The first chapter outlines the introduction of the study. It describes the background of the study, Perinatal care, status of perinatal care (international and national level), reasons of perinatal deaths, and structure of healthcare services,

Quality care, health programmes & schemes related to perinatal care, needs of the study and management of thesis.

The second chapter deals with the review of literature illustrating the subject comprehensively using the available literature based on issues pertaining to quality care in the perinatal period. It also discusses the importance of quality care in perinatal period. It also discusses the issues of availability, accessibility of quality healthcare services.

Chapter third outlines the methodological issues & briefly discusses the area of study. It also discusses various methods and techniques used in sampling and collection of data used in the study and also explains subsequent analysis techniques.

Chapter four describe the profile of respondents. It represents the development scenario, infrastructure and basic healthcare services for maternal & newborn care available in that area and discusses the impact of quality care practices during perinatal period and its impact on health of newborn and mother.

The fifth chapter deals with the status of quality care in the area of study. It begins with a brief discussion on quality practices in healthcare system and to determine the prominent developmental need of the pregnant women during perinatal period which requiring attention.

It also discusses the accessibility, availability and reliability of healthcare services in the rural area. It concludes with difficulties in accessing quality healthcare services in the perinatal period.

Chapter six tries to identify the delivery points, problems, and constraints of the perinatal period.

The final and the last chapter seven of the thesis conclude the major finding of the study. This chapter also highlights some suggestions for effective implementation of policies and programmes for maternal and newborn care. Finally, thesis is concluded with the policy implications.