CHAPTER – I

INTRODUCTION

Nothing brings more joy to a family than the birth of a child. The new parents, grandparents, aunts and uncles are all filled with joy and excitement at the thought of welcoming the newest member of their family to the world. The first little smile, the first tears shed, and the first baby's laugh will surely capture the hearts of each family member and create the most beautiful and unforgettable memories for the baby's parents. Childbirth is not without its challenges, but it is surely one of life's most rewarding events.[1]

Surely if nature has gifted fertility to women, it has also gifted the power of birthing. All women should have faith in their body's ability to give birth to a baby. Preparing for pregnancy in a positive set up enhances pregnancy outcome. Fear comes from not knowing. When we are absolutely certain about our knowledge, we are almost impervious to fear.[2]

Child birth is a normal physiological process, yet it is a life changing experience for the woman becoming pregnant for the first time. Experience of child birth is always linked with the emotional feelings and expectations. Inappropriate mental and physical preparation of the pregnant woman regarding the birthing process can leave her in a state of anxiety, dilemma and fear of the unknown. Gaining confidence by enhancing knowledge about childbirth can be considered as an important factor influencing a pregnant women's birthing experience.[3,4,5]

Childbirth causes physical and mental changes to pregnant women. A woman's experience of birth is vitally important, and her birth memories endure. Four factors are particularly important in determining a woman's childbirth experience:

personal expectations, the amount of support she receives, the quality of the caregiver-patient relationship, and her involvement in decision making. Positive perception of childbirth experience can decrease anxiety and depression in first –time mothers. Women have always prepared for the birth of their babies. Mothers from all cultures traditionally passed their knowledge about labour and birth to their daughters. These cultural and family rituals guided women through pregnancy, labour, birth, and the early days of mothering. Much of women's wisdom about birth was lost when birth moved from home to hospital. Mothers, sisters, and other women knowledgeable about birth no longer attended the woman. Birth became a medical event and cultural and family rituals took a back seat, eventually all but disappearing.[1,6]

BACKGROUND OF THE STUDY

The physiological transition from pregnancy to labor involves sequence of events demanding a high degree of adaptations both physically and psychologically especially for a primigravida.[3]

During pregnancy, a woman’s body undergoes significant physiologic changes to support the needs of the developing fetus and prepare for childbirth and lactation. Under normal circumstances, virtually every system in the pregnant woman’s body adapts as pregnancy progresses to ensure a healthy fetal environment and support dynamic and complex maternal physiologic needs. Ongoing assessment of the progress of pregnancy is important to promote and maintain maternal and fetal well- being. Pregnancy is also a time of significant psychosocial and developmental transition and adaptation. The pregnant woman, her partner and family must all adjust to the reality of pregnancy and anticipated new roles as mother,

father, grandparent or sibling. Whether married or single, women need care and support to understand the nature and significance of this developmental stage and prepare for the joys, challenges and responsibilities of motherhood.[96]

A primigravida lacks previous experience, possesses inadequate information regarding the birthing process and has no perception regarding the events that would take place when she would be undergoing labour herself. When the woman is well informed regarding the events that she would experience during the process of labour, her role in the child birthing process and the information regarding the intra-partum coping behaviour would probably make the labour outcomes favourable leading to positive physical and psychological impact on the postnatal mother.[5]

The development of structured educational programs in preparation for childbirth came about as the traditional methods of information sharing declined. Nurses and physical therapists who knew a great deal about the mechanics and medical management of pregnancy, labour, and birth, began to educate women about childbirth, largely outside of the health care system.

A childbirth education programme renders confidence to the pregnant woman by providing her the required knowledge, skill and to a great extent the change in attitude towards undergoing the unfamiliar experience of labour. It empowers the women to participate in the birthing process with complete psychological preparation, helping to preserve her energy and gain control over the birthing process. It rather improves and enhances communication between the woman in labour and the health team members, especially the midwives.[3]

Childbirth education has probably existed in some form since our earliest ancestors learned to speak and hand

information from one to another. Prior to the twentieth century, pregnancy, birth and childrearing were frequent events that involved the whole community, and women learned about birth from being present at birth. Some anthropologists have proposed that the evolutionary purpose for menopause was the social and species benefit of older women no longer occupied with children of their own, who could instruct and advise those in their childbearing years (Morgan, 1985). Although there appears to be no specific reference to education for pregnancy and birth in historical sources, the care of pregnant women is included in many writings on obstetrics and gynaecology from ancient and medieval times. In the late nineteenth and early twentieth century's, childbirth education was closely tied with prenatal care. In 1907, public health nurses and social reformers, in their efforts to reduce maternal mortality, instituted prenatal visiting programs that included instruction to pregnant women on "personal hygiene, rest and diet" .In 1918, The Maternity Center Association of New York instituted prenatal care that included instruction on childbirth preparation. From this time, until the 1930s, public health nurses provided the largest proportion of childbirth education as part of the prenatal care programs. Of the 34 public health nurses' prenatal care programs, all included instruction in "health habits, nutrition, preparation for the baby, and care of the mother and baby after delivery"[2]

In the 1960s and 1970s, women concerned with all areas of their health care began a movement that not only changed the management of their own pregnancy and birth, but saw the beginnings of the acceptance of their concerns by powerful medical institutions. Childbirth education was an important component of the women's health movement, advocating birth "awake and aware," natural childbirth, and the laboring woman's conscious participation in her birth experience. By

the 1980s, childbirth education was so popular that it was seen as almost essential to the childbearing experience. The structure and focus of childbirth education classes changed dramatically from the late 1970s until today. An oral history project that examines the changes from interviews with the educators can provide a primary source document from which those changes can be defined and analyzed. The oral history can also be compared with the source documents of the different childbirth education programs, to compare and contrast the philosophies and ideals of the certifying bodies with the practice experience of the educators. Finally, the oral history interviews can be used as the basis for a qualitative study that investigates the social processes that affected the changes and evolution of childbirth education from what was considered a radical fringe activity to an almost essential component of the American woman's childbearing experience. The primary goal of maternal-newborn care is a healthy mother and healthy baby, and childbirth educators are often at the forefront of teaching pregnant women and families how best to maximize their chances of achieving that goal. There are still many areas of obstetrical practice that should be carefully re-examined, reviewed and critiqued in the light of research-based evidence, and childbirth educators are in a primary position to do this.[7]

Childbirth education focused on two things in those early years: the basic anatomy and physiology of labour and birth and simple strategies (typically relaxation and breathing) to cope with the pain of contractions. In addition, some traditional birth practices, such as movement during labour, physiologic pushing from earliest times, preparation for childbirth was an informal sharing between socially connected groups of women; family, friends, and other women in the community. In the first part of the twentieth century, public

health nurses began to incorporate education and teaching plans into the prenatal care programs they provided.[8]

The first structured childbirth education programs came from England to the United States via the Maternity Center Association of New York, after the 1932 publication of Grantley Dick-Read's landmark book Childbirth without Fear. Throughout the 1940s, the "Read Method," which advocated reducing pain in childbirth by using knowledge to diminish fear, which in turn, decreased pain, was the basis for prepared childbirth classes. Although Read himself was an obstetrician, the Read Method met with scepticism from the medical establishment, which had not yet accepted the idea that it was beneficial for women to know very much about the process of birth.

While education as a part of prenatal care is well established and routinely practiced in developed countries, the perspectives in developing countries with regard to quality prenatal care is slowly evolving. Researchers have strong evidences that primigravida were poorly prepared for the experience of delivery and many women underestimated the severity of labour pain. A qualitative analysis done by Ibach F et al on knowledge and expectations among 30 African women indicated that primigravida were inadequately prepared for the experience of childbirth. The researcher also expressed his concern regarding the public health system not providing sufficient cognitive and emotional preparation for obstetric clients.[9]

A quasi-experimental, multi-time series research study conducted by Krish J A in 2003, to examine the development of maternal confidence for labour among 46 nulliparous pregnant women from 2 selected maternity units from suburbs of USA, revealed a significant inverse relationship between

maternal confidence for labour and fear of childbirth . The Other important findings of this study included a significant positive relationship between perceived knowledge and maternal confidence, and decreased fear among women who initially seek midwifery based prenatal care at 8-12 weeks of pregnancy.[10]

Evidences from the study conducted on Thai primipara mothers to determine the effect of child birth preparation classes on self efficacy in coping with labour pain show that childbirth preparation classes have the potential not only to increase pregnant women's intra-partum coping ability with labour pain but also to reduce stress during the processes of pregnancy and childbirth.[11,]

Researchers have demonstrated the benefits of childbirth classes in enhancing coping with labour pain in Thai and Chinese primipara. Primiparous women, as opposed to multiparous women, have no previous experience with childbirth against which to evaluate their own capabilities, so this group needs to be benefited most from educational interventions designed to enhance coping behaviour.[13]

Worldwide every day at least 1600 women die due to complication of pregnancy and childbirth. Majority of which occurs in developing countries. India accounts for more than 20% of global maternal and child deaths and also records 20% of births worldwide. Approximately 30 million women in India experience pregnancy annually, and 27 million have live births of these nearly 136000 maternal deaths occur annually, most of which can be prevented.[12]

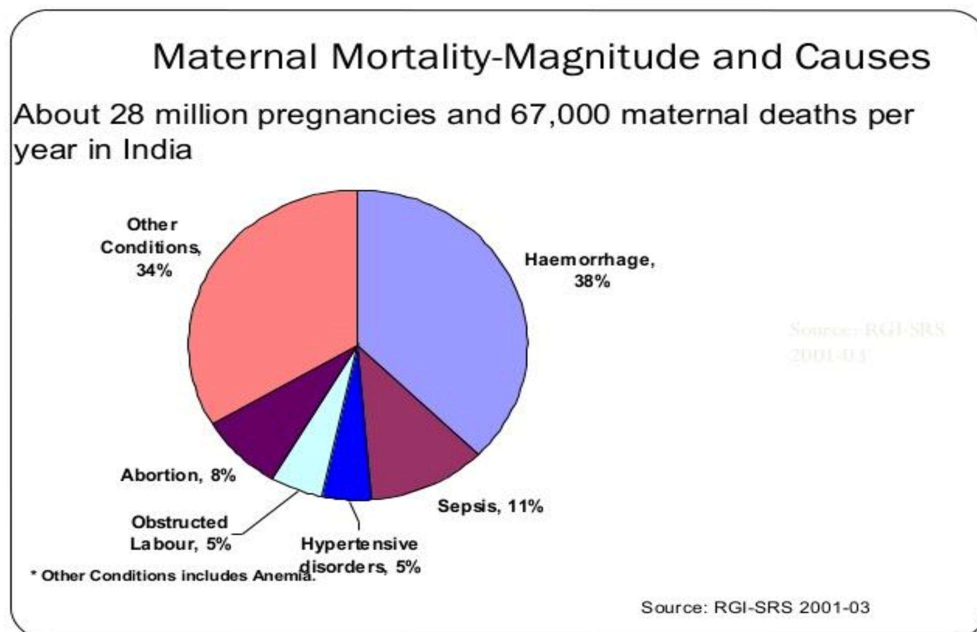


Figure 1: MMR magnitude & causes

From a Maternal Mortality Rate (MMR) of 437 per 100,000 live births in 1990-91, India is required to reduce MMR to 109 per 100,000 live births by 2015. Between 1990 and 2006, there has been some improvement in the Maternal Mortality Rate (MMR) which has declined to 254 per 100,000 live births as compared to 327 in 1990. Safe motherhood depends on the delivery by trained personnel, particularly through institutional facilities. However, delivery in institutional facilities has risen slowly from 26 percent in 1992-93 to 47 percent in 2007-08. Consequently, deliveries by skilled personnel have increased at the same pace, from 33 percent to 52 percent in the same period.[98]

The maternal mortality rate in Maharashtra is 130 per one lakh births. The number of maternal deaths reported in 2009-10 was 1,242. There is rise in reported deaths in 2010-11. As many as 1,372 pregnant women in the state - 876 in rural and 496 in city areas - have succumbed between April 2010 and March 2011. While neighbouring Pimpri-Chinchwad has accounted

for 19 deaths, Pune has listed 35 deaths during the same period. The reasons for the deaths have been uncontrolled bleeding, anaemia, high blood pressure, lack of transport facility, resulting in delayed treatment, etc. These all reasons for maternal deaths could be prevented easily by increasing awareness regarding the pregnancy care. Maternal deaths get automatically checked when pregnant women are encouraged to approach health care establishments for deliveries.[97]

MATERNAL MORTALITY IN 1990-2010
WHO, UNICEF, UNFPA,THE WORLD BANK AND UN POPULATION DIVISION MATERNAL MORTALITY ESTIMATION INTER-AGENCY GROUP
INDIA

YEAR	MMR	MATERNAL DEATHS	LIVE BIRTHS	PROPORTION OF MATERNAL DEATHS OF REPRODUCTIVE AGE	Lifetime risk of maternal death
2010	200 (140–310)	56,000 (38,000–83,000)	27,146	7.4 (5.1–10.8)	170
2005	280 (190–420)	76,000 (51,000–113,000)	27,220	9.4 (6.4–13.9)	110
2000	390 (260–600)	107,000 (72,000–163,000)	27,300	12.2 (8.3–18.3)	73
1995	480 (320–730)	132,000 (88,000–202,000)	27,554	16.0 (10.8–24.0)	53
1990	600 (390–920)	163,000 (109,000–252,000)	27,329	20.3 (13.7–30.8)	38

Figure 2: Maternal Mortality in India

In developing countries pregnancy and child birth are one of the leading cause of death for women of reproductive age, and one child in every 12 children does not reach his/her fifth birthday. Yet, the fate of these women and children is too often overlooked or ignored (WHO 2005). Over 2.3 million children died in India in 2005. Five causes accounted for all child deaths are pneumonia, prematurity & low birth weight, diarrhoeal diseases, neonatal infections and birth asphyxia & birth trauma. Neonatal deaths could easily be preventable by

proper antenatal, intra-natal and neonatal care. The neonatal mortality rate in Maharashtra is 16-20.[72]

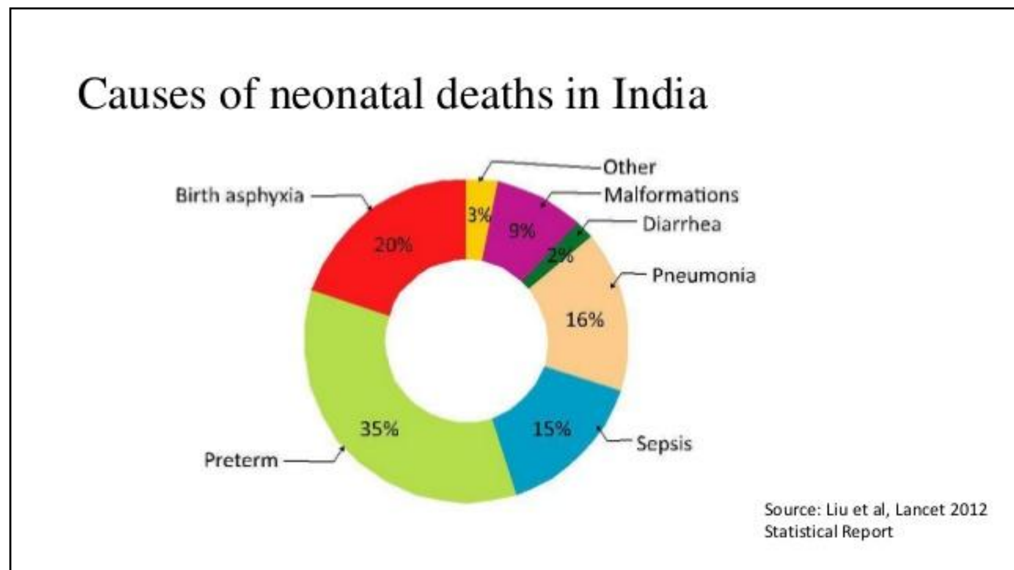


Figure 3: Causes of Neonatal Mortality in India

Midwives hold an important key to positive foeto-maternal care around the time of childbirth that will contribute to a good start for the baby and mother during the critical period of human life.[3] They render the best care during the process of childbirth based on the available evidences to assist woman in labour, helping them to make choices appropriately, depending on their individual clinical conditions and circumstances. They being in close association with the parturient can contribute immensely towards enhancement of intra-partum coping behaviours in the primigravida by using various methods to educate them right from the antenatal period till the completion of labour process.[5,6]

NEED FOR THE STUDY

Childbirth brings psychological changes in the women. During labour, many women develop anxiety and fear concerning injury of the fetus and themselves during and birth, fear of institutional person, fear of pain and fear of impending irreversible lifestyle changes created by the birth of the baby. Anxiety or fear can increase a women's sensitivity to pain and reduce their ability to tolerate it. This phenomenon, called "fear-tension-pain syndrome" was identified by Dick Read he believed that the most women approach labour with fear and anxiety because of ignorance, prejudices, and misinformation. The result is mental tension which, in turn, leads to tension in muscles including those of the lower uterine segment. This tension causes pain and can delay labor.[7]

World over, the goals of childbirth education and midwifery should go hand in hand. Both professions (Medical & Nursing) have at their core the rendering of safe, satisfying care to childbearing women. Both groups have struggled to achieve professional recognition while safeguarding their efforts toward reform. Now, both midwifery and childbirth educators stand at a crossroads described by Zwelling (1990) as a choice between continuing "to willingly prepare parents for the high-tech birth that has become standard practice or...to once again work for reform -- to promote consumer options, decrease the use of routine interventions, and promote natural, physiologic birth". Midwives and childbirth educators can support one another's efforts to continue to achieve reforms in medical management of labour and birth, to teach pregnant women to maximize their health behaviours, and to support family-centered care. The professions intersect in many areas, in helping women to understand the significance and importance of prenatal care, in advocating for pregnant and labouring women, in providing labour support, and in

continuing to examine the research and clinical evidence for management of childbirth. Childbirth educators can, like midwives, continue to be the guardians of normal birth.[14]

Childbirth preparedness—i.e. advance planning and preparation for delivery—can do much to improve maternal health outcomes. Birth preparedness helps ensure that women can reach professional delivery care when labour begins. In addition, birth preparedness can help reduce the delays that occur when women experience obstetric complications, such as recognizing the complication and deciding to seek care, reaching a facility where skilled care is available and receiving care from qualified providers at the facility.[15]

A descriptive cross sectional study conducted in 2006 by Mutiso SM et al to evaluate the birth preparedness and complication readiness among 394 antenatal clients in an antenatal clinic at Nairobi, Kenya, revealed that education and counselling on different aspects of birth preparedness was not given to all respondents. Their knowledge of danger signs were low and many respondents did not know about birth preparedness.[16]

A prospective longitudinal study conducted by Khatib N et al in central Maharashtra among 274 pregnant women to study the predictors for antenatal services and pregnancy outcome in a rural area in Wardha district, Maharashtra state showed that the antenatal services, in spite of being essential to the care of pregnant women, are being poorly delivered.[17]

Women at the poorest situation had approximately 5 times less access to skilled care compared to their richest counterparts.[19,20,21]

Childbirth education was an important social movement in the 20th century but has lost its way in recent years Knowledge about childbirth and parenting has historically been gained informally from other women, mainly family members, and through practical experience of assisting with child-rearing

in extended families. However, changes in family structure and women's increased participation in higher education and the workforce, combined with the increasing medicalization of childbirth, have meant that women are far more likely to depend upon formally organized antenatal education as the mechanism through which they develop their knowledge and skills. Typically, antenatal education tends to focus on facts surrounding pregnancy, labour and basic baby care skills. As a consequence, what women do not necessarily gain from antenatal classes is the confidence and emotional insight traditionally gained through informal communication with other women, and the practical experience of child care in extended families Thus, the content of antenatal classes prepares women to manage decisions during their pregnancy and childbirth, yet gives relatively little attention to preparing women (and their partners) for parenthood. The delivery tends to be instructional rather than oriented towards empowering women to make informed decisions about their health and the health of their baby.[2]

Deoki Nandan et al conducted a cross sectional descriptive study in Rewa district of MP, India, to assess birth preparedness and complication readiness intervention among 2022 respondents including Pre natal and post natal mothers and health care providers. The researchers concluded that the birth preparedness index of the study population was low(47.5%).It was also found that birth preparedness and complication readiness indices were significantly lower in population experiencing morbidity and mortality in contrast to the higher indices in above poverty line families, higher educational level and in-service and business group.[18]

In a review article by Mukherjee S N on rising cesarean section rate, it was quoted cesarean section on demand in absence of any specific risk are increasing. Inadequately

informed women choose cesarean sections to avoid painful natural childbirth.[22]

A descriptive cohort study done by Kingeland T in 2007 among 55,858 pregnant Norwegian women reported that increasing incidence of cesarean sections among first time mothers. The findings also revealed that positive experience from previous childbirth, no dread (fear) of giving birth and reporting positive intra psychic phenomena are significantly associated with the wish for natural childbirth.[23]

Though many studies have been conducted on antenatal education in pre- delivery briefing and preparation, [12,13,26,27] the effect it has on coping during labour is not explored much in Indian scenario. Since the primigravida form a major part of the antenatal population in India, [28,29,30] the status of knowledge regarding birthing process and childbirth preparedness among the primigravida women needs to be explored in order to communicate and convey to the midwives and obstetric team regarding the prospects of the child birth education on the favourable coping behaviours adapted by the primigravida during labour.

Original research done by Edgar Dale shows that the effectiveness of learning or the learning retention rate based on the learning experiences and the media that was used for the instruction. According to him only 5% can be retained by see/hear or lecture whereas learning retention rate increase to 20 % when audio-visual or video is used. [99]

Like classroom instruction, professional development is evolving. Effective platforms embrace 21st century technology in a way that helps improve teacher effectiveness through collaborative learning, real-world application of academic content, customization, meaningful peer evaluation, and self-evaluation through tools like interactive video. There is great potential in using video for the training and assessment

of observers. The advances made in this technology have been significant, resulting in lower costs, greater ease of use, and better quality. [100]

Video assisted teaching is an effective instructional method using advanced technology in its applications. It is a technique which creates interest in the learners with its 3 dimensional audio and visual effects in the learner.[101]

The primigravida's experience of childbirth is influenced by the knowledge and expectations she has of childbirth. Her expectations of childbirth are based on the information she got from the antenatal clinic, the nursing staff, her mother, friends and family. An exploratory, descriptive survey was conducted to determine the knowledge and expectations the primigravida has of childbirth. A structured questionnaire was used to make a survey of the primigravida's knowledge and expectations of childbirth. From this research it is clear that the respondents had insufficient knowledge of childbirth and the handling of pain during childbirth. This insufficient knowledge can mainly be attributed to the poor attendance of antenatal preparation classes, inadequate professional counselling and the mother of the primigravida as the primary source of information on childbirth. The respondents, however, had realistic expectations with regard to their handling of labour, as well as of the role of the midwife and the doctor. From this research it is clear that a large gap exists in the primigravida's preparation for childbirth. The group participating in this research is therefore not adequately prepared for childbirth to have realistic expectations.[109]

The majority of primigravida women expect a negative first childbirth experience. The women expected their overall childbirth experience to be frightening, very long, too difficult and painful. The expectations of a negative childbirth experience could be explained by limited labour preparation and advice given to women. The

women also expect inadequate nursing and midwifery support during childbirth. Health-care providers should emphasize the importance of childbirth preparation and improving the quality of intranatal care to help in changing negative childbirth expectations and experiences.[110]

During the researcher's experience as a midwife, in the labour room it was observed that most of the time the primigravida women were anxious, took more time to understand and follow the instructions given to them. Researcher attended many primigravida mother in labour who are not prepared mentally for labour and not able to follow the instructions that predispose them to more fear, anxiety and pain. They were not able to cope up with the normal labour process. Many a times, it led to intra-partum maladaptive coping behaviours resulting in pre mature bearing down efforts, maternal exhaustion, hypoxia, dehydration etc.

Today's modernized health care emphasises on cost effective, quality nursing care and also independent practice of the nurses are growing day by day. Preparation of mother during labour in initial period will enhance the possibility of healthy normal delivery with less exhaustion, stress and pain to the mother. Simple nursing interventions are very important factor like teaching a mother about labour process and how she should prepare for that. Therefore the investigator felt that the nursing research in this area will equip nurses in improving the mother's knowledge regarding labour and child birth and hasten healthy maternal and fetal outcomes.

Thus the investigator felt the need to do an experimental study to assess the effectiveness of a video assisted childbirth education programme on knowledge intra-partum behaviour, maternal and fetal outcome.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of a video assisted child birth education programme on knowledge, intra-partum behaviour, maternal and foetal outcome among primigravida mothers in selected hospitals of Pune city

OBJECTIVES OF THE STUDY

1. To assess the knowledge of primigravida mothers in experimental and control group regarding child birth before administration of the video assisted child birth education programme.

2. To assess the knowledge of primigravida mothers in experimental and control group regarding child birth after administration of the video assisted child birth education programme in experimental group only.

3. To compare the level of knowledge of primigravida mother regarding child birth before and after administration of the video assisted child birth education programme

4. To observe and compare the intra-partum behaviour of the primigravida mother in experimental and control group.

5. To observe and compare the maternal and foetal outcome in experimental and control group.

6. To associate the knowledge with selected demographic variables.

OPERATIONAL DEFINITIONS

Assess:

According to Oxford English dictionary "assess" means to evaluate or to estimate the value, importance or quality.[31]

In this study assess is the measurement of knowledge regarding childbirth, intra-partum behaviour, maternal and fetal outcome.

Effectiveness:

According to Encyclopedia and dictionary of medicine "effectiveness" is producing intended result. It refers to achieve the result that you want[32]

In this study effectiveness refers to the level of change in knowledge, compliance to the intra-partum behaviour, maternal and fetal outcome of the primigravida mother, brought about by Video Assisted Childbirth Education Programme.

Video:

According to Oxford Dictionary video is a short film or recording of an event, made using digital technology and viewed on a computer/ electronic gadgets.[103]

Video Assisted Teaching: A system of recording and reproducing moving visual images used to communicate with and see each other to a group of people.

In this study Video Assisted Teaching means a short film developed and reproduced to educate the primigravida mothers on labour process and child birth preparedness.

Child Birth Education:

According to Medical Dictionary child birth education refers to the education programme involving the entire process of an

infant making its way from the womb down the birth canal to the outside world.[104]

In this study child birth education programme refers to the structured education developed by the researcher regarding labour process and child birth preparedness. The content of the teaching programme covers the following areas:

a) Important physiological changes in third trimester pregnancy.

b) Impending signs of labour,

c) How to recognize true labour pain

d) Nature of true labour pains.

e) When and where to report for childbirth

f) Preparation of antenatal kit

g) Overview of stages and phases of labour

h) Expected intra partum behaviours and relaxation exercises during all the four stages of labour.

i) Bearing down technique

j) Breast feeding

k) Maternal and fetal outcome

The teaching methodology involved animated audiovisual presentations displaying exercise to be performed during last two months of pregnancy, breathing exercises during labour, comfortable positions to be adopted during labour. Animated Video of vaginal delivery, episiotomy and breast feeding were also shown to the primigravida mothers.

Knowledge:

According to Oxford English dictionary "knowledge" is a state of being aware of or informed.[31]

In this study knowledge refers to the awareness of the primigravida mother regarding labour process and childbirth preparedness.

Intra Partum Behaviours:

According to Webster dictionary intra partum behaviour refers to the way a person act or behaves during the process of labour and delivery.[105]

In this study it refers to the expectant act or behaviour of a primigravida mother during all the four stages of labour.

Maternal Outcome:

In this study it denotes duration of labour, use of any pain relieving drugs, nature of delivery and occurrence of any maternal complications (Perineal tear, maternal distress, post partum haemorrhage, and shock).

Foetal Outcome:

In this study it stands for birth of newborn live, still birth or asphyxiated and Apgar score of a newborn at birth and evidence of any birth injury of newborn.

Primigravida mother:

According to Oxford dictionary "primigravida" is a woman who is first time pregnant.[31]

In this study the primigravida mother is the registered first time mothers who have completed 32 weeks of gestation.

HYPOTHESES

H0 - There is no significant difference in knowledge, intra-partum behaviour, maternal and fetal outcome among primigravida mothers of experimental group after the administration of video assisted childbirth education programme at 0.05 level of significance.

H_1- There is a significant difference in knowledge among primigravida mothers of experimental group after the administration of video assisted childbirth education programme at 0.05 level of significance.

H_2- There is a significant difference in the intra-partum behaviours among primigravida mothers of experimental group after the administration of video assisted childbirth education programme at 0.05 level of significance.

H_3- There is a significant difference in the maternal and foetal outcome among primigravida mothers of experimental group after the administration of video assisted childbirth education programme at 0.05 level of significance.

DELIMITATIONS

This study is delimited to the registered primigravida women who

1. Have planned for vaginal delivery.
2. Have completed 32 weeks of gestation
3. Have a normal status of health throughout the pregnancy
4. Have expressed their willingness to participate in the study

5. Have no associated complications of pregnancy (Not a high risk case)
6. Registered for antenatal care and admitted for delivery in selected hospitals of Pune city.

ETHICAL ASPECTS

The study plan was thoroughly scrutinized by the college ethical committee. The ethical principles[33] followed in this research study were as follows:-

Privacy:- No revelation of any information identifying the participant or the study setting was mentioned in the name. Their names were represented as codes in the compiled data sheet. All documents, where the names of the participants were mentioned were kept under locked cabinet of the investigator. It was destroyed on completion of the research.

Consent:-The participants were given the full right of self determination to attend childbirth education. The measurements of intra-partum behaviours were done using covert data collection, since it would have interfered with the very behaviour of the variable of interest otherwise. This kind of data collection are accepted as long as the risks are negligible and participant's right to privacy had not been violated and also is not focused on sensitive aspects of human behaviour.

Rewards/Promises:- There were no rewards or promises offered to the participants. However, the investigator extended her informational and technical assistance to all the participants to be of any assistance/ support during their period of association with hospital.

Protection:- The subjects were not exposed to any kind of physical or psychological harm. The waiting time in the OPD was utilized to impart childbirth education. Neither the participant was kept waiting in the OPD, nor their turn to consult the obstetrician was overlapped. The information gathered also was not misused in any way to exploit the participants.

Information:- The participants were given beneficial information based on recent and evidence based practices of behaviours to be adopted during childbirth. They were informed about its benefits during intra-partum as well as postpartum phase.

Debriefing:- Though complete research design was not explained to the participants since it was difficult but the brief information about the research and its purposes were explained.

Approval:- The study proposal was scrutinized thoroughly by the subject experts to exclude violation of human rights and was agreed upon by the ethical committee board of the institution and the university.

Permission:- The investigator had obtained permission to conduct the research study from the administrative authorities of the Pune municipality hospital mentioned in the study.

CONCEPTUAL FRAMEWORK

Conceptual framework is a schematic representation. It provides

- A theoretical approach to the study of the problem that are scientifically based and which lay emphasis on the selection, arrangement and clarification of its concepts.
- A certain frame of reference for clinical practice,

research and education.

- A direction to research for relevant questions on phenomenon and points out a solution to practical problems.

"The conceptual framework formalizes the thinking process, so that others may read and know the forms of reference basis to research problem. It deals with elements that are assembled by virtue of their relevance to a common theme. Conceptual framework helps to think, observe, interpret and to adopt strategies for research" [35]

According to Treece and Treece (1986) conceptualization is the forming of ideas, designs and plans. It is the process of moving from an abstract idea to a concrete proposal.[36]

Conceptual framework refers to the interrelated concepts of abstracts that are assembled together in some rational scheme by the virtue of their relevance to a common theme. They serve as a springboard for the generation of the hypothesis to be tested as stated by Polit and Hungler (1999)[37]

Conceptual framework as quoted in Polit and Beck provides a perspective regarding inter related phenomena, presenting an understanding of the phenomenon of interest and reflects the assumptions and philosophic views of the model's designer. The purpose of theoretical and conceptual framework is to make research finding meaningful and generalizable. Theories allow researchers to knit together observations and facts into an orderly scheme.[34]

This research study adopted **Dorothea Orem's self care deficit nursing theory** which viewed self care activities as what people do on their own behalf to maintain health and well being and emphasizes on the goal of nursing as to help people meet their own therapeutic self care demands.[38]

Dorothea Orem's Self-Care Deficit nursing theory can be used for this study since it provides the unique focus for

nursing, related to knowing and meeting the therapeutic self-care demands of labouring primigravida, regulating the development and exercise of self-care agency, establishing self-care and self-management system.

Orem describes her self- care deficit theory as general theory and states that the condition that validates the existence of a requirement for nursing in an adult is the absence of the ability to maintain continuously that amount and quality of self care which is therapeutic in sustaining life and health[34]

Assumptions of the theory

1. Humans require deliberate inputs to self & environment
2. The power to act deliberately is exercised in caring for self & others
3. Mature humans sometimes experience limitations in their care abilities
4. Humans discover, develop and transmit ways for care
5. Humans structure relationships to provide self care
6. Self care comprises those activities performed independently by an individual to promote and maintain personal well-being
7. The three kinds of self care requisites are
   I. Universal
   II. Developmental
   III. Health deviation

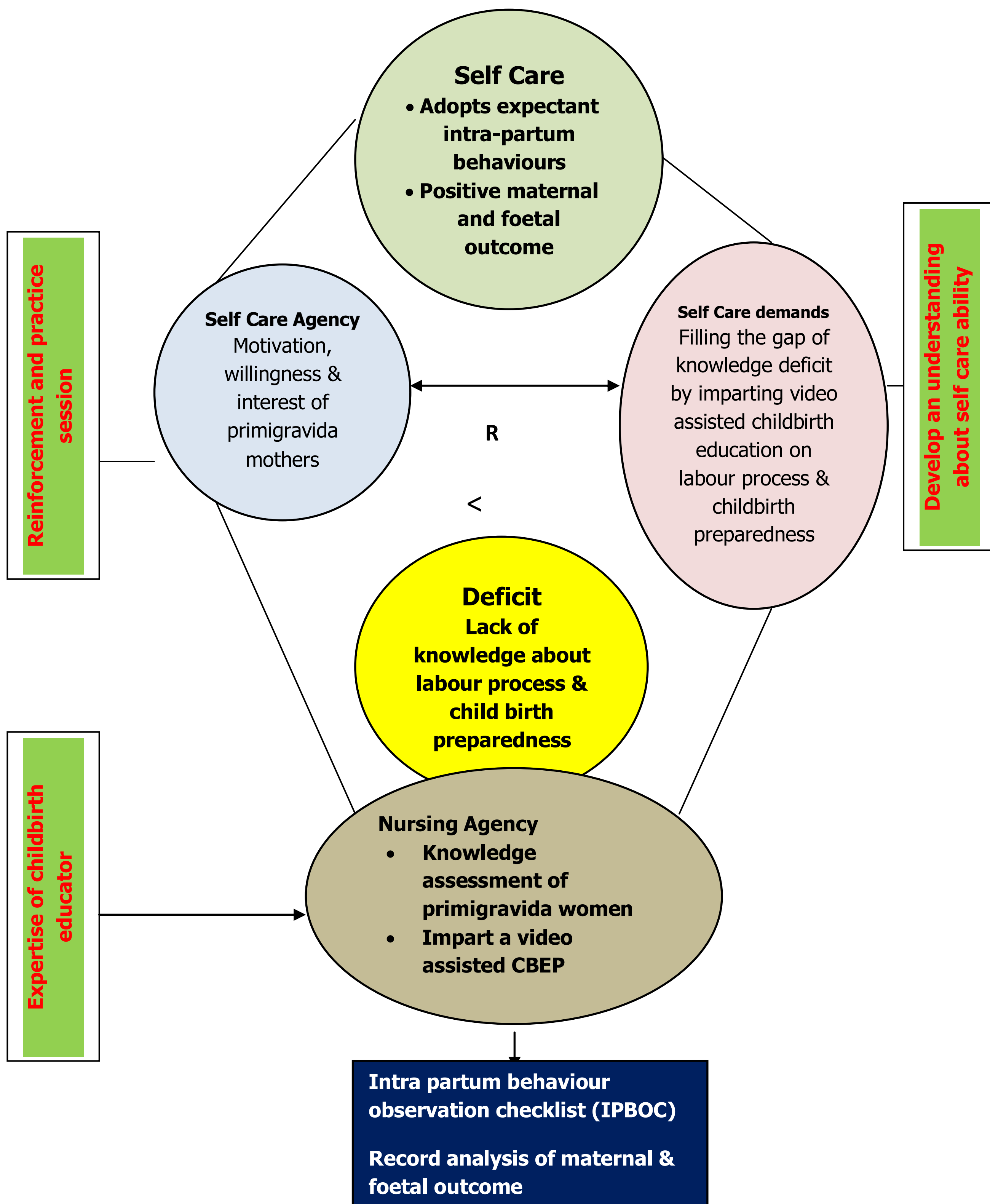
There are 3 variables affecting the self care

1. **Self care agency** is the individual's ability to perform self care activities
2. **Self- care deficit/demand** occurs when the person cannot carry out self-care
3. **Nursing agency-** The nurse then meets the self-care needs by acting or doing for; guiding, teaching, supporting or providing the environment to promote patient's ability

According to theory there are three types of nursing system:

1. **Wholly compensatory -** Patient dependent
2. **Partially compensatory-** Patient can meet some needs but needs nursing assistance
3. **Supportive educative -** Patient can meet self care requisites, but needs assistance with decision making or knowledge

The conceptual model described in **figure 1** has shown the deficit relationship between the three components.



R = Relationship, < = deficit relationship, current or projected

Figure 4: Conceptual framework of the study based on Orem's self care deficit theory (supportive educative)

Self-Care is intellectualized as a human regulatory function deliberately executed with some degree of completeness and effectiveness.

1. Self-Care in its concreteness is directed and deliberate action that is responsive to person's knowledge how human functioning and human development can and should be maintained within a range that is compatible with human life and personal health and well-being under existent conditions and circumstances.
2. Self-Care in its concreteness involves the use of material resources and energy expenditures directed to supply materials and conditions needed for internal functioning and development and to establish and maintain essential and safe relationships with environmental factors and forces.
3. Self-Care in its concreteness when externally oriented emerges as observable events resulting from performed sequences of practical actions directed by persons to themselves or their environments.
4. Self-Care that has the form of internally oriented self-controlling actions is not observable and can be known by others only by seeking subjective information. Reasons for the actions and the results being sought from them may or may not be known to the subject who performs the actions.
5. Self-Care that is performed over time can be understood (intellectualized) as an action system-a self-care system-whenever there is knowledge of the complement of different types of action sequences or care measures performed and the connecting linkages among them. Constituent components of a self-care system are sets of care measures or tasks necessary to use valid and selected means (i.e., techniques).

The Self-Care Framework is comprised of two concepts that express the patient variables and nine other concepts. The concepts and referents are arranged in four sets which includes the justification for application of Dorothea Orem's system model in this study

Set One: Self-Care and Self-Care System

Self-care is a "human regulatory function" that is based on individual's capabilities of the performing their own care. Nurses can draw from their own experiences that there is a relationship among self-care, self-care agency and therapeutic demand. When a client is unable to perform his own self-care, a self- care deficit exists and the nurse performs the tasks the patient is unable to do for him/herself. Self-Care refers to actions of individuals directed to self or environment to regulate factors or conditions in the interest of that individual's life, health, and well-being. Self-Care System consists of self-care (actions) performed over time that are analyzed and arranged into a coordinated system of action. Dependent-Care System is the term applied to a coordinated system of action performed over time to meet self-care requirements of a dependent person. Finally, Data descriptive of self-care denotes data that is analyzed to arrive at the self-care system.

In this study, **Self-Care** for an intra-partum primigravida woman would be to utilize the learnt childbirth knowledge and behaviour taught by the investigator during third trimester of pregnancy after 32 weeks of gestation with self motivation to be in control and to regulate factors or conditions in the interest of her life, health, and well-being to have a safe childbirth.

Set Two: Self-Care Agency

Self-Care Agency refers to: (1) power inherent in human capabilities essential for deliberate action, (2) a self-care

action repertoire, and (3) relationship between 1 and 2. Self-Care Limitation includes the following: (1) actual, defined as absences of an essential action or system of action from the repertoire; (2) predicted, of the human absence or restriction of one or more human capabilities for engagement in deliberate action; and (3) positive/negative, the temporary or permanent or relatively permanent effect of the value of a capability on an individual action repertoire. The theory of self-care expresses the purpose of taking care of self, referred to as the self care requisites; the how of taking care of self, referred to as the self-care agency; and the outcome of these , known as the self-care practices for self-care system.

In the present study, Self-Care Agency is the motivation of the primigravida mothers to work towards the goal of reducing the intra-partum stress. Though there is a range of existing intra-partum coping behaviours, she lacks the necessary knowledge to achieve the goal. By willingly attending the video assisted childbirth education class conducted by the researcher she assumes the purpose of self care, which will be stated herein as the self care agency. The outcome of this will be stated as positive intra-partum behaviours, that is; adopting positive self care practices.

Set Three: Therapeutic Self-Care Demand

Therapeutic self-care demand represents the totality of action required to meet a set of self-care requirements using a set of technologies. Self-care requirements consist of: (1) formulated goals, (2) orientations of Self-care action systems, and (3) expressions of input requirements for human functioning, for growth and development, for preventing, curing, and controlling disease processes.

Types of self-care requirements include Universal Type, referring to requirements that are general for all people require adjustments to age, sex, developmental state, and health state, and Health Deviation Type, meaning requirements

that have their origins in disease processes and their effects; or in medical technologies. Technologies for Meeting Requirements refer to methodologies involving use of specific resources that are valid in meeting a requirement.

In the present study, **self care requirement** are of health deviation type which includes requirement of knowledge regarding Pregnancy And Birth, Events During Child Birth Process, Time And Place For Delivery, Signs Of Labour, Investigations, Responsibilities During Labour, Comfort Measures During Labour, Episiotomy, Child Birth Preparedness, Mother And Baby Craft Item, Breast Feeding ,Diet After Delivery. **Self care demand** occurs when the person cannot carry out self-care which was assessed by a knowledge questionnaire regarding labour process and childbirth preparedness.

Set Four: Self-Care Deficit

Orem states that "if a person's capabilities are inadequate to meet the therapeutic demand (TS-CD) a self –care deficit exists". There are two different terms relating to self-care deficit. The first is actual self-care deficit, defined as a descriptive statement of the relationship between the therapeutic self-care demand and self-care system in which the actions specified by the therapeutic self-care demand and present or absent from the self-care system. Secondly, there is the potential self-care deficit, a descriptive statement of the relationship between the therapeutic self-care demand and predicted self-care limitations.

Self-Care Deficit in the study population was the lack of knowledge regarding labour process and childbirth preparedness which can lead to potential self care deficit during the process of labour. So there was a felt need to educate the antenatal mothers regarding labour process and childbirth preparedness so as to comply to the expectant intra-partum behaviour.

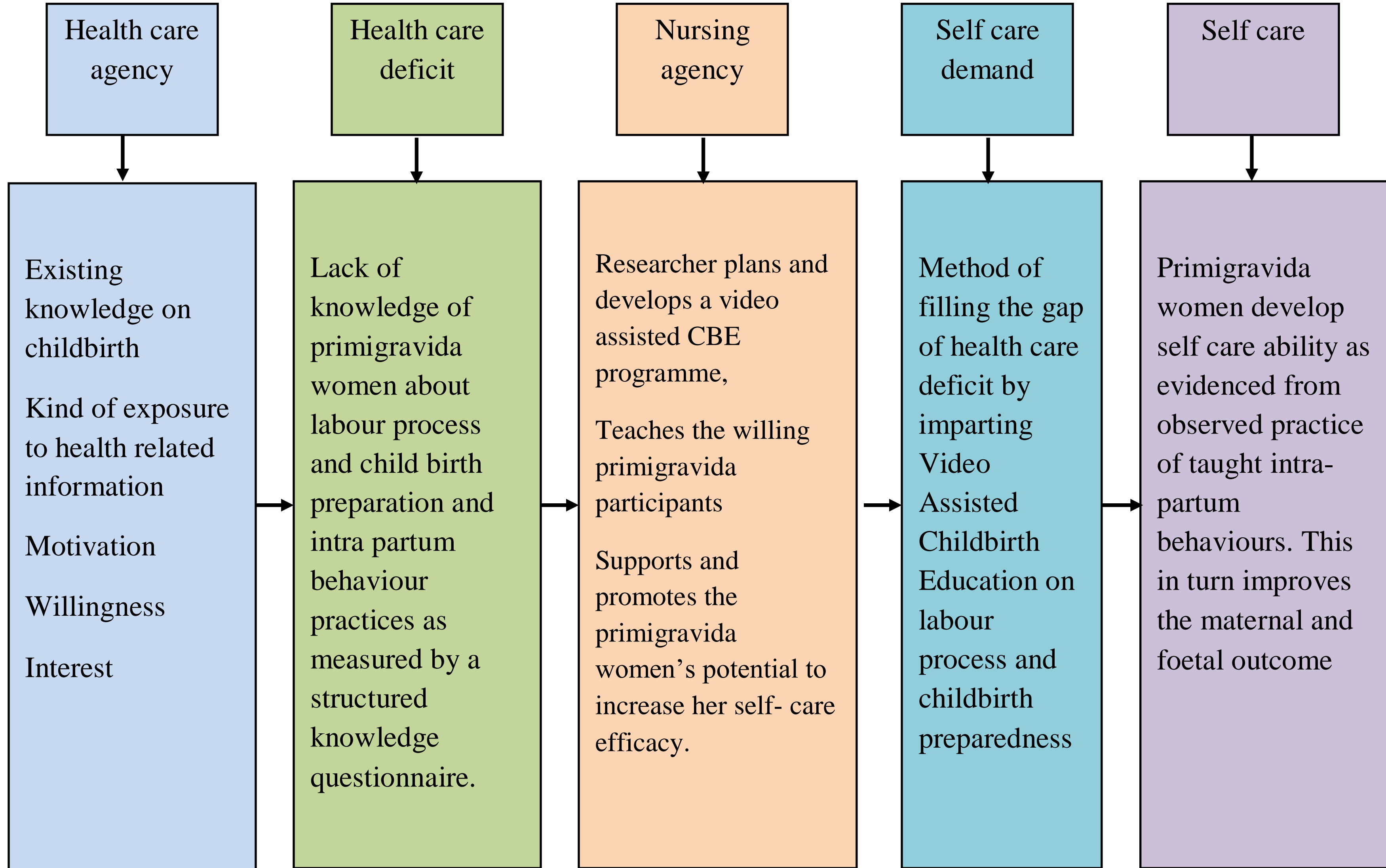


Figure 5 : Description of components of Dorothea Orem's self care model in this study

SUMMARY

This chapter dealt with the introduction, background of the study, need for the study, problem statement, objectives of the study, operational definitions, assumptions, hypotheses, delimitations, scope of the study, ethical aspects and conceptual framework.