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**“EVALUATION OF PRENATAL EDUCATION  
PROGRAM ON PREGNANCY HEALTH  
PRACTICES IN MOTHERS AT A TERTIARY  
CARE HOSPITAL OF BELAGAVI”**

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**Thesis Submitted to  
The KLE Academy of Higher Education and Research, Belagavi  
(Deemed-to-be -University)**

**[Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide  
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***For the award of the degree of  
Doctor of Philosophy  
In  
the Faculty of Nursing***

**By  
Arenlila Jamir**

**Registration No: KLEU/Ph.D./20-21/DO1220026**

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*Date:*

***Arenlila Jamir***

*Place:*

## LIST OF ABBREVIATIONS

ANC	Antenatal Care
OPD	Outpatient Department
SRAHP	Self Rated Abilities for Health Practices
WHO	World Health Organization
APSI	Antenatal Perceived Stress Inventory
BPCR	Birth Preparedness and Complication Readiness
CBSEI	Childbirth Self-Efficacy Inventory
DFS	Delivery Fear Scale
FOC	Fear of Childbirth
GOPE	Goal Oriented Prenatal Education
NRS	Numeric Rating Scale
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analysis
KAP	Knowledge, Attitude and Practice
APGAR	Appearance, Pulse, Grimace, Activity and Respiration
HPQ-II	Health Practice Questionnaire-II
PSI	Pregnancy Symptoms Inventory
CNE	Continuing Nursing Education
OBG	Obstetrics & Gynaecology
Q	Question
RCT	Randomized Controlled Trial
SNOSE	Sequentially Numbered Opaque Sealed Envelopes
SD	Standard Deviation
CI	Class Interval
ANOVA	Analysis of Variance

## ABSTRACT

**Background:** During pregnancy, the well-being of both mother and baby is paramount, requiring lifestyle adjustments. The World Health Organization stresses the importance of engaging pregnant women in healthy behaviors, including a balanced diet, regular exercise, proper supplement intake, and avoiding harmful substances. These health practices significantly impact maternal, fetal, and pregnancy outcomes. Educating women about healthy pregnancy practices, labor, and parenting readiness boosts their confidence in managing pregnancy challenges. Family support, especially from fathers, is crucial in promoting these healthy practices. Fathers' active involvement creates a positive environment, reduces negative maternal health behaviors, and mitigates various risks.

**Methodology:** A randomized controlled trial was conducted among 200 first-time mothers and 140 fathers at the antenatal OPD of KLES Dr. Prabhakar Kore Hospital & MRC. Participants were randomly assigned to control and study groups using the envelope method. Baseline data, including socio-demographic characteristics, the Self-Rated Abilities for Health Practices (SRAHP) scale, and a 5-point Likert attitude scale, were collected. The study group received a prenatal education program consisting of three sessions for mothers and one session for fathers, each lasting about 30 minutes during antenatal visits, while the control group received routine care. Post-tests for mothers were conducted after 37 weeks, and for fathers during their next visit. Data analysis was performed using descriptive and inferential statistics with SPSS software.

**Results:** After the intervention, the study found a significant increase in the mean post-test SRAHP scores for the study group ( $104.79 \pm 9.46$ ) compared to the control

group ( $40.15 \pm 9.77$ ), with a t-value of 38.324 and p-value of 0.0001. Significant improvements in nutrition, psychological well-being, exercise, and responsible health practices were observed within the study group ( $p=0.0001$ ). Among the control group, pregnancy health practices were significantly associated with age, education, occupation, and family income ( $p < 0.05$ ), but no such association was found in the study group. At 5<sup>th</sup> minute, the mean APGAR score was higher in the study group ( $8.9 \pm 0.3$ ) than the control group ( $8.2 \pm 1.0$ ), with p-value of 0.001. Additionally, more newborns in the study group had normal birth weights (89.3%) compared to the control group (64.6%). Post-test mean attitude scores were significantly higher in the study group ( $137.89 \pm 16.81$ ) than the control group ( $76.89 \pm 20.16$ ), with a t-value of 17.686 and  $p < 0.001$ . In the control group, fathers' attitudes towards their roles during pregnancy were significantly associated with age, education, occupation, and residence ( $p < 0.05$ ), but no significant associations were found in the study group.

**Conclusion:** Prenatal education programs for first-time parents are essential to promote healthy pregnancy practices. Healthcare providers should prioritize assessing pregnant mothers' health behaviors and offer support when needed by organizing health programs that enhance awareness of beneficial practices during pregnancy. Including first-time fathers in prenatal education at antenatal clinics is also crucial. To boost male participation, antenatal care processes should be designed with a supportive physical environment that encourages their involvement and respects their socio-cultural roles.

**Keywords:** pregnancy, prenatal education program, first-time mother, father, health practice

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## **CHAPTER - 1**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Pregnancy is an important event of life for every woman during her reproductive period. The process of bringing a new life into the world demands the woman to learn new information about her body and her growing fetus<sup>1</sup>. Particularly for first-time mothers, the onset of pregnancy can evoke feelings of fear, anxiety, and health concerns, requiring timely interventions from healthcare providers. Educating women about pregnancy, labor processes, and parenting readiness not only bolsters their confidence in navigating pregnancy-associated challenges comprehensively but also enables them to identify warning signs, facilitating early intervention. Prenatal education equips women with the necessary knowledge to become informed mothers, actively engaging in the maintenance of their health during pregnancy<sup>2</sup>. Delivered over several consecutive weeks, prenatal education covers a wide array of topics, including coping techniques for childbirth, infant care, and the responsibilities of parenthood<sup>3</sup>. Research have indicated that prenatal education is associated with reduced anxiety levels in mothers, a higher percentage of vaginal births, longer gestational ages, larger birth weights, better Apgar scores, and better coping skills.<sup>4</sup>

During pregnancy, the well-being of both mother and baby takes precedence, necessitating a range of lifestyle adjustments<sup>5</sup>. The World Health Organization emphasizes the importance of actively engaging pregnant women in health-related practices, such as maintaining a balanced diet, regular physical activity, proper supplement intake, and avoidance of harmful substances<sup>6</sup>. These practices

significantly impact maternal health and serve as fundamental determinants of overall well-being during pregnancy<sup>7</sup>. The frequency and intensity of typical pregnancy discomforts, such as nausea, back pain, urine incontinence, sleep quality, mental health, and mood, are significantly influenced by the health practices and lifestyle choices of expectant women.<sup>8</sup>

Health practices during pregnancy encompass a variety of behaviors that profoundly influence maternal, fetal, and pregnancy outcomes<sup>9</sup>. These practices include abstaining from harmful substances like cigarettes and alcohol, avoiding high-risk sexual behaviors and infections, limiting caffeine intake, maintaining oral hygiene, attending prenatal care sessions, and acquiring knowledge about pregnancy and childbirth<sup>(10-12)</sup>. However, some pregnant women may not fully appreciate the importance of adopting a healthy lifestyle for themselves and their children<sup>10</sup>. Adverse outcomes, such as low birth weight, congenital abnormalities, and spontaneous abortion, might result from suboptimal health practices throughout pregnancy<sup>(13,14)</sup>. Furthermore, neglecting one's health during pregnancy may have long-term effects on the health of the mother, potentially leading to conditions like obesity, diabetes, and heart disease if unhealthy behaviors persist postpartum<sup>(15,16)</sup>.

Various obstacles hinder women's access to prenatal and childbirth care. Social factors such as income, educational accessibility, racial background, and ethnicity greatly influence these hurdles. Moreover, detrimental gender biases and disparities frequently lead to the neglect of women's and girls' rights, exacerbating the complexity of the situation<sup>17</sup>. To improve maternal health outcomes, it is vital to identify and address these barriers comprehensively while simultaneously promoting healthy practices throughout pregnancy to ensure optimal maternal and fetal health.

One of the strategies for promoting healthy practices during pregnancy is the participation and support of the family members, especially the fathers. Active involvement of fathers during pregnancy fosters a positive atmosphere, diminishes adverse maternal health behaviors, and alleviates risks linked to preterm birth, low birth weight, and fetal growth restriction. Furthermore, fathers' active participation during pregnancy associates with decreased rates of maternal mortality and has a positive impact on both maternal and neonatal outcomes<sup>(19,20)</sup>. Research suggests that it can impact health-seeking behaviors, better household care practices, and intimate relationships<sup>(21,22)</sup>.

Despite the accumulating evidence advocating for fathers' participation during pregnancy, cultural norms in India may pose challenges to such engagement. However, breaking through these norms is crucial, as fathers play pivotal roles in ensuring the well-being of both mother and baby. These responsibilities entail accompanying their partners to antenatal appointments, offering both physical and emotional assistance, ensuring access to nutritious food and financial aid, showing care and empathy, and being attentive listeners<sup>23</sup>. Partners' support is consistently vital throughout pregnancy. She wants him to be with her and have some knowledge about the pregnancy. In case of emergencies, he will be the best decision-maker for her and the baby<sup>24</sup>. Furthermore, their support for women's health and well-being can significantly influence the care pregnant women receive. So, participating in educational programs during antenatal visits alongside mothers can provide fathers with valuable insights into women's health, alleviate women's workload, and foster positive decision-making processes.<sup>25</sup>. This will ultimately help the mothers to maintain health promoting behaviors and have a smooth pregnancy.

Hence the present study is undertaken to conduct an educational program and evaluate the effect on pregnancy health practices and fathers' attitude in prenatal care.

## **1.2 Need for the Study**

Pregnancy marks a transformative journey, bringing forth new responsibilities, joys, and concerns that can reshape a woman's physical, mental, and health behaviors<sup>26</sup>. From prenatal care through the postpartum period, ensuring adequate healthcare is crucial for the well-being of both mother and child. This continuum of care acts as a preventive measure, involving regular check-ups that enable healthcare professionals to address and prevent potential health issues while promoting healthy lifestyles<sup>27</sup>. The importance of prenatal care for women has been steadily increasing, particularly in developing countries, which are home to approximately 80% of the world's female population<sup>28</sup>. Statistics reveal that around ninety-nine percent of maternal and neonatal deaths occur in these regions, with higher rates observed in rural areas and among impoverished communities<sup>29</sup>. This highlights an urgent necessity for the adoption of evidence-based, cost-effective interventions aimed at enhancing maternal and neonatal health outcomes in these vulnerable settings<sup>30</sup>.

A study conducted by Rezaie et al.<sup>31</sup> revealed that pregnant women who participated in self-care counseling sessions significantly enhanced their health practices, indicating the potential for these sessions to enhance overall well-being. It appears that self-care counseling may also alleviate pregnancy symptoms by fostering healthier habits among expectant mothers. By embracing healthy behaviors, expectant mothers not only enhance their own well-being but also contribute to the optimal development of their offspring<sup>32</sup>. Therefore, it is imperative for healthcare providers to prioritize assessing pregnant mothers' health practices. Upon identifying

suboptimal practices, it is essential to provide the requisite support through health programs aimed at enhancing mothers' awareness of health-promoting behaviors during pregnancy. This approach can help sustain and enhance the well-being of both mothers and their babies, thus reducing pregnancy-related complications.

Simultaneously, becoming a first-time father and fully embracing the responsibilities of fatherhood can profoundly transform one's life. Active involvement of fathers during the prenatal period has a significant potential to improve the health outcomes for both the mother and the child<sup>34</sup>. Despite increasing emphasis on paternal involvement, research on fathers' knowledge and attitudes toward pregnancy care remains limited. Societal norms and patriarchal standards may influence men's perceptions of maternal health care, posing challenges to optimal care<sup>35</sup>. For instance, in India, the attitude of husbands towards pregnancy care plays a crucial role in determining their participation in antenatal care (ANC) visits, which in turn impacts the likelihood of institutional births. Enhancing husbands' understanding of maternal care and fostering healthy husband-wife relationships are associated with higher rates of institutional births<sup>36</sup>. Furthermore, a father's involvement is vital for attaining favorable maternal and neonatal health outcomes and for fostering social and behavioral shifts that empower men to embrace more responsible roles in maternal healthcare. Hence, this study aimed to assess the impact of a prenatal education program on pregnancy health practices. Additionally, we sought to understand the perspectives of first-time fathers regarding their involvement in prenatal care by evaluating the attitudes of those attending antenatal care visits at a tertiary care hospital.

### **1.3 Title of the study**

Evaluation of prenatal education program on pregnancy health practices in mothers at a tertiary care hospital of Belagavi.

### **1.4 Objectives**

#### **Primary objective**

- To evaluate the effect of prenatal education program on pregnancy health practices in mothers
- To find an association between demographic characteristics and pregnancy health practices

#### **Secondary objective**

- To assess the effect of prenatal education program on neonatal outcomes
- To evaluate the effect of prenatal education program on fathers' attitude in prenatal care
- To find an association between demographic characteristics and fathers' attitude in prenatal care

### **1.5 Research Hypotheses**

All the hypotheses will be tested at 0.05 level of significance

**H<sub>1</sub>:** The mean posttest SRAHP scores of mothers after prenatal education program will significantly differ than mean pretest SRAHP scores.

**H<sub>2</sub>:** The mean posttest attitude scores of fathers after prenatal education program will significantly differ than mean pretest attitude scores.

## **1.6 Assumptions**

The study assumes that:

- Implementing a prenatal education program is crucial for equipping first-time mothers with the necessary knowledge and skills to embrace health-promoting behaviors throughout pregnancy, fostering optimal health practices.
- Introducing first-time fathers to their responsibilities during pregnancy through a prenatal education program can enhance their understanding and attitude toward their role in prenatal care.

## **1.7 Delimitation**

The study is delimited to:

- First-time expectant mothers and fathers attending the antenatal OPD at KLES Dr. Prabhakar Kore Hospital in Belagavi.
- First-time mothers at 20-24 weeks of gestation and fathers only who are available during the data collection.

## **1.8 Operational Definitions**

**a. Evaluation:** It refers to the statistical difference in pregnancy health practices scores and attitude scores before and after the prenatal education program, measured by Self Rated Abilities for Health Practices (SRAHP) scale and 5-point Likert attitude scale.

**b. Mother:** In this study, it refers to a woman who is pregnant for the first time with singleton fetus, attending antenatal OPD in KLES Dr. Prabhakar Kore Hospital &MRC.

**c. Father:** In this study, it refers to the spouse of the first time mother who has accompanied her for the antenatal visit in KLES Dr. Prabhakar Kore Hospital &MRC.

**d. Prenatal Education Program:** In this study, it includes planned teaching of three sessions with mothers and one session with fathers, related to pregnancy health promoting behaviors which is given by the researcher. Each session lasts for approximately 30 minutes and all the topics are dealt with videos, flash cards, handouts, model and demonstration. The content for the education program is prepared based on the needs of the program participants and it has been developed according to WHO and Ministry of Health & Family Welfare guidelines.

The following topics are included:

Session I (Overview of Normal Pregnancy)

- Physical changes
- Emotional changes
- Staying healthy

Session II (Self-care During Pregnancy)

- Keeping an active lifestyle
- Identifying warning signs
- Managing common discomforts

Session III (Childbirth and Postnatal Care)

- Preparation for childbirth
- Care after delivery
- Neonatal care

Session IV (Fathers' Role in Prenatal Care)

- Responsibilities of first-time father

Providing emotional and physical support, being attentive listeners, fostering healthy communication, providing nutritious foods, jointly planning, accompanying for check-ups, financial responsibilities, preparing for childbirth and parenthood, embracing fatherhood, and recognizing the significance of birth spacing.

**e. Pregnancy Health Practices:** In this study, it refers to the mother's self-perceived ability to implement health promoting behaviors during pregnancy, measured by 28-item Self Rated Abilities for Health Practices (SRAHP) Scale.

**f. Attitude:** It refers to the perspective and outlook that fathers hold regarding their role during the prenatal period. This encompasses their beliefs, feelings, and behaviors concerning their involvement in supporting the health and well-being of both the expectant mother and the unborn child. It is categorized as positive, negative, or neutral, reflecting the range of sentiments and approaches fathers may adopt towards their responsibilities in prenatal care.

## **1.9 Conceptual Framework**

A framework serves as a concise outline of the theory or specific components of theory that will be examined in a quantitative study. Conceptual frameworks are frequently employed in research studies to structure the study and offer a framework for interpreting the results. In this study, Imogene King's goal attainment theory forms the foundation, as it is well-suited for assessing the efficacy of a prenatal education program on pregnancy health practices in mothers and paternal attitudes towards prenatal care.

King's theory provides valuable perspectives on how nurses engage with individuals and groups in their surroundings. It underscores the importance of including clients in decision-making processes related to their care, emphasizing the dynamic nature of nurse-client interactions and the subsequent impacts on care outcomes<sup>37</sup>.

The components of King's goal attainment theory include:

- Role
- Perception
- Judgment
- Action
- Reaction
- Interaction
- Transaction

**Role:**

A person's role refers to the position they hold within the social system, which comes with specific rules and obligations. In this study, the researcher's role is to administer the prenatal education program to first-time mothers to improve their pregnancy health practices and to educate fathers about their role in prenatal care.

**Perception:**

Perception involves the energy a person absorbs from the environment, which is then transformed, processed, and stored. The researcher perceives that first-time mothers may require assistance with pregnancy health practices, and fathers may need guidance regarding their role in prenatal care. Mothers and fathers in the control group receive routine care.

**Judgment:**

Judgment aligns with the nursing goal of helping individuals maintain health to effectively fulfill their roles. The researcher collects relevant data and assesses mothers' and fathers' willingness to participate in the prenatal education program.

**Interaction:**

Interaction encompasses verbal and non-verbal communication between individuals and involves goal-directed perception and communication. The researcher communicates information about the prenatal education program to mothers and fathers through continuous interaction.

**Action:**

Action refers to the capacity or ability to achieve a goal. Here, the researcher implements the intervention by conducting prenatal education sessions for mothers and fathers in the study group. Meanwhile, individuals in the control group receive standard prenatal care.

**Transaction:**

Transaction involves the interaction between a person and the environment to achieve a goal. In this study, transaction pertains to assessing the effectiveness of the prenatal education program among first-time mothers and fathers. The researcher communicates the program's benefits, mutually sets goals with mothers and fathers, and evaluates their health practices and attitudes using assessment scales.

Both the study and control groups undergo evaluation using the Self Rated Abilities for Health Practices (SRAHP) scale and a 5-point Likert attitude scale. SRAHP scale scores classify health practices as good, average, or poor, while the Likert attitude scale assesses attitudes as negative, neutral, or positive. Following the intervention, the nurse determines whether the established goals have been achieved. If the goals are not met or if scores indicate poor/negative outcomes, feedback is necessary for refining the intervention further.

The aim of nursing is to assist individuals in preserving their health so they can effectively fulfill their roles. King's goal attainment theory posits that nurses and clients engage in communication, establish shared objectives, and collaborate to attain these goals.

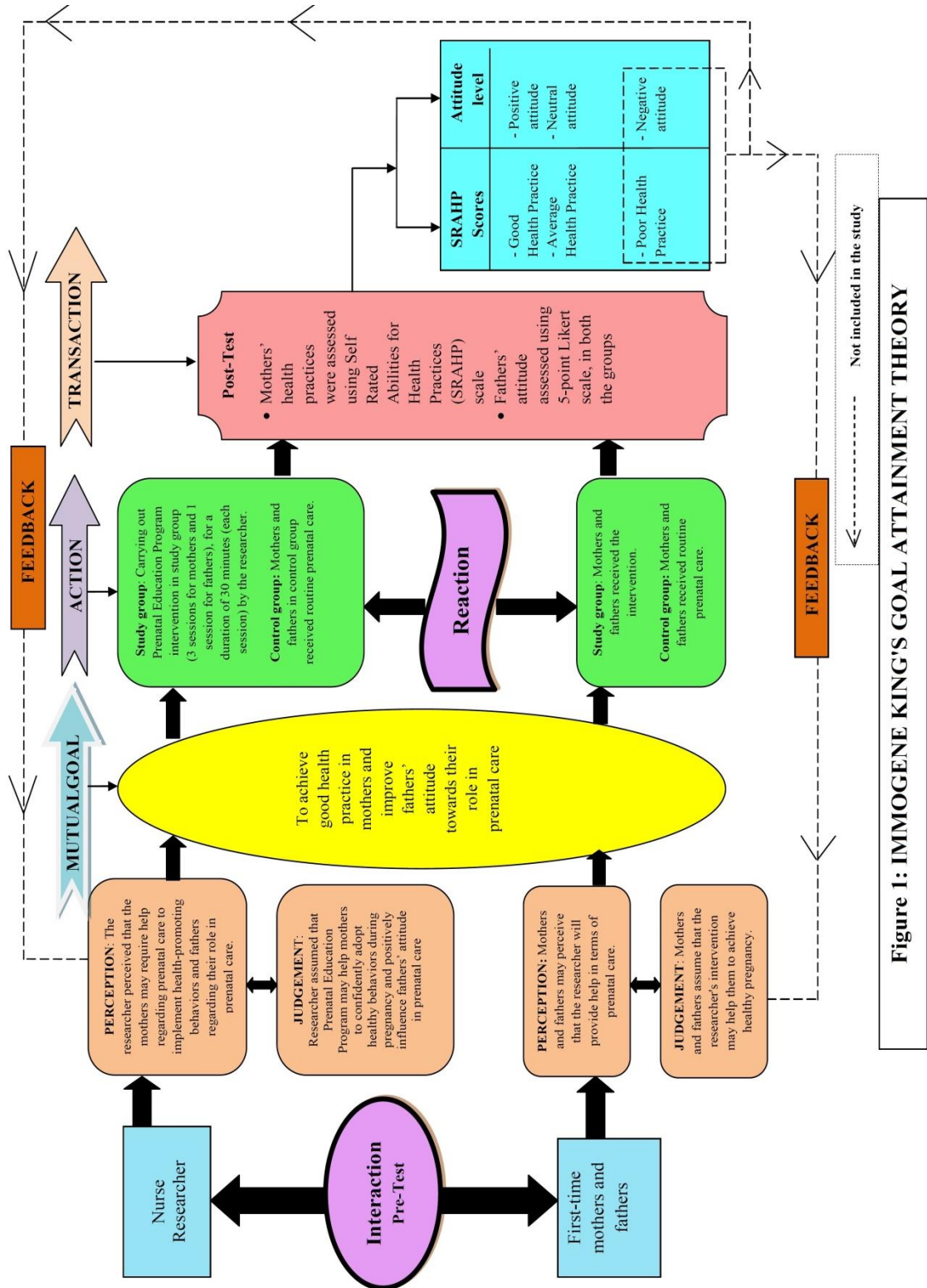


Figure 1: IMMOGENE KING'S GOAL ATTAINMENT THEORY

## **CHAPTER – 2**

### **REVIEW OF LITERATURE**

A literature review serves as a critical synthesis of existing research findings on a chosen topic, offering insight into current theoretical and scientific knowledge. It involves evaluating and summarizing various studies, highlighting what is known and what remains unanswered. Researcher undertakes literature reviews to familiarize themselves with the existing knowledge base, making it a crucial step in the research process. By providing an overview of prior work on a specific phenomenon, literature reviews aim to inform readers about established knowledge and ideas relevant to the research topic.

In the context of the present study, the researcher conducted an extensive literature review to deepen understanding of the problem and gather pertinent information. This comprehensive review aimed to enrich the current study by incorporating insights gleaned from previous research.

#### **2.1 Studies related to Prenatal Education**

In a single-blind, prospective, randomized controlled trial aimed at assessing the influence of antenatal education on psychological well-being and childbirth outcomes, 120 first-time pregnant women from Turkey's Central Anatolia Region were enrolled. These participants were randomly divided into either an antenatal education group (n = 60) or a control group (n = 60). Over a specified period, the antenatal education group attended two 2-hour sessions per week for four weeks. The results indicated notable reductions in birth fear, depression, anxiety, and stress

among the education group compared to the control group ( $p < 0.05$ ). Postnatal evaluations further reinforced these findings, demonstrating diminished levels of birth fear, depression, anxiety, and stress ( $p < 0.001$ ), along with a higher prevalence of vaginal births ( $p = 0.043$ ) within the education group. As a result, the study underscored the significant clinical advantages of antenatal education for expectant mothers throughout pregnancy and the postpartum phase.<sup>38</sup>

A prospective study involving 89 women, with 62 in the study group and 27 in the control group, who delivered at Bucur Maternity Hospital in Bucharest, Romania, and participated in prenatal courses, was conducted. The participants' perceptions regarding the impact of prenatal education were assessed through a questionnaire. The findings revealed that 90.3% of women who attended prenatal lectures acknowledged the importance of the content related to newborn care, whereas only 55.6% of women in the control group found it beneficial. Additionally, 93.5% of the study group recognized the significance of breastfeeding topics covered in the lectures, in contrast to only 55.6% of the control group. The study concluded that further efforts are needed to promote awareness about the significance of antenatal education.<sup>39</sup>

A study assessing the effectiveness of childbirth education classes and their impact on pregnant women's satisfaction levels was conducted. A total of 147 women who had recently given birth participated in the study by completing a questionnaire. The findings revealed no significant differences in the frequency of C-sections between the two groups ( $p = 0.503$ ). However, women who attended the birthing classes demonstrated a lower frequency of epidural analgesia ( $p = 0.036$ ). Moreover, attendees were more likely to utilize breathing techniques ( $p = 0.009$ ) and visualization exercises ( $p = 0.039$ ) during labor compared to non-attendees. These results highlight

several positive factors supporting the effectiveness of antenatal classes, particularly for first-time mothers.<sup>40</sup>

A cross-sectional study involving 204 primiparous pregnant women attending health centers in Tabriz, Iran, was carried out using cluster sampling. Participants were categorized into three groups: non-attenders, irregular attendees (attending one to three sessions of classes), and regular attendees (attending four to eight sessions of classes). Interviews were conducted to complete childbirth fear, pregnancy anxiety, and depression questionnaires. The results revealed significantly lower scores of childbirth fear ( $p < 0.001$ ), anxiety ( $p < 0.001$ ), and depression ( $p = 0.006$ ) among pregnant women who regularly attended classes compared to non-attenders. However, there were no significant differences between regular attendees and irregular attendees in terms of childbirth fear ( $p = 0.066$ ), anxiety ( $p = 0.078$ ), and depression ( $p = 0.128$ ). The study concluded that prenatal education can effectively mitigate fear, anxiety, and depression among primiparous women. Integrating such education into prenatal care can contribute to enhanced maternal well-being.<sup>41</sup>

In a cross-sectional study undertaken in Taiwan, investigators aimed to explore the influence of attending antenatal classes on levels of delivery fear among postpartum women. Data were collected from 147 women who had undergone vaginal deliveries within 24 to 72 hours following childbirth. Using the Delivery Fear Scale (DFS) and Numeric Rating Scale (NRS), participants were grouped based on parity and attendance of antenatal classes. Results indicated that primiparous women who participated in antenatal classes exhibited significantly lower DFS scores ( $p < 0.03$ ), while no substantial difference was noted in the multiparous group ( $p < 0.90$ ). Moreover, there were no discernible variations in NRS scores related to attendance of

antenatal classes across any subgroup. The study concluded by advocating for the involvement of all first-time pregnant women in antenatal classes as a measure to alleviate delivery fear.<sup>42</sup>

In a case-control study carried out in China, investigators delved into the impact of prenatal education courses on pregnant women's decisions regarding the method of delivery. The study examined 644 pregnant women who underwent a prenatal education course and 4,134 pregnant women who did not. Findings unveiled a notable contrast in attempted vaginal delivery rates between the two groups, with a significantly higher proportion observed among those who attended the prenatal education course (87% compared to 60% in the non-attending group). Consequently, the study posits that prenatal education courses wield considerable influence over the choice of delivery method and hold promise for reducing the prevalence of unnecessary cesarean sections.<sup>43</sup>

In an extensive review, researchers undertook an assessment of antenatal education programs' influence on pregnancy outcomes, with the aim of offering insights for future guidelines. Conducted up to November 2018, the review rigorously combed through bibliographic databases, adhering to predefined criteria (PICO). A total of 23 studies made the cut, comprising 14 controlled trials and 9 observational studies. The findings suggested that engaging in antenatal education correlated with decreased rates of cesarean birth and epidural anesthesia, alongside enhancements in maternal mental well-being, including reduced stress levels and heightened self-efficacy. However, definitive evidence regarding its impact on both maternal and fetal physical health outcomes remained somewhat elusive. Emphasizing the necessity for standardized antenatal education programs, the review underscored the imperative of

comprehensively understanding their broader effects on mental and physical well-being for both mothers and babies.<sup>44</sup>

A systematic review and meta-analysis were carried out to assess the impact of antenatal education on the self-efficacy levels of pregnant women concerning childbirth. The study followed the PRISMA checklist and involved quality evaluations by two researchers. Utilizing a random-effect model, the analysis included heterogeneity tests, moderator assessments, and sensitivity analyses. Seven eligible articles were reviewed. The results demonstrated a significant positive effect of antenatal education on both outcome expectancy (Effect size = 3.817, 95% CI 1.71 to 5.93,  $p = .000$ ) and efficacy expectancy (Effect size = 3.520, 95% CI 1.67 to 5.37,  $p = .000$ ). These findings suggest that antenatal education effectively enhances women's confidence not only in their ability to cope with childbirth but also in achieving a positive birth experience. Consequently, it is recommended that healthcare professionals prioritize the provision of antenatal education to bolster women's confidence in managing the birthing process.<sup>45</sup>

In Denpasar Regency, Indonesia, a descriptive qualitative study involving ten midwives from primary healthcare and private midwifery clinics compared maternity class and face-to-face methods of education. Maternity classes were found to offer comprehensive information aligned with curriculum standards, but suffered from low participation rates. Conversely, face-to-face sessions allowed pregnant women to freely express personal concerns, with midwives offering tailored solutions during antenatal visits. However, this method was limited by the amount of information provided and logistical challenges. Despite its drawbacks, the study concluded that

the maternity class method is preferable, albeit with the caveat of addressing low participation rates among pregnant women.<sup>46</sup>

A longitudinal qualitative study was carried out in which 82 pregnant women were interacted, throughout and after their pregnancies to explore their experiences and information-seeking behaviors. Spanning a specific timeframe, the study aimed to elucidate the importance of antenatal classes and the specific information sought by pregnant women. Employing Template Analysis, data were collected through focus groups and interviews, revealing three prominent themes: the quest for information, the significance of antenatal classes, and the specific information desired. Women expressed a need for trustworthy information to alleviate concerns, boost confidence, and prepare for childbirth and parenthood. They valued antenatal classes for their ability to normalize worries and encourage partner involvement in the journey to parenthood. Frequently sought-after information included details about labor stages, coping strategies, and medical interventions. The study concludes that while the abundance of information available may heighten anxieties, antenatal classes serve broader purposes beyond information dissemination, effectively addressing the needs of both women and their partners in ensuring maternal and fetal well-being.<sup>47</sup>

In a quasi-experimental study involving 400 pregnant women from semi-urban areas of Ibadan, participants were randomly assigned to Intervention and Control groups. The Intervention group received Goal-Oriented Prenatal Education (GOPE) focusing on birth preparedness and complication readiness (BPCR). Post-intervention assessment revealed significant improvements in BPCR knowledge and attitude, with 95.3% of Intervention group participants demonstrating good BPCR practice compared to 73.1% in the Control group. Additionally, 93.5% of Intervention group

participants opted for institutional delivery, contrasting with 53.5% in the Control group. These findings suggest that GOPE enhances BPCR and institutional delivery rates, advocating for its integration into routine prenatal education.<sup>48</sup>

In another quasi-experimental study in Tehran, Iran, 165 first-time pregnant women were recruited to investigate how social media-based prenatal education influenced birth preferences. The participants were divided into three groups: one exposed to social media-based educational interventions, another attending in-person educational sessions, and a control group receiving no prenatal education. Although there were no significant differences in pregnancy experiences and fear of childbirth (FOC) among the groups, the impact on birth preferences was noteworthy. Surprisingly, 66% of participants in the social media-based education group preferred vaginal birth, with none opting for elective cesarean section. These findings underscore the potential of social media-based prenatal education to offer adaptable and effective learning opportunities for Iranian women, underscoring its crucial role in shaping birth preferences and enhancing maternal and fetal health outcomes.<sup>49</sup>

In a nationwide cross-sectional study covering mainland China, researchers explored the utilization and effectiveness of web-based prenatal education among a vast cohort of 590,912 pregnant women. The investigation shed light on the widespread adoption of these educational programs, particularly focusing on topics related to gestational diet and fetal development. The results underscored the significance of web-based prenatal education as a convenient and effective platform for pregnant women to access comprehensive information about pregnancy, thereby enhancing their awareness and preparedness for childbirth. The availability of a wide range of pregnancy-related resources empowers expectant mothers with knowledge

and fosters confidence as they navigate through pregnancy and childbirth. Positioned as a promising component of maternal healthcare initiatives, the integration of web-based prenatal education shows potential in providing pregnant women with essential tools to optimize their prenatal journey and improve maternal outcomes.<sup>50</sup>

A randomized controlled trial was conducted in Jeddah, Saudi Arabia, to investigate the effects of an antenatal education program on maternal self-efficacy among 94 first-time pregnant women. Participants were divided into two groups: an intervention group that received structured antenatal education and a control group that received routine care. Using the Childbirth Self-Efficacy Inventory (CBSEI), the study demonstrated a significant increase in CBSEI scores post-intervention for both groups ( $p < .05$ ), indicating the positive impact of the educational program on maternal confidence. These findings underscore the crucial importance of allocating resources to empower pregnant women, highlighting the role of antenatal education in cultivating positive perceptions and boosting confidence in childbirth.<sup>51</sup>

In Australia, a mixed-method study involving 294 individuals who participated in diverse online antenatal and early parenting education programs offered by a private provider was conducted. The study aimed to delve into the experiences of new parents engaging in online antenatal education and discern their preferences regarding its design and delivery. Participants were solicited via email to complete a survey comprising closed and open-ended questions. Thematic analysis of the open-ended responses unveiled three primary themes: video control and content, accessibility, and pre/intra-programme support. The study's findings underscored the significance of furnishing reliable and precise antenatal education in a manner that aligns with adult-learning principles and caters to the diverse learning styles of

expectant parents. These insights hold substantial value for the advancement of online antenatal education programs and are pertinent to antenatal educators, maternity services, and policymakers.<sup>52</sup>

A quasi-experimental study was undertaken among 133 nulliparous pregnant women to evaluate the impact of attending antenatal classes on fear of childbirth and antenatal stress. Data collection involved utilizing a descriptive data form, the Wijma Delivery Expectancy/Experience Questionnaire, and the Antenatal Perceived Stress Inventory (APSI). The findings indicated a notable association between attending antenatal classes and possessing a higher level of education along with an intended pregnancy ( $p < 0.05$ ). Before the training, the mean fear of childbirth score among pregnant women stood at  $85.50 \pm 19.41$ , decreasing to  $76.32 \pm 20.52$  after the training, with a significant difference between these scores ( $p < 0.01$ ). However, there was no significant disparity in fear of childbirth score between the intervention and control groups. Moreover, the mean APSI score among pregnant women in the intervention group was  $22.32 \pm 6.12$  before the training and  $21.79 \pm 5.97$  after the training, though this variance was not statistically significant ( $p = 0.70$ ). The study concluded that the fear of childbirth score exhibited a notable decrease in the intervention group following the training.<sup>53</sup>

A semi-experimental study involving 96 pregnant women in Mashhad aimed to assess the impact of prenatal education on the fear of natural childbirth. Participants were randomly assigned to either face-to-face or virtual groups. Pre-test and post-test assessments were conducted using the Wijma childbirth experience/expectation questionnaire version A and a midwifery personal information form. Results indicated a significant decrease in fear of natural childbirth in both face-to-face and virtual

groups post-intervention. However, the reduction in fear scores was more pronounced in the face-to-face group compared to the virtual group and the control. The study concluded that participation in natural childbirth preparation classes, whether in-person or virtual, positively influences fear reduction. Therefore, promoting and facilitating women's access to such training courses can enhance their inclination towards natural childbirth.<sup>54</sup>

A cross-sectional study was conducted in Arbaminch town, Southern Ethiopia, spanning from January 1st to January 30th, 2023, with an aim to assess factors influencing childbirth self-efficacy among 422 pregnant women attending public health facilities. Utilizing face-to-face interviews with a structured questionnaire, the findings revealed that 54.8% of participants exhibited low childbirth self-efficacy. Significant factors associated with reduced self-efficacy included being  $\leq 24$  years old, primigravida status, unplanned pregnancy, inadequate social support, anxiety, limited knowledge about childbirth, and intense fear of childbirth. The study underscores the importance of addressing these factors during antenatal care to enhance childbirth self-efficacy, thereby promoting positive maternal well-being and birth experiences.<sup>55</sup>

In a cross-sectional study carried out in Slovenia, the impact of childbirth on the quality of life before and during the COVID-19 pandemic was investigated, spanning periods from May 2018 to May 2019 and from May 2020 to May 2021, respectively. The study involved 2,254 unrelated Slovenian pregnant women who participated in antenatal classes, categorized into two cohorts: G1, comprising 1,091 women who delivered before the pandemic, and G2, consisting of 1,163 women who gave birth during the pandemic. Data collection was conducted through an online survey, revealing that the shortened duration of antenatal classes during the pandemic

corresponded with a decrease in postpartum quality of life. Conversely, increased exposure to antenatal education was linked to an improved quality of life following childbirth. This study highlights the crucial role of antenatal class duration in influencing postpartum well-being, even amidst the challenging circumstances posed by the COVID-19 pandemic.<sup>56</sup>

## **2.2 Studies related to Pregnancy Health Practices**

A cross-sectional study was carried out through a convenience sampling to assess the knowledge, attitudes, and practices (KAP) regarding antenatal care (ANC) among 400 pregnant women. The findings revealed moderate knowledge levels (96%), overwhelmingly positive attitudes (98.75%), and generally good practices (58.5%) concerning ANC. A positive correlation was noted between overall knowledge and ANC practices ( $r=0.18$ ,  $p<0.001$ ). Socio-demographic factors such as age, family structure, education, and occupation significantly influenced ANC awareness and practices. Despite favorable levels of knowledge and attitudes, ANC practices fell short of optimal standards. The study suggests further investigation to design targeted interventions aimed at improving ANC practices and enhancing maternal and fetal health outcomes.<sup>57</sup>

In a facility-based, single-group pre-post quasi-experimental study conducted in Asmara involving 226 pregnant women, significant enhancements in nutritional knowledge scores were noted immediately after the training. Although these scores slightly decreased by the 6-week follow-up, they remained significantly elevated compared to pre-intervention levels ( $p<0.0001$ ). Moreover, dietary practices showed marked improvement at the 6-week follow-up compared to pre-intervention levels. This study underscores the pivotal role of antenatal care (ANC) clinics in raising

awareness and delivering nutrition education to pregnant women. Education provided by trained healthcare professionals is indispensable for promoting favorable dietary practices among expectant mothers, thereby contributing to maternal and fetal health.<sup>58</sup>

A quasi-experimental pretest-posttest control group study was conducted in Jordan involving 195 pregnant women. The intervention group (n=95) underwent a one-month health education program, while the control group (n=100) received routine antenatal care. Post-intervention findings revealed that the intervention group achieved significantly higher scores in dietary knowledge and practices compared to the control group ( $p < 0.001$ ). This study highlights the essential role of nurses and midwives in assessing pregnant women's knowledge and delivering health education on dietary practices. Their active engagement is vital for improving dietary knowledge and practices among pregnant women, thereby enhancing maternal and fetal health outcomes.<sup>59</sup>

In a randomized controlled trial with 66 healthy pregnant women from urban centers in Southwestern Ontario, participants expressed a strong determination to prioritize their health for the well-being of their babies. However, they faced hurdles due to limited access to information and skills regarding safe physical activity and dietary practices during pregnancy. Their behaviors were notably influenced by personal beliefs and societal values regarding weight gain and its effects on maternal health. Additionally, challenges like fatigue and nausea impeded their ability to maintain healthy habits. The women perceived counseling on nutrition and physical activity from healthcare providers as inadequate. The study recommends enhancing

counseling strategies and addressing individual beliefs to enhance prenatal care interventions.<sup>60</sup>

A single-blind randomized controlled trial involving 126 pregnant women was conducted. Participants who received individual counseling showed significant enhancements in health practices during their second and third trimesters compared to the control group. Initially, there were no observable discrepancies in health practices between the two groups. Nonetheless, after the counseling intervention, participants in the intervention group demonstrated substantial improvements in their health behaviors. These results highlight the effectiveness of personalized counseling in promoting healthier behaviors among pregnant women, underscoring the potential advantages of such interventions for both maternal and fetal health.<sup>61</sup>

In a descriptive, cross-sectional study conducted at a public hospital in Istanbul, 1,458 pregnant women were surveyed, revealing a diverse range of cultural practices associated with pregnancy. Some practices, such as dietary beliefs and walking to aid childbirth, were acknowledged as benign or even beneficial. However, others, such as superstitions about the baby's bed and fasting, were flagged as potentially harmful. The study emphasizes the importance of endorsing beneficial cultural practices while addressing and mitigating harmful ones. This can be accomplished through targeted education and intervention initiatives during prenatal care and post-hospital discharge, ensuring that expectant mothers receive the necessary guidance to make informed decisions regarding their health and the well-being of their babies.<sup>62</sup>

A randomized controlled trial involving 54 adolescent pregnant women was carried out. The participants were evenly distributed into either a counseling group (n=27) or a control group (n=27). The counseling group engaged in six self-care group counseling sessions as part of the intervention. Surveys, including the Health Practices Questionnaire-II (HPQ-II), Attitudes towards Motherhood and Pregnancy Questionnaire (PRE-MAMA), and Pregnancy Symptoms Inventory (PSI), were administered before and four weeks after the intervention. Post-intervention findings revealed significantly higher scores in health practices and attitudes towards motherhood among the intervention group compared to the control group. Additionally, the intervention group showed a slightly lower mean score for pregnancy symptoms. These results indicate that self-care counseling sessions effectively improve health practices and maternal attitudes among adolescent pregnant women. Hence, it is recommended that organizers prioritize implementing such programs, especially for this demographic, to enhance their overall health and well-being during pregnancy.<sup>31</sup>

In a cluster-randomized controlled trial aimed at improving health literacy among pregnant women through lifestyle interventions, the intervention group received personalized counseling on nutrition and physical activity during prenatal check-ups. Initially, approximately 61.9% of participants showed adequate health literacy. While the intervention did not result in significant improvements in overall health literacy, it did have a positive effect on pregnancy-specific lifestyle knowledge. These findings underscore the importance of tailored lifestyle counseling during pregnancy, particularly benefiting first-time mothers. The study emphasizes the critical role of personalized prenatal education in providing expectant mothers with the specific knowledge needed to promote a healthy pregnancy.<sup>63</sup>

A predictive correlational study involving 122 low-risk pregnant Chinese women was conducted to investigate the factors influencing maternal childbirth self-efficacy during the latent phase of labor. Data collection included administering questionnaires on self-efficacy, followed by standard multiple linear regression analysis to identify significant predictors. The study unveiled a mean childbirth self-efficacy score of 225, indicating moderate self-efficacy during labor. Key predictors comprised professional support ( $p < 0.001$ ), childbirth knowledge ( $p < 0.01$ ), and parity ( $p < 0.05$ ). These findings underscore the crucial role of professional assistance, childbirth knowledge, and parity in strengthening childbirth self-efficacy. The study suggests that healthcare providers can boost maternal self-efficacy by providing increased emotional and informational support, especially for first-time mothers, ensuring a comprehensive understanding of the birthing process during the latent phase of labor.<sup>64</sup>

### **2.3 Studies related to Neonatal outcomes (Apgar score and Birth weight)**

A randomized clinical trial was conducted in Shahreza, Iran, involving 150 pregnant women, with an aim to evaluate the effects of prenatal education on maternal and neonatal outcomes in high-risk pregnancies. Participants were randomly assigned to either a control group, receiving standard pregnancy care, or an intervention group receiving standard care plus prenatal education. Following delivery, maternal and neonatal outcomes, including delivery method, Apgar scores, weight, height, head circumference, and the incidence of jaundice, were assessed using statistical analyses such as Chi-square and independent t-tests. Results revealed no significant differences in demographic and obstetric variables between the groups ( $P > 0.05$ ). However, notable variations were observed in delivery method, neonatal height, weight, and

head circumference ( $P < 0.05$ ). The study concluded that prenatal education positively impacts neonatal health and advocates for widespread implementation of prenatal education programs to enhance outcomes for both mothers and babies.<sup>65</sup>

At a Government Hospital in Cheyyur, a true experimental post-test study involved 20 primigravida mothers at thirty-six weeks of gestation who met the inclusion criteria. Using simple random sampling, participants received nursing interventions during the intrapartum period, including breathing exercises, massage, and position changes. Maternal and newborn outcomes were evaluated using an ongoing assessment tool. The results indicated that the experimental group demonstrated better maternal outcomes (mean score: 23,  $SD=3.13$ ) and newborn outcomes (mean score: 7.7,  $SD=1.06$ ) compared to the control group (maternal outcome: mean score 27.4,  $SD=4.62$ ; newborn outcome: mean score 6.8,  $SD=0.92$ ), with paired t-values of 2.49 and 2.04, respectively. These findings suggest that the nursing interventions effectively enhanced maternal and newborn outcomes.<sup>66</sup>

At Komfo Anokye Teaching Hospital, a cross-sectional study encompassed 950 women who delivered during the study period. Through systematic sampling, participants were selected and interviewed using a pretested structured questionnaire, complemented by a review of their medical records. The findings unveiled that only 7.6% of the women received excellent-quality antenatal care (ANC), while 63.4% received average-quality ANC, and 29.0% received poor-quality ANC. Factors such as higher educational attainment and early initiation of ANC (during the first trimester) were linked to increased odds of receiving good-quality ANC, while unemployment decreased the odds. Notably, poor and average-quality ANC correlated with a higher likelihood of delivering a low birth weight baby. In conclusion, the

study emphasized that a significant proportion of women did not receive adequate ANC, underscoring the importance of providing high-quality ANC services and promoting adherence to ANC practices among pregnant women.<sup>67</sup>

In Ceará, Brazil, a cross-sectional study was conducted across four high-risk referral maternity hospitals under the Stork Network's umbrella. The study interviewed 440 postpartum women selected through simple probabilistic sampling methods, utilizing finite population formulas and stratification by each maternity hospital. The findings unveiled associations between fewer prenatal consultations and increased occurrences of prematurity and low birth weight. Additionally, delivering at a maternity hospital within the woman's locality was linked to low birth weight and the need for ventilatory support. The study concluded that prenatal care significantly influences neonatal outcomes, emphasizing the critical importance of ensuring both access to and the quality of care to mitigate infant morbidity and mortality rates.<sup>68</sup>

#### **2.4 Studies related to Fathers' Attitude in Prenatal Care**

In the Atelewo community, located in Osogbo, Osun State, Nigeria, a cross-sectional descriptive survey was conducted to delve into men's perceptions, attitudes, and involvement levels in maternal health. Utilizing a multi-stage technique, 400 respondents were sampled, and data were collected through semi-structured questionnaires. The primary objective was to understand the community's stance on maternal healthcare. Findings unveiled that while a significant proportion (51.5%) lacked adequate knowledge, the majority (56.5%) held positive attitudes toward maternal healthcare. Despite this awareness, men's actual engagement in providing maternal care remained limited, with only half displaying a favorable attitude. The study advocates for governmental and non-governmental organizations to lead

educational and awareness initiatives aimed at enhancing men's participation in maternal health initiatives.<sup>69</sup>

In a distinct cross-sectional survey study involving 145 respondents, researchers utilized a multistage sampling approach and structured questionnaires to gather data. The findings indicated a moderate level of comprehension among participants regarding men's involvement in maternity care, which corresponded to a similar level of engagement. Noteworthy barriers identified included insufficient facilities supporting male participation, conflicting work schedules, and limited awareness of men's roles in maternity care. The study underscores the importance of educating men about their significant contributions to maternity care, regardless of prevailing cultural norms, and advocates for hospital policies that promote male presence during childbirth.<sup>70</sup>

A cross-sectional study was conducted in Anomabo, Ghana, among 100 adult male participants whose partners were either pregnant or had recently given birth. The study unveiled a range of male involvement levels in maternal health services, indicating disparities in attendance rates for antenatal, delivery, and postnatal care services. These attendance rates were influenced by various socio-demographic factors and enabling/disabling conditions. Consequently, the study underscores the critical need for targeted interventions to enhance male engagement in maternal healthcare. Furthermore, it suggests developing tailored public health messages to address socio-cultural perceptions and attitudes that hinder male participation in such services.<sup>71</sup>

In a quasi-experimental study conducted at Farafenni Regional Hospital in Gambia, 300 spouses of pregnant women attending antenatal care were recruited and evenly distributed into intervention and comparison groups. The intervention group participated in two health education sessions focusing on obstetric danger signs and birth preparedness. Results showed a significant association between the intervention and spouses' knowledge regarding birth preparedness ( $\beta=0.789$ ,  $p<0.001$ ). Moreover, the intervention group demonstrated markedly higher mean scores ( $M=4.4$ ;  $SD=0.8$ ) in birth preparedness participation compared to the comparison group ( $M=0.9$ ;  $SD=0.8$ ). Spouses who received the intervention were four times more likely to be prepared for their wives' delivery after the educational sessions. Thus, the study concluded that educating men on maternal healthcare positively influences their involvement in birth preparedness, highlighting the importance of including spouses in prenatal education initiatives.<sup>72</sup>

In the Kucha district of the Gamo Zone in Southern Ethiopia, a community-based cross-sectional study surveyed 421 husbands whose wives had delivered babies within the past year. The study identified notable factors influencing husbands' engagement in birth preparedness and complication readiness planning. Specifically, husbands with at least a secondary school education ( $AOR=3.1$ ,  $CI: 1.84-5.23$ ), those attending a minimum of four antenatal care visits ( $AOR=4.91$ ,  $CI: 2.36-10.2$ ), and those residing more than five kilometers away from healthcare facilities ( $AOR=2.35$ ,  $CI: 1.40-3.96$ ) demonstrated increased participation in these preparations. Consequently, advocating for enhanced antenatal care visits and promoting higher levels of education among husbands are vital strategies to bolster their involvement in initiatives related to birth preparedness and complication readiness. These findings underscore the importance of addressing socio-economic and educational barriers to

ensure husbands' active participation in decision-making processes related to maternal healthcare.<sup>73</sup>

A scoping review was undertaken, systematically exploring databases such as MEDLINE, EMBASE, and Maternity and Infant Care. Manual searches of papers, journals, and websites were also conducted to ensure thorough coverage. Thirty-five articles meeting the inclusion criteria were identified, comprising various study designs including qualitative, cross-sectional, mixed-method, and intervention studies, with approximately 14,550 individuals participating collectively. While the review revealed robust evidence in certain domains, it also exposed significant knowledge gaps. Notably, it underscored the pivotal role of male partners in birth preparedness and their potential to contribute to addressing obstetric emergencies. Additionally, the review highlighted the pressing need for standardized, culturally appropriate, and high-quality evidence, particularly concerning interventions aimed at enhancing male partners' knowledge and involvement in maternal healthcare. This emphasis arises from recognizing the limited availability of data in this critical area, underscoring the importance of further research to inform effective strategies for engaging male partners in maternal health initiatives.<sup>74</sup>

In a randomized controlled trial, fifty expectant fathers with significant childbirth fears were recruited at 24-27 weeks of gestation and randomly assigned to intervention or control groups. The intervention group received six counseling sessions from midwives twice weekly via the Sky room platform. Evaluations occurred at recruitment, post-intervention, and one-month follow-up. Results showed a significant reduction in childbirth fear scores in the intervention group compared to the control group ( $\beta=-11.84$ ; 95% CI:  $-21.90$  to  $-1.78$ ;  $P=0.021$ ). Additionally, at the

one-month follow-up, the intervention group had significantly higher General Self-Efficacy scores ( $\beta=1.43$ ; 95% CI: 0.28 to 2.58;  $P=0.014$ ). Despite no significant difference in preferred delivery types, the study concluded that midwifery-led counseling effectively reduces childbirth fears in expectant fathers, highlighting its clinical benefits.<sup>75</sup>

Recognizing the imperative for men's participation in antenatal education, a systematic review was undertaken, focusing on English-language studies spanning from 1997 to 2021. Exhaustive scrutiny of 87 studies sourced from reputable journal databases was conducted, resulting in the selection of 17 studies meeting the predefined criteria for analysis. The findings unveiled the profound impact of men's involvement in antenatal education across various domains, including pregnancy, childbirth, parenting, couple dynamics, and overall family well-being. Of particular significance was the pivotal role attributed to tailored face-to-face antenatal education sessions specifically designed for men and facilitated by healthcare professionals such as doctors or midwives. This approach emerged as a cornerstone in preparing for perinatal care, given its substantial positive outcomes. The amalgamation of these findings underscores the indispensability of integrating men into antenatal education initiatives to furnish holistic support for expectant families.<sup>76</sup>

In rural southeast Nigeria, a pre-post intervention study engaged 396 male partners of pregnant women to assess the impact of participatory-action research on their attitudes and behaviors regarding maternity care and safe motherhood. Utilizing a five-point Likert scale questionnaire, researchers evaluated male partners' perceptions and actions before and after the intervention. The intervention involved training community volunteers to educate male partners on safe motherhood practices

and facilitate initiatives related to emergency savings and transportation. The findings revealed significant improvements in male partners' readiness to accompany pregnant women to antenatal care appointments, provide support during facility delivery, and participate in birth preparedness activities. As a result, the study suggested that adopting a community-participatory approach could effectively enhance male involvement in maternal health initiatives. It proposed advocating for the integration of male partners into maternal health policies and integrating community health influencers into healthcare systems to optimize service delivery.<sup>77</sup>

A scoping review, conducted following Peters et al.'s (2015) criteria, explored the involvement of expectant fathers, particularly their participation in childbirth. The comprehensive search spanned prominent databases such as PubMed, the Cochrane Library, CINAHAL, and PsycINFO for English-language publications. Examining five studies (consisting of four qualitative inquiries and one hermeneutic review), the review identified six crucial factors delineating paternal engagement during pregnancy: attendance at medical appointments, information-seeking behavior, provision of emotional and physical support, involvement in decision-making processes, presence during childbirth, and contribution to financial support. It highlighted the scarcity of research in this domain and recommended future investigations to integrate qualitative and quantitative methodologies. The review stressed the imperative for further research that acknowledges socio-cultural disparities to advance a holistic understanding of paternal involvement on a global scale.<sup>78</sup>

## **2.5 Justification for the study**

Pregnancy places considerable physiological, psychological, and social demands on women, requiring comprehensive adjustments. Prenatal classes are crucial in this transition, providing expectant mothers with structured, in-depth information. These classes empower women to prepare effectively, alleviating concerns and uncertainties. Tailored to individual needs, prenatal education programs cover a wide range of topics, including strategies for managing common discomforts, recognizing pregnancy warning signs, ensuring optimal nutrition to prevent anemia, and promoting proper hygiene practices.

In a study by Li M et al.<sup>64</sup>, the crucial role of professional support, childbirth knowledge, and parity in shaping childbirth self-efficacy was underscored. This study highlighted the pivotal role of healthcare professionals in strengthening maternal self-efficacy by offering emotional support and comprehensive information, with a particular focus on first-time mothers. Through such measures, healthcare providers can empower women, providing them with the confidence and knowledge necessary to navigate the childbirth process successfully. Additionally, Bashir S et al.<sup>57</sup> noted that mothers exhibited low ANC practices, indicating a need for tailored intervention programs to enhance healthcare practices among pregnant women. Research on integrating prenatal education programs as interventions in pregnancy health practices is very limited. Hence, investing in such programs provides access to high-quality information and skills, significantly enhancing maternal self-efficacy and confidence regarding childbirth.

Furthermore, studies emphasize the significance of educating fathers about their roles during pregnancy, encouraging their active involvement in maternal health and household responsibilities. According to Palioura Z et al.<sup>76</sup>, involving men in antenatal education significantly impacts various aspects of pregnancy, childbirth, parenting, and family dynamics. Integrating face-to-face antenatal education sessions tailored for fathers, facilitated by midwives, emerges as a critical component in preparing couples for the prenatal care journey. This approach not only enhances fathers' understanding and involvement but also strengthens the overall family support system, fostering a more informed and supportive environment for expectant mothers and leading to favorable outcomes for both maternal and child health. Recognizing the overlooked role of fathers in maternal health, it becomes imperative for health programs in India to actively engage them in the process.

## CHAPTER - 3

### MATERIALS AND METHODS

The research materials and methods provide a structured model and framework, integrating theoretical principles to guide research within specific paradigms. It facilitates a systematic approach to problem-solving, steering research from inception to conclusion. This section is thorough, covering key elements such as research approach, design, setting, participant demographics, sampling technique, inclusion criteria, and data collection tools. Additionally, it delineates methodological strategies for data collection, ensuring accuracy and reliability, and includes detailed plans for data analysis to assess intervention effectiveness. This methodological approach ensures a robust framework for research and comprehensive evaluation of intervention impact, involving the identification and completion of the program while shaping data gathering and organization processes.

#### **3.1 Research Approach:**

A quantitative, evaluative research approach was used in this study.

#### **3.2 Research Design:**

The research design adopted for the present study was Randomized Controlled Trial.

<b>Group</b>	<b>Randomization</b>	<b>Pre-treatment</b>	<b>Intervention</b>	<b>Post-treatment</b>
S	R	Q <sub>1</sub>	X	Q <sub>2</sub>
C	R	Q <sub>1</sub>	-	Q <sub>2</sub>

Key:

S is the study group

C is the control group

R is the randomization of the sample

Q<sub>1</sub> is the pre-intervention assessment

Q<sub>2</sub> is the post-intervention assessment

X is the intervention that is prenatal education program

### **3.3 Randomization of the participants:**

In our study, we conducted a single-blind randomized controlled trial (RCT) using the Sequentially Numbered Opaque Sealed Envelopes (SNOSE) method to randomize participants into two parallel arms. One arm received routine care (control), while the other was assigned to a prenatal education program (study). The randomization process was carried out by the investigator using a computer-based Research Randomizer. The sealed envelopes were kept confidential and securely stored. Participants were then randomly assigned by the investigator through the process of opening sealed envelopes in her presence. The study group participants attended a prenatal education program comprising three sessions for mothers and one session for fathers during their antenatal visits. These sessions were conducted in a separate room at the antenatal OPD to prevent sample contamination. Meanwhile, the control group continued with routine care. Throughout the study, the investigator conducting the trial served as the primary contact for participants and remained blinded to the initial outcome assessment to minimize bias.

### **3.4 Variables under Study**

**Independent variable:** Prenatal education program

**Dependent variable:** Pregnancy health practices, fathers' attitude and neonatal outcomes

**Extraneous variables:** Age (in years), religion, education, occupation, family income per month (in Rs), type of family, area of residence and diet.

### **3.5 Research Setting**

The setting selected for the study was antenatal OPD of KLES Dr. Prabhakar Kore Hospital & MRC, Belagavi.

### **3.6 Study Population**

The study population was first-time mothers and fathers, who were attending the antenatal OPD at KLES Dr. Prabhakar Kore Hospital & MRC, Belagavi.

### **3.7 Sample**

The sample for the present study was first-time mothers at 20-24 weeks of gestation and fathers attending the antenatal OPD of KLES Dr. Prabhakar Kore Hospital & MRC, Belagavi.

### **3.8 Sample Size**

The required sample was calculated using the following formula

$$n = \frac{\left( Z_{1-\frac{\alpha}{2}} + Z_{1-\frac{\beta}{2}} \right)^2 (S_1^2 + S_2^2)}{(\bar{X}_1 - \bar{X}_2)^2}$$

where  $Z_{1-\alpha/2}$  is associated with the significance level and  $Z_{1-\beta/2}$  is associated with the test's power. For a significance level of 5%,  $Z_{1-\alpha/2} = 1.96$  and for a test power of 80%,  $Z_{1-\beta/2} = 1.64$ .  $\bar{X}_1$  represents the mean of the first group (26.05) and  $\bar{X}_2$  represents the

mean of the second group (27.92). Similarly,  $S_1$  denotes the standard deviation of the first group (4.24) and  $S_2$  denotes the standard deviation of the second group (3.91).<sup>7</sup>

The required sample size was 74.

As 25% dropout was added, the required sample size was 94. Therefore, 100 samples in each group were recruited.

### **3.9 Sampling Technique**

For the present study, simple random sampling technique by envelope method was used.

### **3.10 Sampling Criteria**

#### **Inclusion criteria:**

- i. First-time mothers:
  - a. Attending antenatal OPD at KLES Dr. Prabhakar Kore Hospital &MRC
  - b. With singleton pregnancy
  - c. At 20-24 weeks of gestation
- ii. Fathers who are available in OPD to attend one session

#### **Exclusion criteria:**

- i. Mothers who are irregular for visits
- ii. Not willing to take part in the study
- iii. Pre-term delivery

### **3.11 Administrative and Ethical Considerations**

**Hospital authority:** Formal permission was obtained from the Director, Medical Superintendent and Head of Obstetrics & Gynaecology department of KLES Dr. Prabhakar Kore Hospital & MRC

**Approval from the Institutional Ethical Committee:** The ethical clearance was obtained from the Ethics Committee on Human Subjects, KAHER, Belagavi (Ref. No. KAHER/EC/21-22/013).

**Protection of human rights:** Informed consent was obtained from the first-time mothers and fathers, who participated in the study. The researcher explained the nature and purpose of study to all the participants. Assurance was given to them that the anonymity of each individual would be maintained as well as the confidentiality of the information obtained.

**CTRI registration:** The study has been registered in CTRI (Clinical Trials Registry-India) under the registration number CTRI/2021/12/038726.

### **3.12 Data collection instruments and techniques**

#### **3.12.1 Description of the Tool**

The following tools were used:

##### **Tool 1: Socio demographic data**

It includes information such as age (in years), religion, education, occupation, family income per month (in Rs)., type of family, area of residence and diet.

##### **Tool 2: Self Rated Abilities for Health Practices (SRAHP)**

This scale comprises of 28 items rated on a 5-point scale, designed to assess self-perceived ability in adopting health-promoting behaviors. It encompasses four sub-scales: Nutrition, Psychological Well-being, Exercise, and Responsible Health Practices, each comprising seven items. Responses range from 0 (not at all) to 4

(completely). Sub-scale scores are calculated by summing the ratings of individual items, and then total scores are derived by summing the sub-scale scores. The total score ranges from 0 to 112, with each sub-scale having a potential range of 0 to 28. Higher scores indicate greater self-efficacy in health practices. These scores were converted into percentages and participants were subsequently categorized into groups reflecting good, average, or poor health practices.

Scoring:

$\leq 50\%$  - Poor health practice

51-75% - Average health practice

$\geq 76\%$  - Good health practice

### **Tool 3: 5-point Likert Attitude scale**

It was designed to assess fathers' attitudes toward prenatal care. The scale includes 30 items, consisting of both positive and negative statements, arranged on a 5-point Likert scale: strongly agree, agree, undecided, disagree, and strongly disagree. For positive statements, the scoring is 5 for strongly agree, 4 for agree, 3 for undecided, 2 for disagree, and 1 for strongly disagree. Conversely, for negative statements, the scoring is 5 for strongly disagree, 4 for disagree, 3 for undecided, 2 for agree, and 1 for strongly agree. The total score ranges from 30 to 150. These scores were converted into percentages to categorize participants into groups with positive, neutral, or negative attitudes based on their scores.

Scoring:

$\leq 50\%$  - Negative attitude

51-75% - Neutral attitude

$\geq 76\%$  - Positive attitude

### 3.12.2 Development of Prenatal Education Program content

It was developed through a meticulous review of existing literature, aligning with guidelines provided by both the World Health Organization (WHO) and the Ministry of Health & Family Welfare. Additionally, constructive discussions with guides and experts have significantly contributed to its refinement. The prenatal education program comprised of four sessions (three sessions for mothers and one session for fathers) each session lasting for approximately 30 minutes by using videos, flashcard, model, demonstration and handouts. It was carried out in the following manner:

<b>ACTIVITY LOG</b>		
<b>SESSIONS</b>	<b>WEEKS OF GESTATION</b>	<b>CONTENTS</b>
Session I	20-24 Weeks	<ul style="list-style-type: none"> <li>➤ Establishment of rapport 2 min</li> <li>➤ Collection of baseline data 5 min</li> <li>➤ Overview of Normal Pregnancy 27 min                             <ul style="list-style-type: none"> <li>i. Physical changes 8</li> <li>ii. Emotional changes 4</li> <li>iii. Staying healthy 15</li> </ul> </li> </ul>
Session II	25-29 Weeks	<ul style="list-style-type: none"> <li>➤ Reinforcement of previous session 3 min</li> <li>➤ Self-care During Pregnancy 27 min                             <ul style="list-style-type: none"> <li>i. Keeping an active lifestyle 13</li> <li>ii. Identifying warning signs 2</li> <li>iii. Managing common discomforts 12</li> </ul> </li> </ul>
Session III	30-34 Weeks	<ul style="list-style-type: none"> <li>➤ Reinforcement of previous sessions 3 min</li> <li>➤ Childbirth and Postnatal Care 27 min                             <ul style="list-style-type: none"> <li>i. Preparation for childbirth 10</li> <li>ii. Care after delivery 8</li> <li>iii. Neonatal care 9</li> </ul> </li> </ul>
Session IV	-	<ul style="list-style-type: none"> <li>➤ Establishment of rapport 2 min</li> <li>➤ Collection of baseline data 5 min</li> <li>➤ Fathers' Role in Prenatal Care 25 min</li> </ul> <p>Emotional support, physical support, being a good listener, maintaining a strong relationship with healthy communication, providing nutritious food, planning together, accompany for checkups/follow-ups, financial responsibilities, prepare for the baby, prepare for the delivery, transition to fatherhood and importance of birth spacing.</p>
<ul style="list-style-type: none"> <li>➤ Mothers' Posttest assessment - after full-term (37 weeks)</li> <li>➤ Fathers' Posttest assessment - during their next visit</li> </ul>		

### **3.12.3 Development and validation of Pamphlet**

The pamphlet was crafted in adherence to the guidelines set forth by both the WHO and the Ministry of Health & Family Welfare, and underwent validation by an expert team. Originally formulated in English, it was subsequently translated into local languages such as Kannada and Marathi to cater to a broader audience. To gauge readability, we employed the Flesch Reading Ease (FRE), which operates on a scale of 0 to 100. Scores below 60 suggest difficulty in comprehension, while scores above 60 indicate ease of understanding. Our pamphlet garnered an average FRE score of 79, signifying high readability and accessibility for readers.

### **3.12.4 Content Validity of the Tool**

To ensure the tool's content validity, it underwent scrutiny by experts, who were provided with the blueprint, objectives, checklist, and validation certificate. A panel consisting of four experts from the OBG Nursing department, three doctors specializing in Obstetrics & Gynecology, two psychiatrists, and one professional midwife participated in the validation process. Their valuable feedback was meticulously analyzed, resulting in refinements aimed at enriching the tool's content comprehensiveness.

### **3.12.5 Reliability of Tool**

To test the reliability, the tools were administered to 20 first-time mothers and fathers attending antenatal OPD.

**5-point Likert attitude scale:** Reliability of the tool was tested using internal consistency reliability. The Cronbach's alpha obtained was  $r=0.88$ , which was highly significant.

**Self-Rated Abilities for Health Practices (SRAHP) scale:** It is a standardized tool.

The Cronbach's alpha for internal consistency was 0.94.<sup>97</sup>

Hence, the tools were found to be reliable.

### **3.12.6 Data Collection Procedure**

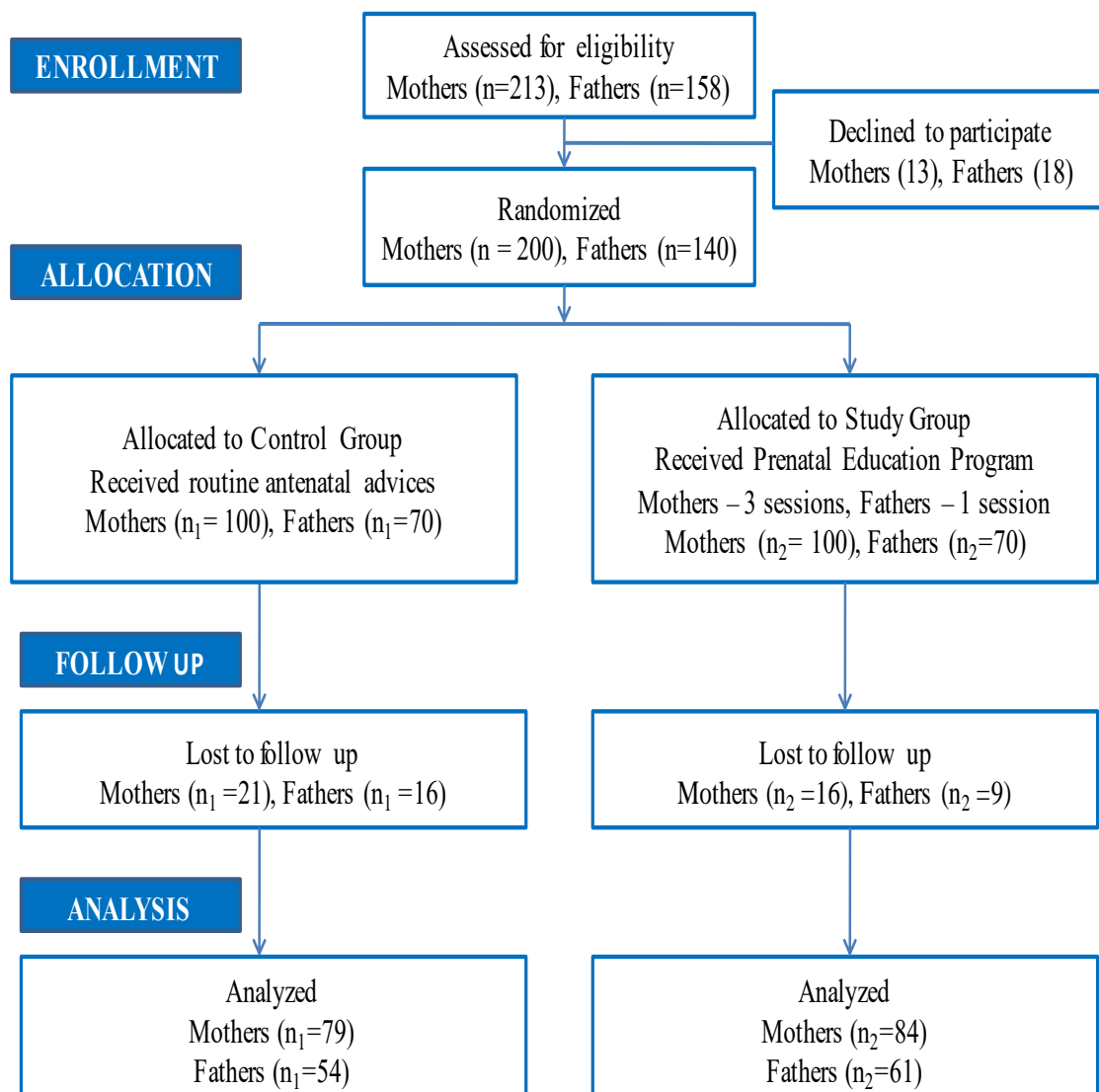
- a. The data was collected from February 2022 to January 2023.
- b. Ethical clearance was obtained from Ethics Committee on Human Subjects, KAHER
- c. Formal permission was taken from the administrators of the selected hospital
- d. Mothers and fathers were selected based on inclusion and exclusion criteria
- e. Purpose and need for the study were explained to them
- f. Informed consent was obtained from the mothers and also, the fathers who were enrolled for one session, assuring them the confidentiality and anonymity
- g. They were randomly assigned into study group and control group using envelope method.
- h. The socio-demographic data and pretest were assessed using structured interview schedule
- i. Intervention in the form of prenatal education program comprising of four sessions (three sessions with mothers and one session with fathers), each session lasting for approximately 30 minutes was given by the researcher during their antenatal visits every month.
- j. Prenatal Education Program: Expectant mothers received comprehensive health education covering physical and emotional transformations, maintaining wellness, fostering an active lifestyle, recognizing warning signs, coping with

common discomforts, preparing for childbirth, postnatal care, and neonatal health. Fathers were equipped with knowledge on providing emotional and physical support, fostering effective communication, being a good listener, providing nutritious meals, jointly planning for the arrival of the baby, accompanying for medical check-ups, financial responsibilities, preparing for childbirth and parenthood, embracing the role of fatherhood, and recognizing the significance of birth spacing.

- k. The control group received routine antenatal care
- l. The posttest for fathers was carried out on their next visit using attitude scale and for the mothers, it was conducted after full term (37 weeks) with the help of Self Rated Abilities for Health Practices (SRAPH) scale
- m. The prenatal education information was given to the participants of control group in the form of pamphlet after the posttest, as a sign of gratitude.

### **3.12.7 Data Analysis**

The data analysis was performed in alignment with the study objectives and hypothesis testing. Both descriptive and inferential statistical methods were used to analyze the collected data. Descriptive statistics, including frequency, mean, median, standard deviation, and mean percentage, were utilized to provide a comprehensive overview of the data. Inferential statistics, such as the chi-square test, ANOVA, Mann-Whitney U test and t-test, were employed to identify significant associations and differences among the groups. A significance level of  $p < 0.05$  was established to determine the statistical significance.



**Fig 2: CONSORT flow diagram**

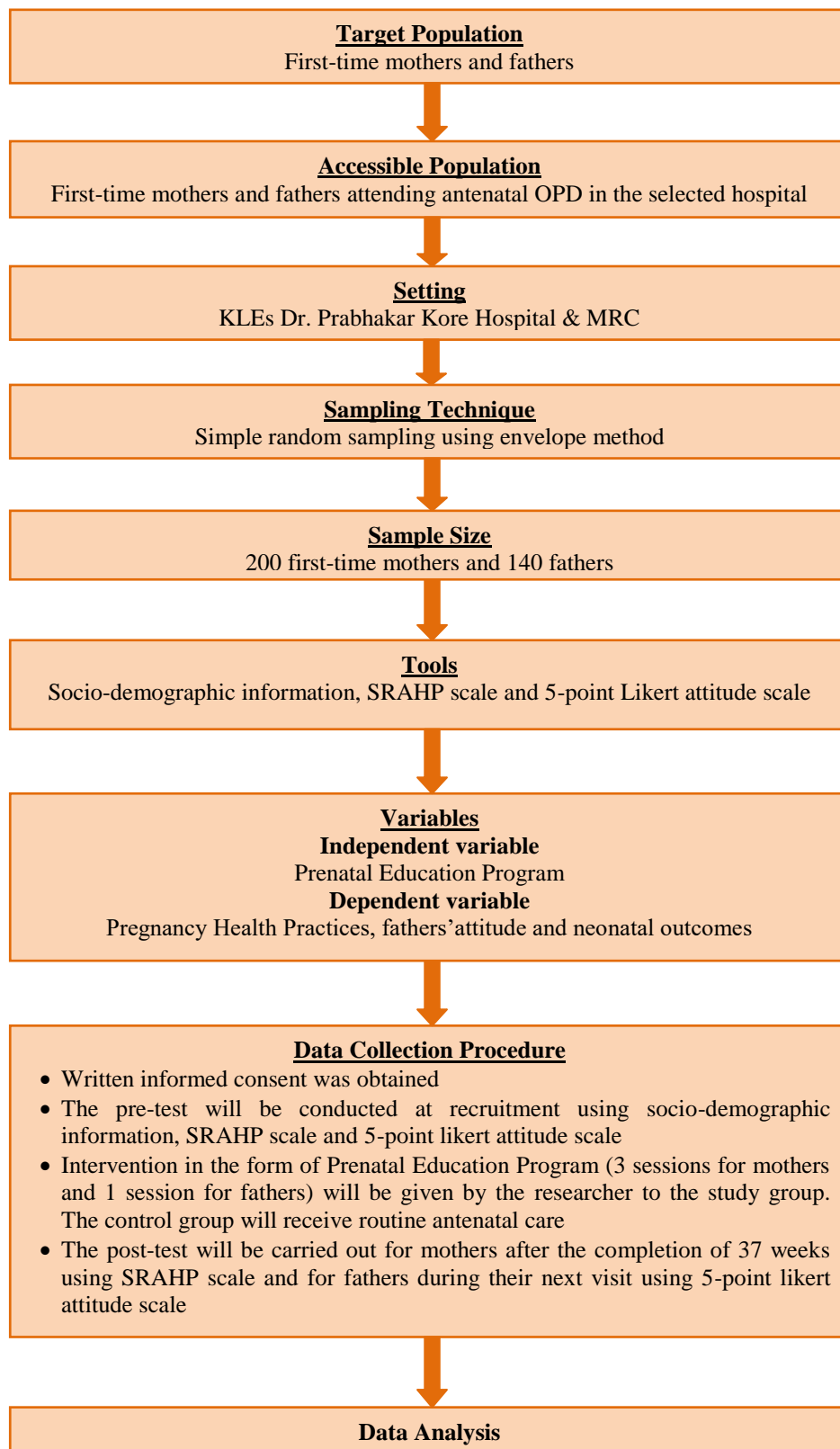


Fig 3: Schematic Representation of Research Methodology

## **CHAPTER – 4**

### **RESULTS**

This chapter delves into the data gathered for the current study. Analysis involves computing various measures and exploring relationships among different data sets. It entails organizing and synthesizing data to address the research question and test hypotheses. To derive meaningful insights into the research problem at hand, the data underwent systematic and coherent processing and analysis to identify patterns and relationships among data sets. The gathered data underwent organization, tabulation, analysis, and interpretation employing both descriptive and inferential statistical methods. MS Excel and SPSS software were employed for the data analysis.

#### **Objectives**

##### Primary objective

- To evaluate the effect of prenatal education program on pregnancy health practices in mothers
- To find an association between demographic characteristics and pregnancy health practices

##### Secondary objective

- To assess the effect of prenatal education program on neonatal outcomes
- To evaluate the effect of prenatal education program on fathers' attitude in prenatal care
- To find an association between demographic characteristics and fathers' attitude in prenatal care

## **Organization and Presentation of the findings**

The data collected were organized and presented in the form of tables and diagrams under the following sections:

**Section I:** Description of demographic characteristics of mothers

**Section II:** Pretest and Posttest SRAHP scores of mothers on pregnancy health practices

**Section III:** Assessment of neonatal outcomes

**Section IV:** Description of demographic characteristics of fathers

**Section V:** Pretest and Posttest attitude scores of fathers in prenatal care

## Section I: Description of demographic characteristics of mothers

Table 1: Comparison of control group and study group with demographic characteristics

Demographic Characteristics	Control group n (%)	Study group n (%)	Total n (%)	$\chi^2$	P-value
<b>Age (in years)</b>					
≤20yrs	19(19.00)	20(20.00)	39(19.50)	0.048	0.976
21-25yrs	58(58.00)	58(58.00)	116(58.00)		
≥26yrs	23(23.00)	22(22.00)	45(22.50)		
<b>Religion</b>					
Hindu	66(66.00)	61(61.00)	127(63.50)	1.339	0.512
Christian	12(12.00)	10(10.00)	22(11.00)		
Muslim	22(22.00)	29(29.00)	51(25.50)		
<b>Education</b>					
No education	8(8.00)	6(6.00)	14(7.00)	1.045	0.790
Primary education	35(35.00)	41(41.00)	76(38.00)		
Secondary	39(39.00)	38(38.00)	77(38.50)		
Graduate & above	18(18.00)	15(15.00)	33(16.50)		
<b>Occupation</b>					
Farmer	7(7.00)	12(12.00)	19(9.50)	4.596	0.204
Home maker	72(72.00)	72(72.00)	144(72.00)		
Labourer/daily wager	17(17.00)	9(9.00)	26(13.00)		
Employee	4(4.00)	7(7.00)	11(5.50)		
<b>Family Income (Rs.)</b>					
1-10000	46(46.00)	42(42.00)	88(44.00)	3.541	0.170
10001-20000	50(50.00)	47(47.00)	97(48.50)		
≥20001	4(4.00)	11(11.00)	15(7.50)		
<b>Type of family</b>					
Nuclear	38(38.00)	30(30.00)	68(34.00)	1.426	0.232
Joint	62(62.00)	70(70.00)	132(66.00)		
<b>Area of residence</b>					
Urban	46(46.00)	50(50.00)	96(48.00)	0.321	0.571
Rural	54(54.00)	50(50.00)	104(52.00)		
<b>Diet</b>					
Pure Vegetarian	21(21.00)	17(17.00)	38(19.00)	1.648	0.439
Vegetarian with egg	27(27.00)	22(22.00)	49(24.50)		
Mixed	52(52.00)	61(61.00)	113(56.50)		

Table 1 illustrates the demographic composition of both the control and study groups. The highest percentage in age distribution was for the 21-25 years category, with 58% in both groups. Regarding religion, Hindus comprised the largest proportion in both groups, with 66% in the control group and 61% in the study group. In terms of education, primary education was predominant in both groups, with 35% in the control group and 41% in the study group. Home makers represented the highest percentage in occupation for both groups, with 72% in each. For family income, the Rs. 10001-20000 category was the most common, with 50% in the control group and 47% in the study group. Joint families were more prevalent in both groups, with 62% in the control group and 70% in the study group. Lastly, the mixed diet was the most prominent in dietary habits for both groups, with 52% in the control group and 61% in the study group.

## Section II: Pre-test and Post-test SRAHP scores of mothers on pregnancy health practices

**Table 2: Comparison of control group and study group with pretest scores of each item of SRAHP scale by Mann-Whitney U test**

Items	Control group			Study group			U-value	Z-value	P-value
	Mean	SD	Mean rank	Mean	SD	Mean rank			
Q1	2.06	0.91	96.17	2.19	0.95	104.83	4567.0	-1.0568	0.2906
Q2	1.91	0.92	93.93	2.14	0.97	107.07	4343.0	-1.6041	0.1087
Q3	1.05	0.97	104.66	0.91	0.92	96.35	4584.5	1.0140	0.3106
Q4	2.23	0.87	100.13	2.24	0.94	100.87	4963.0	-0.0892	0.9289
Q5	0.86	0.86	100.15	0.90	0.95	100.86	4964.5	-0.0855	0.9318
Q6	0.98	0.93	102.14	0.89	0.82	98.86	4836.0	0.3995	0.6895
Q7	2.04	0.91	102.28	2.02	0.86	98.72	4822.0	0.4337	0.6645
Q8	1.84	0.63	107.14	1.66	0.71	93.86	4336.0	1.6212	0.1050
Q9	1.79	0.76	107.60	1.61	0.65	93.40	4290.0	1.7336	0.0830
Q10	1.74	0.69	104.95	1.62	0.66	96.06	4555.5	1.0849	0.2780
Q11	1.65	0.70	103.03	1.61	0.72	97.98	4747.5	0.6157	0.5381
Q12	1.64	0.69	95.83	1.76	0.67	105.17	4533.0	-1.1398	0.2544
Q13	1.24	0.64	96.06	1.34	0.59	104.94	4556.0	-1.0836	0.2785
Q14	1.16	0.61	98.80	1.20	0.62	102.20	4830.0	-0.4142	0.6788
Q15	0.92	0.60	99.02	1.00	0.75	101.98	4852.0	-0.3604	0.7185
Q16	0.87	0.81	98.49	0.93	0.82	102.52	4798.5	-0.4911	0.6233
Q17	0.94	0.62	101.40	0.96	0.74	99.60	4910.0	0.2187	0.8269
Q18	0.91	0.65	104.29	0.85	0.78	96.72	4621.5	0.9236	0.3557
Q19	0.73	0.74	105.86	0.64	0.86	95.15	4464.5	1.3072	0.1911
Q20	0.72	0.71	103.40	0.69	0.83	97.61	4710.5	0.7061	0.4801
Q21	1.09	0.73	107.86	0.91	0.74	93.14	4264.0	1.7971	0.0723
Q22	1.46	0.80	101.20	1.43	0.78	99.81	4930.5	0.1686	0.8661
Q23	1.16	0.75	100.77	1.14	0.70	100.23	4973.0	0.0647	0.9484
Q24	1.22	0.68	100.61	1.23	0.63	100.39	4989.0	0.0257	0.9795
Q25	2.02	0.74	100.61	2.03	0.74	100.39	4989.0	0.0257	0.9795
Q26	1.79	0.81	100.07	1.80	0.77	100.94	4956.5	-0.1051	0.9163
Q27	1.64	0.72	100.70	1.60	0.65	100.30	4980.0	0.0476	0.9620
Q28	2.08	0.71	101.12	2.08	0.69	99.88	4938.0	0.1503	0.8806

At the pretest stage, no significant differences were found between the control and study groups across all items (Q1-Q28) of the SRAHP scale, as  $p > 0.05$ .

**Table 3: Comparison of control group and study group with posttest scores of each item of SRAHP by Mann-Whitney U test**

Items	Control group			Study group			U-value	Z-value	P-value
	Mean	SD	Mean rank	Mean	SD	Mean rank			
Q1	1.99	0.69	42.34	3.77	0.42	119.30	184.5	-10.4034	0.0001*
Q2	1.95	0.66	41.86	3.75	0.44	119.75	147.0	-10.5279	0.0001*
Q3	1.03	0.83	41.20	3.52	0.61	120.37	95.0	-10.7006	0.0001*
Q4	2.06	0.63	41.72	3.81	0.40	119.88	136.0	-10.5645	0.0001*
Q5	0.89	0.92	41.27	3.69	0.49	120.30	100.5	-10.6823	0.0001*
Q6	0.99	0.84	40.66	3.58	0.50	120.88	52.5	-10.8417	0.0001*
Q7	1.99	0.81	42.94	3.76	0.43	118.74	232.0	-10.2457	0.0001*
Q8	1.81	0.53	40.73	3.73	0.45	120.82	57.5	-10.8251	0.0001*
Q9	1.73	0.65	40.80	3.75	0.44	120.75	63.0	-10.8069	0.0001*
Q10	1.66	0.62	40.54	3.80	0.40	120.99	42.5	-10.8749	0.0001*
Q11	1.61	0.63	40.71	3.67	0.47	120.83	56.0	-10.8301	0.0001*
Q12	1.63	0.60	40.43	3.80	0.40	121.10	34.0	-10.9032	0.0001*
Q13	1.42	0.69	40.82	3.69	0.47	120.73	65.0	-10.8002	0.0001*
Q14	1.30	0.74	40.41	3.81	0.40	121.12	32.0	-10.9098	0.0001*
Q15	0.86	0.80	40.10	3.81	0.40	121.40	8.0	-10.9895	0.0001*
Q16	0.89	0.70	40.41	3.52	0.55	121.12	32.0	-10.9098	0.0001*
Q17	0.96	0.67	40.00	3.76	0.43	121.50	0.0	-11.0161	0.0001*
Q18	0.89	0.66	40.00	3.38	0.49	121.50	0.0	-11.0161	0.0001*
Q19	0.89	0.70	40.00	3.73	0.45	121.50	0.0	-11.0161	0.0001*
Q20	1.03	0.66	40.00	3.56	0.50	121.50	0.0	-11.0161	0.0001*
Q21	1.14	0.66	40.00	3.82	0.39	121.50	0.0	-11.0161	0.0001*
Q22	1.71	0.72	41.56	3.79	0.41	120.04	123.0	-10.6076	0.0001*
Q23	1.18	0.62	40.15	3.73	0.45	121.36	11.5	-10.9779	0.0001*
Q24	1.18	0.66	40.19	3.82	0.39	121.32	15.0	-10.9663	0.0001*
Q25	1.86	0.71	41.42	3.82	0.39	120.16	112.5	-10.6425	0.0001*
Q26	1.84	0.72	41.33	3.82	0.39	120.25	105.0	-10.6674	0.0001*
Q27	1.85	0.62	40.85	3.82	0.39	120.70	67.5	-10.7919	0.0001*
Q28	1.96	0.59	41.04	3.82	0.39	120.52	82.5	-10.7421	0.0001*

\*p<0.05

Following the intervention, significant differences were noted between the control and study groups across all the items (Q1-Q28) of the SRAHP scale during the posttest as p<0.05, indicating a statistical significance.

**Table 4: Comparison of control group and study group with pretest and posttest SRAHP scores by independent t test**

Time	Control group		Study group		N	t-value	p-value
	Mean	SD	Mean	SD			
Pretest	39.74	10.15	39.38	11.36	200	0.236	0.814
Posttest	40.15	9.77	104.79	9.46	163	-42.891	0.0001*

\*p<0.05

The above table highlights a significant finding where the mean posttest score of study group is substantially higher than that of the control group. The computed t-value was 0.236 (p=0.814) at pre-test and 42.891 (p=0.0001) at posttest, indicating a statistically significant improvement after participating in the prenatal education program in study group.

**Table 5: Comparison of pretest and posttest SRAHP scores in control group and study group by dependent t test**

Groups	Times	Mean	SD	N	t-value	p-value
Control group	Pretest	40.43	10.41	100	0.385	0.701
	Posttest	40.15	9.77	79		
Study group	Pretest	39.37	12.07	100	-38.324	0.0001*
	Posttest	104.79	9.46	84		

\*p<0.05

The table above indicates that while the control group displayed no significant variance between the mean pre and post scores, with a computed t-value of 0.385 and p=0.701, the study group demonstrated a noticeable difference. In this case, a considerable disparity in pre and post mean scores was evident, as indicated by a t-value of 38.324 and a remarkably low p-value (p=0.0001). These findings emphasize a statistically significant improvement in the study group's SRAHP scores following their participation in the prenatal education program.

**Table 6: Comparison of control group and study group with pretest and posttest scores of components of SRAHP by independent t test**

Components	Times	Control group		Study group		t-value	p-value
		Mean	SD	Mean	SD		
Nutrition	Pretest	11.13	3.92	11.29	4.03	-0.2848	0.7761
	Posttest	10.87	3.25	26.06	2.51	-33.5187	0.0001*
Psychological well being	Pretest	11.06	2.90	10.80	3.13	0.6098	0.5427
	Posttest	11.11	2.84	26.38	2.46	-36.7730	0.0001*
Exercise	Pretest	6.18	3.55	5.98	4.33	0.3571	0.7214
	Posttest	6.59	3.81	25.73	2.38	-38.7250	0.0001*
Responsible health practices	Pretest	11.37	3.01	11.31	2.77	0.1468	0.8835
	Posttest	11.57	2.59	26.62	2.66	-36.6171	0.0001*

\*p<0.05

The table above shows that, at the pretest phase, there was no statistically significant difference in the SRAHP component scores between the control and study groups. However, during the posttest phase, a significant distinction emerged between the two groups across all components of the SRAHP, encompassing nutrition, psychological well-being, exercise, and responsible health practices, with a p-value of 0.0001. These findings indicate significant improvements in various components of the SRAHP in study group, compared to the control group, following their participation in the program.

**Table 7: Comparison of pretest and posttest SRAHP scores in control group and study group by dependent t test**

Components	Groups	Times	Mean	SD	t-value	p-value
Nutrition	Control group	Pretest	11.35	3.93	1.5575	0.1234
		Posttest	10.87	3.25		
	Study group	Pretest	11.27	4.25	-27.8570	0.0001*
		Posttest	26.06	2.51		
Psychological well being	Control group	Pretest	11.08	2.94	-0.1945	0.8463
		Posttest	11.11	2.84		
	Study group	Pretest	10.69	3.25	-34.7924	0.0001*
		Posttest	26.38	2.46		
Exercise	Control group	Pretest	6.42	3.50	-0.6908	0.4917
		Posttest	6.59	3.81		
	Study group	Pretest	6.10	4.58	-32.8123	0.0001*
		Posttest	25.73	2.38		
Responsible health practices	Control group	Pretest	11.58	3.07	0.0489	0.9611
		Posttest	11.57	2.59		
	Study group	Pretest	11.31	2.85	-38.4043	0.0001*
		Posttest	26.62	2.66		

\*p<0.05

The table above indicates that, although there were no notable differences in pre and post test scores across all components within the control group, a notable contrast emerged in the pre and post test scores of the study group for all components of SRAHP, with a p-value of 0.0001. These findings underscore substantial enhancements in all the components of the SRAHP within the study group subsequent to their participation in the prenatal education program.

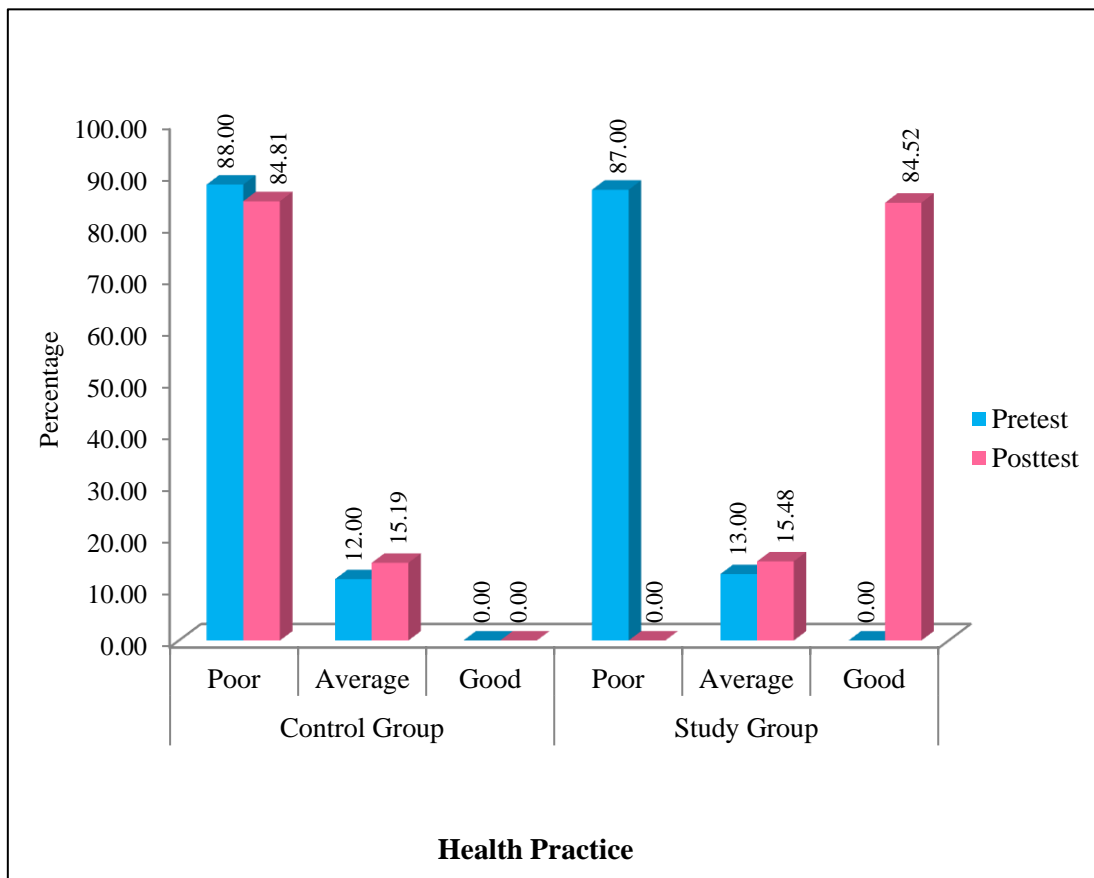
**Table 8: Comparison of control group and study group with pretest and posttest levels of SRAHP**

Health Practice	Control group		Study group	
	Pretest (%)	Posttest (%)	Pretest (%)	Posttest (%)
Poor ( $\leq 50\%$ )	88 (88.00)	67 (84.81)	87 (87.00)	0 (0.00)
Average (51-75%)	12 (12.00)	12 (15.19)	13 (13.00)	13 (15.48)
Good ( $\geq 76\%$ )	0 (0.00)	0 (0.00)	0 (0.00)	71 (84.52)
Total	100 (100.00)	79 (100.00)	100 (100.00)	84 (100.00)

In the control group's pretest phase, a striking majority (88%) exhibited poor health practices, with only a small percentage (12%) falling into the average category, and none at the good level. At posttest, there was a slight decline in the percentage of participants categorized as having poor health practices, dropping to 84.81%. However, the average level showed minimal change (15.19%), and the percentage of participants with good health practices remained at zero.

Similarly, during the pretest phase in the study group, a significant proportion (87%) demonstrated poor health practices, with a small percentage (13%) classified as having average practices, and none at the good level. After the prenatal education program, majority of the participants in the study group (84.52%) exhibited improvement, with none remaining in the poor health practices category. However, the average level showed marginal change (15.48%). These results underscore the substantial improvement observed in the study group, particularly in transitioning from poor to good health practices, in contrast to the minimal changes observed in the control group.

**Figure 4: Bar diagram showing comparison between control group and study group with pretest and posttest levels of SRAHP**



**Table 9: Association between posttest levels of SRAHP with demographic characteristics in control group**

Demographic Characteristics	Posttest levels of SRAHP		Total	$\chi^2$	p-value
	Low level %	Average level %			
<b>Age (in years)</b>					
≤20yrs	14(87.50)	2(12.50)	16	16.561	0.001*
21-25yrs	40(97.56)	1(2.44)	41		
≥26yrs	13(59.09)	9(40.91)	22		
<b>Religion</b>					
Hindu	45(88.24)	6(11.76)	51	1.335	0.513
Christian	8(80.00)	2(20.00)	10		
Muslim	14(77.78)	4(22.22)	18		
<b>Education</b>					
No education	6(85.71)	1(14.29)	7	6.196	0.102
Primary education	26(92.86)	2(7.14)	28		
Secondary education	29(85.29)	5(14.71)	34		
Graduate & above	6(60.00)	4(40.00)	10		
<b>Occupation</b>					
Farmer	5(100.00)	0(0.00)	5	23.216	0.001*
Home maker	52(94.55)	3(5.45)	55		
Labourer/daily wager	9(60.00)	6(40.00)	15		
Employee	1(25.00)	3(75.00)	4		
<b>Family Income (Rs.)</b>					
1-10000	34(94.44)	2(5.56)	36	9.483	0.009*
10001-20000	32(80.00)	8(20.00)	40		
≥20001	1(33.33)	2(66.67)	3		
<b>Type of family</b>					
Nuclear	27(87.10)	4(12.90)	31	0.207	0.649
Joint	40(83.33)	8(16.67)	48		
<b>Area of residence</b>					
Urban	33(89.19)	4(10.81)	37	1.036	0.309
Rural	34(80.95)	8(19.05)	42		
<b>Diet</b>					
Pure Vegetarian	11(78.57)	3(21.43)	14	0.861	0.650
Vegetarian with egg	19(82.61)	4(17.39)	23		
Mixed	37(88.10)	5(11.90)	42		

\*p<0.05

The table above illustrates statistically significant associations between demographic characteristics such as age (16.56), occupation (23.22), and income (9.48) and posttest SRAHP scores in the control group, as indicated by the computed Chi-square values at  $p < 0.05$ .

**Table 10: Association between posttest levels of SRAHP with demographic characteristics in study group**

Demographic Characteristics	Posttest levels of SRAHP		Total	$\chi^2$	p-value
	Average level %	High level %			
<b>Age (in years)</b>					
≤20yrs	4(28.57)	10(71.43)	14	2.249	0.325
21-25yrs	6(12.24)	43(87.76)	49		
≥26yrs	3(14.29)	18(85.71)	21		
<b>Religion</b>					
Hindu	6(12.24)	43(87.76)	49	0.939	0.625
Christian	2(20.00)	8(80.00)	10		
Muslim	5(20.00)	20(80.00)	25		
<b>Education</b>					
No education	0(0.00)	6(100.00)	6	1.547	0.671
Primary education	6(16.67)	30(83.33)	36		
Secondary	4(14.29)	24(85.71)	28		
Graduate & above	3(21.43)	11(78.57)	14		
<b>Occupation</b>					
Farmer	1(9.09)	10(90.91)	11	4.627	0.201
Home maker	12(21.05)	45(78.95)	57		
Labourer/daily wager	0(0.00)	9(100.00)	9		
Employee	0(0.00)	7(100.00)	7		
<b>Family Income (Rs.)</b>					
1-10000	4(10.81)	33(89.19)	37	1.650	0.438
10001-20000	8(21.05)	30(78.95)	38		
≥20001	1(11.11)	8(88.89)	9		
<b>Type of family</b>					
Nuclear	3(12.00)	22(88.00)	25	0.329	0.566
Joint	10(16.95)	49(83.05)	59		
<b>Area of residence</b>					
Urban	6(13.64)	38(86.36)	44	0.239	0.625
Rural	7(17.50)	33(82.50)	40		

<b>Diet</b>					
Pure Vegetarian	4(28.57)	10(71.43)	14	2.457	0.293
Vegetarian with egg	2(9.52)	19(90.48)	21		
Mixed	7(14.29)	42(85.71)	49		

The table above demonstrates that within the study group, no statistically significant associations were found between demographic characteristics and posttest SRAHP scores. All participants showed notable improvements after undergoing the prenatal education program intervention. This suggests that the intervention was effective across diverse demographic segments, highlighting its broad applicability and impact on enhancing health practices during pregnancy.

### Section III: Assessment of neonatal outcomes

**Table 11: Birth weight of babies in control and study group**

<b>Groups</b>	<b>Birth weights</b>		$\chi^2$	<b>p-value</b>
	<b>Low birth weight (&lt;2.5 kg)</b>	<b>Normal birth weight (≥2.5 kg)</b>		
	<b>f (%)</b>	<b>f (%)</b>		
Control group	28(35.4)	51(64.6)	14.19	0.001*
Study group	9(10.7)	75(89.3)		

\*p<0.05

The table above demonstrates a statistically significant association between birth weights and the groups under study. Notably, the number of babies having normal birth weight was significantly higher in study group (n=75, 89.3%) as compared to the control group (n=51, 64.6%), at a p-value of 0.001.

**Table 12: Comparison of Mean and SD of the APGAR scores in control and study group**

<b>APGAR Score</b>	<b>Group</b>	<b>Mean±SD</b>	<b>t-value</b>	<b>p-value</b>
At 1 <sup>st</sup> minute	Control group	6.8±1.2	-1.47	0.144
	Study group	7.4±0.6		
At 5 <sup>th</sup> minute	Control group	8.2±1.0	-6.56	0.001*
	Study group	8.9±0.3		

\*p&lt;0.05

The table above illustrates that, although the study group exhibited a slightly higher mean APGAR score at the 1<sup>st</sup> minute, this difference did not reach statistical significance. However, at the 5<sup>th</sup> minute, the mean APGAR score in the study group was significantly higher than that of the control group, with a p-value of 0.001.

## Section IV: Description of demographic characteristics of fathers

Table 13: Comparison of control group and study group with demographic characteristics

Demographic Characteristics	Control group n (%)	Study group n (%)	Total n (%)	$\chi^2$	p-value
<b>Age (in years)</b>					
21-25yrs	42(60.00)	37(52.86)	79(56.43)	1.127	0.569
26-30yrs	22(31.43)	28(40.00)	50(35.71)		
≥31yrs	6(8.57)	5(7.14)	11(7.86)		
<b>Religion</b>					
Hindu	48(68.57)	43(61.43)	91(65.00)	2.757	0.252
Christian	9(12.86)	6(8.57)	15(10.71)		
Muslim	13(18.57)	21(30.00)	34(24.29)		
<b>Education</b>					
No formal education	6(8.57)	6(8.57)	12(8.57)	1.286	0.733
Primary education	20(28.57)	20(28.57)	40(28.57)		
Secondary education	32(45.71)	27(38.57)	59(42.14)		
Graduate & above	12(17.14)	17(24.29)	29(20.71)		
<b>Occupation</b>					
Farmer	8(11.43)	13(18.57)	21(15.00)	3.967	0.411
Labourer/daily wager	8(11.43)	9(12.86)	17(12.14)		
Government employee	9(12.86)	14(20.00)	23(16.43)		
Private employee	33(47.14)	26(37.14)	59(42.14)		
Self employed	12(17.14)	8(11.43)	20(14.29)		
<b>Family Income (Rs.)</b>					
1-10000	14(20.00)	24(34.29)	38(27.14)	3.947	0.139
10001-20000	43(61.43)	33(47.14)	76(54.29)		
≥20001	13(18.57)	13(18.57)	26(18.57)		
<b>Type of family</b>					
Nuclear	28(40.00)	23(32.86)	51(36.43)	0.771	0.380
Joint	42(60.00)	47(67.14)	89(63.57)		
<b>Area of residence</b>					
Urban	32(45.71)	30(42.86)	62(44.29)	0.116	0.734
Rural	38(54.29)	40(57.14)	78(55.71)		

Table 1 presents the demographic characteristics of both the study and control groups. The age group of 21-25 years was the most represented, with 60% in the control group and 52.86% in the study group. Hindus constituted the majority in both groups, accounting for 68.57% in the control group and 61.43% in the study group. In terms of education, secondary education was the most common, with 45.71% in the control group and 38.57% in the study group. Private employment was the predominant occupation, with 47.14% in the control group and 37.14% in the study group. The income range of Rs. 10,001-20,000 was the most prevalent, with 61.43% in the control group and 47.14% in the study group. Joint family structures were more common, with 60% in the control group and 67.14% in the study group. Lastly, rural residency was slightly higher in both groups, with 54.29% in the control group and 57.14% in the study group.

## Section V: Pretest and Posttest fathers' attitude scores in prenatal care

Table 14: Comparison of control group and study group with pretest scores of each item of attitude scale by Mann-Whitney U test

Items	Control group			Study group			U-value	Z-value	P-value
	Mean	SD	Mean rank	Mean	SD	Mean rank			
Q1	3.37	1.04	71.94	3.33	0.93	69.06	2349.5	0.4168	0.6769
Q2	3.09	0.96	72.64	3.00	0.96	68.36	2300.0	0.6231	0.5333
Q3	2.01	1.12	67.66	2.11	1.04	73.34	2251.0	-0.8273	0.4081
Q4	1.93	1.03	72.99	1.80	0.97	68.01	2275.5	0.7252	0.4684
Q5	1.81	0.91	69.91	1.90	1.04	71.09	2408.5	-0.1709	0.8643
Q6	1.97	1.05	73.11	1.81	0.95	67.89	2267.5	0.7585	0.4482
Q7	3.07	1.07	73.54	2.91	1.16	67.46	2237.5	0.8835	0.3770
Q8	2.20	1.03	72.15	2.10	0.95	68.85	2334.5	0.4793	0.6317
Q9	2.73	1.06	71.79	2.69	1.28	69.21	2359.5	0.3751	0.7076
Q10	2.94	0.93	66.47	3.14	0.94	74.53	2168.0	-1.1732	0.2407
Q11	3.06	0.87	68.74	3.16	1.03	72.26	2327.0	-0.5105	0.6097
Q12	2.29	0.97	76.44	2.04	1.07	64.56	2034.5	1.7295	0.0837
Q13	2.13	1.03	75.49	1.87	0.96	65.51	2101.0	1.4524	0.1464
Q14	2.31	1.08	76.59	2.03	1.14	64.41	2024.0	1.7733	0.0762
Q15	2.90	0.95	69.45	2.96	1.00	71.55	2376.5	-0.3042	0.7610
Q16	2.73	1.14	65.62	3.00	1.10	75.38	2108.5	-1.4211	0.1553
Q17	2.74	1.06	73.56	2.57	1.06	67.44	2235.5	0.8919	0.3725
Q18	2.97	1.02	69.34	3.03	0.87	71.66	2368.5	-0.3376	0.7357
Q19	2.93	1.08	65.12	3.23	0.98	75.88	2073.5	-1.5670	0.1171
Q20	2.09	0.93	73.36	1.93	0.80	67.64	2249.5	0.8335	0.4046
Q21	2.81	0.97	67.38	2.99	1.01	73.62	2231.5	-0.9085	0.3636
Q22	2.66	0.99	72.84	2.53	0.99	68.16	2286.0	0.6814	0.4956
Q23	2.76	0.95	65.31	3.01	1.03	75.69	2086.5	-1.5128	0.1303
Q24	1.91	0.88	71.45	1.89	0.91	69.55	2383.5	0.2751	0.7833
Q25	2.76	1.00	65.88	2.99	0.91	75.12	2126.5	-1.3461	0.1783
Q26	2.01	0.96	69.78	2.07	1.01	71.22	2399.5	-0.2084	0.8349
Q27	1.90	0.97	70.44	1.91	0.99	70.56	2445.5	-0.0167	0.9867
Q28	1.77	0.85	69.59	1.86	0.98	71.41	2386.0	-0.2646	0.7913
Q29	3.76	0.73	71.89	3.66	0.90	69.11	2353.0	0.4022	0.6876
Q30	3.49	0.97	69.21	3.67	0.68	71.79	2359.5	-0.3751	0.7076

At the pre-test phase, no significant differences were found between the control and study groups across all items (Q1-Q30) of the 5-point Likert attitude scale, as  $p > 0.05$ .

**Table 15: Comparison of control group and study group with posttest scores of each item of attitude scale by Mann-Whitney U test**

Items	Control group			Study group			U-value	Z-value	P-value
	Mean	SD	Mean rank	Mean	SD	Mean rank			
Q1	3.30	1.11	34.92	4.74	0.51	78.43	400.5	-6.9826	0.0001*
Q2	2.98	1.04	34.33	4.59	0.80	78.95	369.0	-7.1591	0.0001*
Q3	2.00	1.12	30.16	4.59	0.74	82.65	143.5	-8.4228	0.0001*
Q4	1.89	1.04	29.88	4.57	0.81	82.89	128.5	-8.5069	0.0001*
Q5	1.78	0.90	29.52	4.51	0.83	83.21	109.0	-8.6162	0.0001*
Q6	1.83	0.97	29.81	4.51	0.83	82.96	124.5	-8.5293	0.0001*
Q7	2.93	1.15	35.08	4.56	0.65	78.29	409.5	-6.9322	0.0001*
Q8	2.30	1.09	31.31	4.44	0.62	81.63	205.5	-8.0754	0.0001*
Q9	2.67	1.17	32.96	4.63	0.64	79.58	295.0	-7.5166	0.0001*
Q10	2.89	0.96	34.20	4.56	0.74	79.07	362.0	-7.1984	0.0001*
Q11	3.02	0.98	33.47	4.61	0.53	79.71	322.5	-7.4197	0.0001*
Q12	2.17	0.93	30.35	4.52	0.79	82.48	154.0	-8.3640	0.0001*
Q13	2.06	1.11	30.33	4.64	0.73	82.49	153.0	-8.3696	0.0001*
Q14	2.35	1.12	31.06	4.64	0.68	81.85	192.0	-8.1510	0.0001*
Q15	2.93	1.11	35.73	4.52	0.74	77.71	444.5	-6.7360	0.0001*
Q16	2.74	1.20	33.66	4.62	0.64	79.55	332.5	-7.3637	0.0001*
Q17	2.74	1.05	33.88	4.48	0.79	79.35	344.5	-7.2964	0.0001*
Q18	2.96	1.06	34.95	4.59	0.69	78.40	402.5	-6.9714	0.0001*
Q19	2.98	1.24	35.99	4.64	0.63	77.48	458.5	-6.6576	0.0001*
Q20	2.11	0.92	29.43	4.62	0.66	83.30	104.0	-8.6442	0.0001*
Q21	2.74	1.10	33.14	4.66	0.54	80.01	304.5	-7.5206	0.0001*
Q22	2.61	0.94	31.85	4.54	0.77	81.15	235.0	-7.9101	0.0001*
Q23	2.65	0.95	31.91	4.59	0.72	81.10	238.0	-7.8933	0.0001*
Q24	1.96	0.85	29.69	4.56	0.79	83.06	118.5	-8.5629	0.0001*
Q25	2.78	1.00	32.21	4.64	0.73	80.83	254.5	-7.8008	0.0001*
Q26	2.15	0.90	29.27	4.66	0.63	83.43	95.5	-8.6918	0.0001*
Q27	2.06	0.92	28.94	4.67	0.63	83.73	77.5	-8.7927	0.0001*
Q28	2.00	0.85	29.46	4.64	0.73	83.26	106.0	-8.6330	0.0001*
Q29	3.78	0.82	37.51	4.70	0.49	76.14	540.5	-6.1980	0.0001*
Q30	3.56	1.02	36.22	4.72	0.52	77.28	471.0	-6.5875	0.0001*

\*p<0.05

After the intervention (posttest), significant differences were observed between the control and study groups across all items (Q1-Q30) of the 5-point Likert attitude scale as  $p < 0.05$ , indicating statistical significance.

**Table 16: Comparison of control group and study group with pretest and posttest attitude scores by independent t test**

Time	Control group		Study group		N	t-value	p-value
	Mean	SD	Mean	SD			
Pretest	77.10	16.72	77.19	16.08	140	-0.031	0.9754
Posttest	76.89	20.16	137.89	16.81	115	-17.686	0.0001*

\*p<0.05

The table above underscores a notable finding where the average posttest score of the study group markedly exceeds that of the control group. Specifically, the computed t-value was 0.031 with p=0.9754 at the pretest stage, but surged to 17.686 with p=0.0001 at the post-test stage. This notable shift signifies a statistically significant improvement in attitude following participation in the prenatal education program in study group.

**Table 17: Comparison of pretest and posttest attitude scores in control group and study group by dependent t test**

Group	Times	Mean	SD	N	t-value	p-value
Control group	Pretest	77.48	17.44	70	0.5111	0.6114
	Posttest	76.89	20.16	54		
Study group	Pretest	78.21	15.49	70	-18.1974	0.0001*
	Posttest	137.89	16.81	61		

\*p<0.05

The table above reveals contrasting results between the control and study groups. While the control group exhibited minimal variance between the mean pre and post scores, with a computed t-value of 0.511 and p=0.6114, the study group showed a distinct difference. Here, a substantial contrast in pre and post mean scores

emerged, illustrated by a t-value of 18.197 and an exceptionally low p-value of 0.0001. These findings underscore a statistically significant enhancement in the study group's attitude scores subsequent to their involvement in the prenatal education program.

**Table 18: Comparison of control group and study group with pretest and posttest levels of attitude**

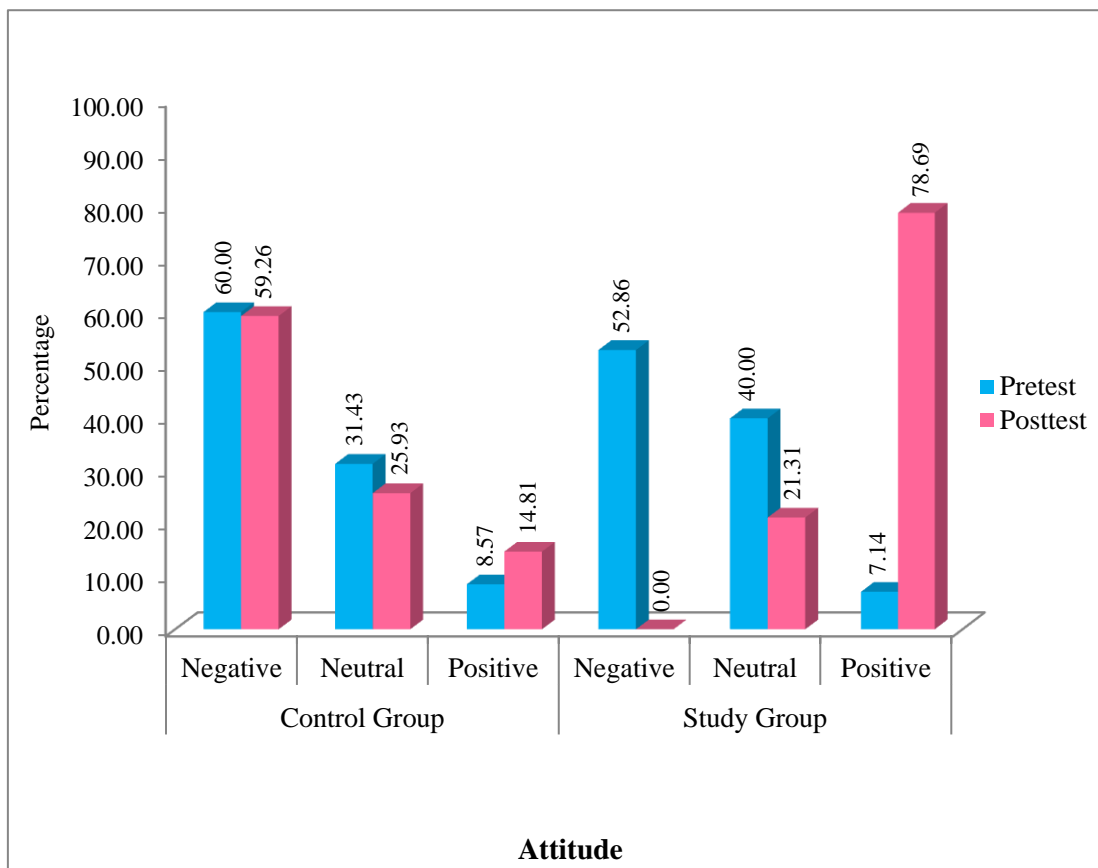
Attitude	Control group		Study group	
	Pretest (%)	Posttest (%)	Pretest (%)	Posttest (%)
Negative ( $\leq 50\%$ )	42(60.00)	32 (59.26)	37 (52.86)	0 (0.00)
Neutral (51-75%)	22 (31.43)	14 (25.93)	28 (40.00)	13 (21.31)
Positive ( $\geq 76\%$ )	6 (8.57)	8 (14.81)	5 (7.14)	48 (78.69)
Total	70 (100.00)	54 (100.00)	70 (100.00)	61 (100.00)

During the control group's pretest phase, a significant majority (60%) exhibited a negative attitude, while a smaller portion (31.43%) fell into the neutral attitude category, and 8.57% were categorized as having a positive attitude. Following the post-test, there was a slight decrease in the percentage of participants with a negative attitude, dropping to 59.26%. However, there was also a slight reduction in neutral attitudes (25.93%), while the percentage of participants with a positive attitude increased slightly to 14.81%.

Similarly, in the pretest phase of the study group, a substantial portion (52.86%) displayed a negative attitude, with 40% showing neutrality and a small fraction of 7.14% displaying positivity. After participating in the prenatal education program, 78.69% of the study group participants demonstrated a positive attitude, with none remaining in the negative attitude category, and there was a slight decline in the neutral attitude level (21.31%). These findings highlight the significant

improvement observed in the study group, particularly the transition from negative to positive attitudes towards fathers' roles in prenatal care, in contrast to the minimal changes observed in the control group.

**Figure 5: Bar diagram showing comparison between control group and study group with pretest and posttest levels of attitude**



**Table 19: Association between posttest levels of attitude with demographic characteristics in control group**

Demographic Characteristics	Posttest levels of attitude			Total	$\chi^2$	P-value
	Low level %	Average level %	High level %			
<b>Age (in years)</b>						
21-25yrs	32(100.00)	0(0.00)	0(0.00)	32	81.794	0.001*
26-30yrs	0(0.00)	14(82.35)	3(17.65)	17		
≥31yrs	0(0.00)	0(0.00)	5(100.00)	5		
<b>Religion</b>						
Hindu	25(64.10)	9(23.08)	5(12.82)	39	1.557	0.816
Christian	2(40.00)	2(40.00)	1(20.00)	5		
Muslim	5(50.00)	3(30.00)	2(20.00)	10		
<b>Education</b>						
No formal education	6(100.00)	0(0.00)	0(0.00)	6	20.148	0.003*
Primary education	12(80.00)	2(13.33)	1(6.67)	15		
Secondary education	12(52.17)	9(39.13)	2(8.70)	23		
Graduate & above	2(20.00)	3(30.00)	5(50.00)	10		
<b>Occupation</b>						
Farmer	8(100.00)	0(0.00)	0(0.00)	8	16.905	0.031*
Labourer/daily wager	6(85.71)	1(14.29)	0(0.00)	7		
Government employee	5(71.43)	2(28.57)	0(0.00)	7		
Private employee	11(47.83)	6(26.09)	6(26.09)	23		
Self employed	2(22.22)	5(55.56)	2(22.22)	9		
<b>Family Income</b>						
1-10000	10(90.91)	1(9.09)	0(0.00)	11	8.211	0.084
10001-20000	19(55.88)	10(29.41)	5(14.71)	34		
≥20001	3(33.33)	3(33.33)	3(33.33)	9		
<b>Type of family</b>						
Nuclear	16(66.67)	7(29.17)	1(4.17)	24	3.881	0.144
Joint	16(53.33)	7(23.33)	7(23.33)	30		
<b>Area of residence</b>						
Urban	7(30.43)	10(43.48)	6(26.09)	23	13.814	0.001*
Rural	25(80.65)	4(12.90)	2(6.45)	31		

\*p<0.05

The table above depicts statistically significant associations between demographic characteristics, including age (81.794), education (20.148), occupation (16.905), and area of residence (13.814), and posttest levels of attitude scores within the control group. These associations are evidenced by the computed Chi-square values at  $p < 0.05$ .

**Table 20: Association between posttest levels of attitude with demographic characteristics in study group**

Demographic Characteristics	Posttest levels of attitude		Total	$\chi^2$	p-value
	Average level %	High level %			
<b>Age (in years)</b>					
21-25yrs	5(17.24)	24(82.76)	29	2.2500	0.3250
26-30yrs	6(21.43)	22(78.57)	28		
≥31yrs	2(50.00)	2(50.00)	4		
<b>Religion</b>					
Hindu	8(20.51)	31(79.49)	39	0.0560	0.9720
Christian	1(25.00)	3(75.00)	4		
Muslim	4(22.22)	14(77.78)	18		
<b>Education</b>					
No formal education	0(0.00)	4(100.00)	4	3.1440	0.3700
Primary education	2(11.76)	15(88.24)	17		
Secondary education	6(25.00)	18(75.00)	24		
Graduate & above	5(31.25)	11(68.75)	16		
<b>Occupation</b>					
Farmer	3(30.00)	7(70.00)	10	3.8600	0.4250
Labourer/daily wager	1(14.29)	6(85.71)	7		
Government employee	4(33.33)	8(66.67)	12		
Private employee	5(20.83)	19(79.17)	24		
Self employed	0(0.00)	8(100.0)	8		
<b>Family Income (Rs.)</b>					
1-10000	2(9.52)	19(90.48)	21	2.8780	0.2370
10001-20000	8(29.63)	19(70.37)	27		
≥20001	3(23.08)	10(76.92)	13		
<b>Type of family</b>					
Nuclear	4(22.22)	14(77.78)	18	0.0130	0.9110
Joint	9(20.93)	34(79.07)	43		
<b>Area of residence</b>					
Urban	7(24.14)	22(75.86)	29	0.2630	0.6080
Rural	6(18.75)	26(81.25)	32		

The table above demonstrates that in the study group, there was no statistically significant association between demographic characteristics and posttest attitude scores. This suggests that all participants experienced significant improvements following the prenatal education program intervention.

## **CHAPTER- 5**

### **DISCUSSION**

In this chapter, the researcher discussed thorough analysis of the study's findings, aligning them with the predefined study objectives and contextualizing them within the broader landscape of existing research. The primary objective of the study was to evaluate the effectiveness of a prenatal education program on pregnancy health practices in mothers at a tertiary care hospital of Belagavi.

#### **5.1 Effectiveness of prenatal education program on pregnancy health practices in mothers**

In our study, the pretest phase revealed no statistically significant difference in the mean SRAHP scores between the control and study groups. However, in the posttest phase, the study group exhibited a substantial increase in the mean SRAHP score compared to the control group at  $p=0.0001$ , which was statistically significant. This suggests that the prenatal education program demonstrates remarkable effectiveness in enhancing maternal health practices during pregnancy. These findings are consistent with the study by Rezaie et al.<sup>31</sup>, which demonstrated that after participating in self-care group counseling sessions, the average health practices score of the intervention group significantly exceeded that of the control group, achieving statistical significance with a p-value of less than 0.001, suggesting that such sessions can enhance health practices during pregnancy. Ghahremani et al.<sup>7</sup> also discovered that following health education, the mean scores for health-promoting behaviors, subscales, and physical activity self-efficacy significantly increased in the intervention group compared to the control group ( $P<0.001$ ). The study emphasized

that adequate and effective training during pregnancy can significantly boost pregnant women's motivation to engage in healthy behaviors. A study by AlSomali et al.<sup>51</sup> highlighted the beneficial effects of an educational program on maternal confidence, emphasizing the importance of investing in resources to empower pregnant women and enhance their confidence in childbirth. Similarly, Simon et al.<sup>55</sup> stressed the crucial role of antenatal care education in effectively addressing low childbirth self-efficacy. Gaston et al.<sup>80</sup> reported a significant increase in self-efficacy and physical activity among pregnant women who received an educational intervention. Additionally, research by Sezer and Sen<sup>61</sup> demonstrated significant improvements in health practices among pregnant women who underwent counseling training, underscoring the effectiveness of such interventions in promoting healthy behaviors during pregnancy. Conversely, Nawabi et al.<sup>63</sup> found that while lifestyle intervention did not significantly impact general health literacy, it positively influenced pregnancy-specific lifestyle knowledge, underscoring the importance of tailored lifestyle counseling, especially for first-time mothers.

The initial assessment in our study revealed that a significant majority (88%) of participants in the control group displayed poor health practices during pregnancy, with 12% exhibiting average practices and none falling into the category of good health practices. Similarly, 87% of participants in the study group demonstrated poor health practices, with only 12% displaying average practices and none falling into the category of good health practices. This coincides with the discoveries from a study conducted by Gebremariam et al.,<sup>79</sup> which similarly indicated a high percentage (45%) of mothers with poor health practices during pregnancy. The behaviors of expectant mothers hold considerable potential to influence both maternal and fetal well-being, thereby affecting pregnancy outcomes significantly (Widen & Siega-

Riz<sup>81</sup>). Bashir S et al.,<sup>57</sup> also reported that, although knowledge and attitudes regarding antenatal care (ANC) were positive, actual ANC practices remained insufficient. The study suggested conducting further exploratory research to create targeted intervention programs, with the goal of improving ANC practices and enhancing maternal health outcomes.

The comprehensive pretest mean scores for health practices in our study were relatively low, with scores of 39.74 in the control group and 39.38 in the study group, out of a possible range of 0-112. This contrasts with studies conducted by Hadian et al.<sup>82</sup> in Iran, Yanikkerem et al.<sup>83</sup> in Turkey, and Canella<sup>84</sup> in New Jersey, which reported higher levels of health practices among pregnant women. According to Güney<sup>85</sup>, higher levels of health practices during pregnancy were associated with improved health behaviors, increased social support, and higher levels of education. These variations may be attributed to socio-cultural and demographic differences across different countries.

Furthermore, our study identified exercise as the least adhered-to health practice, with mean scores of 6.18 in the control group and 5.98 in the study group out of 28. This suggests that pregnant women generally did not incorporate exercise into their daily routines during pregnancy. Similarly, Nguyen et al.<sup>86</sup> in Vietnam found that only 13% of pregnant women engaged in physical exercise during pregnancy. Research conducted by Ferrari & Joisten<sup>87</sup> also reported that numerous women experience a reduction in physical activity levels during pregnancy compared to their pre-pregnancy state. This decline can be attributed to various factors, including apprehension about the potential impact of physical exertion on the developing fetus. Conversely, findings by Lindqvist et al.<sup>88</sup> revealed a widespread desire among

pregnant women to enhance their well-being by increasing physical activity and managing weight, indicating a motivation for lifestyle changes equal to their perceived ability to implement them.

## **5.2 Association between SRAHP scores and demographic characteristics in control and study group**

Our research revealed a statistically significant association between health practices and a range of demographic characteristics, including age, education, occupation, and family income, within the control group. However, we did not observe any significant association within the study group. This aligns with the findings of Montazeri et al.<sup>89</sup>, who similarly identified associations between health practices and factors such as education, occupation and family income. Bashir S et al.<sup>57</sup> also found that socio-demographic factors such as age, family type, education, and occupation were significantly associated with ANC awareness and practices. Conversely, Gebremariam et al.<sup>79</sup> reported significant associations between health practices during pregnancy and factors like gravidity and parity.

## **5.3 Effectiveness of prenatal education program on Neonatal outcomes**

In our study, the study group ( $7.4 \pm 0.6$ ) exhibited a slightly higher mean APGAR score than the control group ( $6.8 \pm 1.2$ ) at the 1<sup>st</sup> minute, but this difference was not statistically significant. However, at the 5<sup>th</sup> minute, the mean APGAR score in the study group ( $8.9 \pm 0.3$ ) was significantly higher than the control group ( $8.2 \pm 1.0$ ), with a p-value of 0.001. Similarly, Shenbagavalli's<sup>65</sup> study demonstrated a significant difference in APGAR scores between the groups after the intervention, with a p-value of less than 0.05. In contrast, Rahimi et al.<sup>66</sup> reported no statistically significant

difference in APGAR scores between the intervention and control groups at both the first and fifth minutes, subsequent to participating in prenatal education sessions.

A statistically significant association was also found between birth weights and the groups under study. Notably, the proportion of babies with normal birth weight was markedly higher in the study group (n=75, 89.3%) as compared to the control group (n=51, 64.6%). Conversely, low birth weight babies was substantially lower in the study group (n=9, 10.7%) than in the control group (n=28, 35.4%), with a p-value of 0.001, indicating statistical significance. Rahimi et al.<sup>66</sup> found a substantial increase in birth weight in the intervention group when compared to the control group, which is consistent with our findings, demonstrating the positive impact of educational classes on fetal growth at  $p < 0.05$ . Similarly, Amponsah-Tabi et al.<sup>67</sup> highlighted a significant association between the quality of antenatal care (ANC) and low birth weight, with poorer ANC quality linked to lower birth weights ( $p < 0.0001$ ). Vidal et al.<sup>68</sup> also demonstrated a strong connection between prenatal care and low birth weight ( $p < 0.001$ ), with a prevalence ratio of 2.35, emphasizing the direct impact of adequate prenatal care on reducing adverse outcomes in newborns.

#### **5.4 Effectiveness of prenatal education program on fathers' attitude in prenatal care**

In our study, no statistically significant difference was observed in the mean attitude scores between the control and study groups during the pretest phase. However, in the posttest phase, the mean attitude score significantly increased in the study group compared to the control group, with a p-value of 0.0001. A similar study by Reinicke<sup>90</sup> found that fathers' sense of responsibility and awareness of their role increased after participating in an educational course. Additionally, Tunkara-Bah's<sup>72</sup>

study showed a fourfold increase in preparedness among spouses in the intervention group for their wives' delivery, compared to the control group, following health education ( $p < 0.001$ ). In contrast, Adinike et al.<sup>69</sup> found that despite a high level of awareness regarding maternal health, male involvement in caregiving during pregnancy was limited, with only half displaying a positive attitude towards supporting their spouses.

In our preliminary assessment, we investigated the attitudes of first-time fathers toward their engagement in prenatal care. The results revealed that only 8.57% of individuals in the control group and 7.14% in the study group held positive perceptions regarding their role during the prenatal period. Conversely, a majority (60%) of fathers in the control group and 52.86% in the study group expressed negative attitudes. A significant portion of fathers, comprising 31.43% in the control group and 40% in the study group, remained neutral. These findings resonate with a prior study by Matseke et al.<sup>91</sup>, where a substantial number of male participants exhibited reluctance and embarrassment (negative attitude) towards involvement in pregnancy care. This finding may be due to prevailing patriarchal norms in Indian society, which assign men the role of the primary breadwinner and give decision-making authority to elder family members (Singh & Ram<sup>92</sup>). Furthermore, previous research by Aborigo et al.<sup>93</sup> reported that fathers perceive pregnancy as a natural process and see themselves as having no role in maternal care, viewing their participation as unnecessary interference. This perspective aligns with the findings of a study conducted by Pruthi et al.<sup>94</sup>, where nearly all fathers (94%) shared a similar viewpoint.

### **5.5 Association between levels of attitude scores and demographic characteristics in control and study group**

Our study not only confirms but also elucidates the notable association within the control group between fathers' attitudes toward their roles during pregnancy and various demographic characteristics including age, education, occupation, and area of residence, with a significance level of  $p < 0.05$ . However, in the study group, no statistically significant association was observed between demographic variables and fathers' attitudes. In a parallel study conducted by Singh & Ram<sup>92</sup>, it was revealed that traditional gender role attitudes, the educational background of participants, and their residential location significantly influenced men's participation during pregnancy and childbirth. It was discovered that, men who had received education beyond high school were more inclined to wives prenatal care compared to those who had only completed primary school education. Furthermore, pregnancy and childbirth are traditionally regarded as family matters, with husbands often assuming a minimal role, particularly within a traditional rural context.

This is consistent with our findings, where participants with a negative attitude had only primary education (80%,  $n=12$ ) and resided in rural areas (80.65%,  $n=25$ ). Allendorf<sup>95</sup> also noted that in rural areas, decisions are often made by elders, and traditional gender roles tend to be more prominent than in urban and metropolitan areas. Despite a possible desire to be more involved, societal constraints may limit men's ability to actively participate in their spouses' delivery care in rural settings. Additionally, Sarvar et al.<sup>96</sup> found that about one-fourth of the men studied reported that their paternal involvement was restricted due to work obligations and traditional male roles.

Men also cited lack of knowledge, previous negative experiences with healthcare, and perceived low accessibility to antenatal care visits as reasons for their lack of involvement during their spouses' pregnancies. In contrast, Ghaffari et al.<sup>75</sup> reported no statistically significant association between fathers' attitudes and demographic factors.

## **CHAPTER – 6**

### **SUMMARY**

The current study was undertaken to evaluate the effectiveness of prenatal education program on pregnancy health practices in mothers at a tertiary care hospital of Belagavi. The prenatal education program consisted of four sessions, with three sessions tailored for mothers and one session specifically designed for fathers. Each session had a duration of approximately 30 minutes. These sessions were conducted by the researcher during the participants' monthly prenatal visits.

#### **Objectives**

##### **Primary objective**

- To evaluate the effect of prenatal education program on pregnancy health practices in mothers
- To find an association between demographic characteristics and pregnancy health practices

##### **Secondary objective**

- To assess the effect of prenatal education program on neonatal outcomes
- To evaluate the effect of prenatal education program on fathers' attitude in prenatal care
- To find an association between demographic characteristics and fathers' attitude in prenatal care

## **Research Hypotheses**

### **At 0.05 level of significance**

**H<sub>1</sub>:** The mean posttest SRAHP scores of mothers after prenatal education program significantly differ than mean pretest SRAHP scores.

**H<sub>2</sub>:** The mean posttest attitude scores of fathers after prenatal education program significantly differ than mean pretest attitude scores.

### **Major findings of the study:**

As per the results of the study, the significant outcomes are as follows:

- Mothers in the study group showed a significant increase in their posttest SRAHP scores. The study group's mean posttest SRAHP score ( $104.79 \pm 9.46$ ) demonstrated a significant difference from the control group's posttest score ( $40.15 \pm 9.77$ ), as indicated by the computed t-value of 38.324 and p-value of 0.0001.
- Significant differences were observed in the posttest scores within the study group across all components (Nutrition, Psychological Wellbeing, Exercise, and Responsible Health Practices) of the SRAHP scale, evidenced by a p-value of 0.0001.
- A statistically significant association was found in our study between pregnancy health practices and several demographic characteristics such as age, education, occupation, and family income, within the control group at a significance level of  $p < 0.05$ . However, no significant association was observed within the study group.

- In our study, although the study group displayed a slightly higher mean APGAR score ( $7.4\pm 0.6$ ) than the control group ( $6.8\pm 1.2$ ) at the 1<sup>st</sup> minute, this disparity did not reach statistical significance. However, at 5<sup>th</sup> minute, the mean APGAR score in the study group ( $8.9\pm 0.3$ ) was significantly higher compared to the control group ( $8.2\pm 1.0$ ), with a p-value of 0.001.
  
- A statistically significant association was observed between the groups and newborn birth weights. In particular, compared to the control group (n=51, 64.6%), the study group had a significantly higher percentage of newborns with normal birth weight (n=75, 89.3%). On the other hand, with a p-value of 0.001, the number of low-birth-weight newborns was significantly lower in the study group (n=9, 10.7%) than in the control group (n=28, 35.4%).
  
- Significant differences were seen between the study group's posttest mean attitude score ( $137.89\pm 16.81$ ) and the control group's posttest mean attitude score ( $76.89\pm 20.16$ ), as indicated by a t-value of 17.686 and p-value of 0.001.
  
- In our study, significant associations were found within the control group between fathers' attitudes towards prenatal care and various demographic characteristics, including age, education, occupation, and area of residence, at  $p < 0.05$ . However, in the study group, no statistically significant association was detected between demographic characteristics and fathers' attitudes.

## **CHAPTER – 7**

### **CONCLUSION**

According to the results of this study, it is apparent that first-time mothers who participated in the prenatal educational program exhibited better health practices compared to those who did not receive it. Specifically, in comparison to the pretest findings, the posttest assessment revealed a significant improvement in practice levels. We also found that, the neonatal outcomes like birth weight and APGAR scores were significantly higher in the study group. This shows that, prenatal education program is effective in promoting health practices during pregnancy.

Additionally, the attitude of fathers towards their role in prenatal care also improved significantly after the prenatal education program.

Therefore, Prenatal Education Program serves as a valuable resource for expectant mothers and fathers as they prepare to welcome their newborn into the world. These classes offer comprehensive information covering various aspects of pregnancy, labor, delivery, and infant care. By participating in prenatal education, they gain knowledge and confidence in adopting healthy practices. For mothers, it provides an opportunity to better prepare and address any concerns or uncertainties she may have, while fathers learn more about women's health and their crucial role during pregnancy, enabling them to contribute responsibly to the well-being of both mother and child.

## **NURSING IMPLICATIONS**

1. **Clinical Implications:** The prenatal education program will serve as a valuable tool for midwives and obstetrical nurses, enabling them to effectively assist expectant mothers both physically and emotionally as they navigate through the birthing process and postnatal phase. OPD nurses can utilize this program to educate, support, and counsel expectant mothers, thereby enhancing their preparation for both prenatal and postnatal experiences.
2. **Community Implications:** Community health centers and outreach programs can integrate this prenatal education program to provide essential education and support to expectant mothers within their neighborhoods. By collaborating with local organizations and healthcare providers, community-based initiatives can ensure wider access to prenatal education, particularly in underserved areas. Additionally, community centers can host workshops, empowering young women and families with knowledge about prenatal care and healthy lifestyles. Furthermore, community leaders and policymakers play a vital role in advocating for the integration of prenatal education into existing community health initiatives, thereby promoting proactive maternal and child health practices.
3. **Nursing Education:** OBG Nursing undergraduate and postgraduate programs should incorporate teaching to emerging midwives regarding assessment and management of pregnant women with specific emphasis on weight, dietary management, and physical activities. They receive inadequate training to provide lifestyle advice. So current midwifery curriculum should incorporate the lifestyle advices and support to all pregnant women and India should emphasize the primary care role of midwives and obstetrical nurses in lifestyle promotion.

4. **Nursing Administration:** Nurse Administrators can organize in-service education programs, Continuing Nursing Education (CNE) workshops, and skill training sessions focused on promoting healthy lifestyles in the workplace. These initiatives will equip practicing midwives and obstetrical nurses with the confidence and skills necessary to support pregnant women in improving their lifestyles.
  
5. **Nursing Research:** New researchers can employ the prenatal education program to assess its efficacy across diverse healthcare settings. There is a crucial necessity to disseminate the research findings and advocate for best practices in various healthcare environments, particularly in developing nations, where such initiatives hold immense potential for positive impact.

## **LIMITATIONS**

Following were some of the limitations to this study:

- The sample size was relatively small, primarily influenced by selective inclusion criteria. Specifically, the study focused on first-time mothers and fathers who attended antenatal clinics and expressed willingness to participate. This selectivity raises concerns regarding potential bias in the results and diminishes the overall representativeness of the findings.
  
- The study had a narrow geographic scope, which undermines the universality of its findings. By focusing solely on one setting, the study may not adequately capture the diverse cultural, socioeconomic, and regional nuances present in broader populations, thus impeding the generalizability of its results.

## **OUTCOME OF THE STUDY**

- The study resulted in the development of an educational module titled “Prenatal Education Program for First-Time Parents”.
- This module serves as a valuable resource for conducting prenatal classes at the antenatal Outpatient Department (OPD) of KLE’s Dr. PrabhakarKore Hospital & Medical Research Centre in Belagavi.
- Additionally, the module can be utilized by undergraduate and postgraduate students specializing in Obstetric and Gynecological (OBG) Nursing at KAHER Institute of Nursing Sciences (INS), OBG Nursing Department, during their routine clinical postings to educate expectant mothers/fathers attending antenatal visits.

## **RECOMMENDATIONS**

Based on the findings of this study, the following recommendations can be suggested:

- Healthcare providers must prioritize the evaluation of pregnant mothers regarding their health practices. In instances where suboptimal practices are recognized, it is crucial to extend the necessary support by conducting health programmes to increase mother’s awareness on health promoting behaviors during pregnancy.
- First-time fathers should be routinely identified and included in prenatal care education at antenatal clinics. To encourage greater male attendance, it is essential to design antenatal care processes with a supportive physical environment that actively promotes male participation and acknowledges their socio-cultural roles.

**In Research:**

- A similar study can be replicated on larger population and can be conducted in different health care settings or community settings to generalize the findings.
- A comparative study can be conducted on urban and rural pregnant women regarding their health practices.

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## ANNEXURE I

## ETHICAL CLEARANCE LETTER



KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH

(Formerly known as KLE University)

(Deemed-to-be-University established u/s 3 of the UGC Act, 1956)

Accredited 'A' Grade by NAAC (2<sup>nd</sup> Cycle)

Placed in Category 'A' by MHRD (GoI)

JNMC Campus, Nehru Nagar, Belagavi-590 010, Karnataka State, India

☎: 0831-2444444

FAX: 0831-2493777

Web: <http://www.kledeemeduniversity.edu.in>E-mail: [info@kledeemeduniversity.edu.in](mailto:info@kledeemeduniversity.edu.in)

Ref.No.KAHER/EC/21-22/ 013

29<sup>th</sup> July 2021

To,  
Ms.Arenlila Jamir  
Full-Time Ph.D. Research Scholar,  
2020-21Batch, Faculty of Nursing,  
KAHER, Belagavi.

Dear Research Scholar,

The KAHER Ethics Committee on Human Subjects for Ph.D. Research Project met on **the 7<sup>th</sup> and 8<sup>th</sup> June, 2021** to consider your application for approval of the research project **"Evaluation of prenatal education program on pregnancy health practices in mothers in selected hospital of Belagavi."**

As there are no ethical issues involved in your proposed research project, the committee has provided approval for this research project.

You are requested to report to Ethical Committee of the following:

1. Any deviation from or change of the protocol.
2. Any changes in study documents.

  
(Dr. Sheetal U. Harakuni)

Member-Secretary

Ethical Committee (Human) for Ph. D. Research  
KAHER, Belagavi.
  
(Dr. B.C. Kotintot)

Chairman

Ethical Committee (Human) for Ph. D. Research  
KAHER, Belagavi.

CC to:

- Special Officer to Hon. Vice Chancellor, KAHER, Belagavi
- The Registrar, KAHER, Belagavi.
- The Director Research Foundation, KAHER, Belagavi.
- The Director Academic Affairs, KAHER, Belagavi.

## ANNEXURE II

## PERMISSION LETTER



**MEDICAL RESEARCH CENTRE**  
NEHRUNAGAR, BELAGAVI-590010.  
KARNATAKA - INDIA

ಕೆ.ಎಲ್.ಇ. ಸಂಸ್ಥೆಯು

ಡಾ. ಪ್ರಭಾಕರ ಕೋರೆ ಆಸ್ಪತ್ರೆ ಮತ್ತು  
ವೈದ್ಯಕೀಯ ಸಂಶೋಧನಾ ಕೇಂದ್ರ,  
ನಹರು ನಗರ, ಬೆಳಗಾವಿ - 590 010, ಕರ್ನಾಟಕ

Phone : 0831 - 2473777 (16 Lines)  
Fax : 0831 - 2470732  
E-mail : medicaldirector@klehospital.org  
Website : http://www.klehospital.org

REF.NO: KLES/Dr.PK-HOSP/ADM-CS/GEN/21-22/ 3276

Date: 26 October 2021

To  
The Principal  
KAHER Institute of Nursing Sciences  
Nehru Nagar, Belagavi

**Sub: Permission to conduct PhD Dissertation work at KLES Dr Prabhakar Kore  
Hospital & MRC, Belagavi**

Madam,

1. Kindly refer to your letter dated 12<sup>th</sup> October 2021 on the subject mentioned above to the undersigned.
2. After perusal, the Medical Director & Chief Executive has permitted Ms Arenlila Jamir, full time research scholar of Doctor of Philosophy in Nursing to conduct the PhD dissertation work. The topic chosen is entitled 'Evaluation of Prenatal education program on pregnancy health practices in mothers in selected hospital of Belagavi' under the guidance of Prof.(Dr.) Sangeeta Kharde, HOD, Dept of OBG Nursing, KAHER Institute of Nursing Sciences. The study would be entirely conducted at the KLES Dr Prabhakar Kore Hospital & MRC, Belagavi in the Department of Antenatal OPD from October 2021 to January 2023.
3. The hospital will not have any financial implications for the study. However, any incidental expenses occur to be borne by the investigators.
4. As per the hospital policy, you are **NOT** permitted to give away any information/materials/data/statistics of the hospital to a third party. You will not send the information gathered in the hospital for publication in any form to any individual/organization. You cannot modify, copy, reproduce, republish, upload, post, transmit or distribute materials of the hospital's documents. If published, the research outcome should mention the conflict of interest and financial/any reimbursement received by the beneficiary. The investigator's suitable acknowledgement of the institution about the source of research material obtained to be mentioned, which the institution will appreciate. We wish you the best of luck in your research endeavour.

Thanking you,

Yours faithfully,

Administrator-CS (Academics)  
For Medical Director & Chief Executive

Copy to:

- **Ms Arenlila Jamir**  
Full-time research scholar of Doctor of Philosophy (PhD) in Nursing Sciences  
Department of Nursing Sciences  
KAHER Institute of Nursing Sciences, Belagavi
- **Prof.(Dr.) Sangeeta Kharde-HOD-Dept of OBG Nursing, KAHER Institute of Nursing Sciences, Belagavi**

Sushma D.ADM-CS/PL

**ANNEXURE III**  
**INFORMATION SHEET**

**Evaluation of Prenatal Education Program on Pregnancy Health Practices in  
Mothers at a Tertiary Care Hospital of Belagavi**

**Research Scholar:** Ms. Arenlila Jamir

**Supervisor:** Prof. (Dr.) Sangeeta Kharde

**Introduction:**

We are requesting you to agree to participate in the study entitled “Evaluation of Prenatal Education Program on Pregnancy Health Practices in Mothers at a Tertiary Care Hospital of Belagavi”, conducted by Ms. Arenlila Jamir, Ph.D Research scholar at KLE Academy of Higher Education and Research, under the guidance of Dr. Sangeeta Kharde, Vice Principal and HOD, dept. of Obstetrics and Gynaecology Nursing, KAHER Institute of Nursing Sciences, Belagavi.

**Explanation of the Procedure:**

In this study, you will have to answer some questions about socio-demographic details and self-rated abilities of pregnancy health practices with the help of questionnaire, followed by a planned health education of three sessions for you and one session will be for your partner, on father's role during pregnancy, whenever he is available during antenatal visits. The content for the education program is prepared based on the needs of the program participants and developed according to WHO and Ministry of Health and Family Welfare guidelines. This entire procedure will take approximately 30 minutes.

**Possible Benefits:**

There will be a health education provided to you regarding body changes during pregnancy, emotional changes, staying healthy and active, warning signs and management of common discomforts of pregnancy, preparation for delivery, care after delivery and baby care. Your participation is likely to help in the evaluation of the effect of prenatal education program on pregnancy health practices.

**Possible Risks:**

There is no risk involved in participating in this study.

**Confidentiality:**

Your identity will not be revealed and all the information will be collected, coded so that no one will know your identity.

**Withdrawal:**

Participation in study is voluntary. If you do not wish to participate in the study, you can refuse anytime. It is your choice and it will be respected.

**Cost of Participation:**

The cost of the study will be borne by the researcher. There will be no additional cost for participating in this study.

**Payment of Participation:**

There will be no incentives for participating in this study.

**Publication Rights:**

The results of this study may be used for publication. However, your identity will not be revealed.

**Contact Information:**

If you have any doubts or questions you can contact any time to:

**Ms. Arenlila Jamir**

Ph.D Research scholar,  
KAHER Institute of Nursing Sciences,  
Nehru Nagar, Belagavi-590010  
Mobile No – 9900791035  
Email id- arenlyjamir9@gmail.com

**Prof.(Dr.) Sangeeta Kharde**

Vice Principal and HOD  
Dept. of OBG Nursing  
KAHER Institute of Nursing Sciences,  
Nehru Nagar, Belagavi-590010  
Mobile No – 9481322656

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**CONSENT FORM**

I have read this consent form and I have understood it. I have been given the opportunity to ask my query regarding the study & I have got satisfactory answers for them. I consent voluntarily to participate as a participant in this research.

**Signature of participant:** \_\_\_\_\_

**Signature of Researcher:** \_\_\_\_\_

**Date:**

**Place:**

**If Illiterate**

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

**Name of witness** \_\_\_\_\_  
**of participant**

**Thumb print**

**Signature of witness** \_\_\_\_\_

**Date:**

**Place:**

**Statement by the researcher**

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands above mentioned procedure.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

**A copy of this Informed Consent Form has been provided to the participant.**

**Name of Researcher / person taking the consent** \_\_\_\_\_

**Signature of Researcher / person taking the consent** \_\_\_\_\_

**Date** \_\_\_\_\_

**INFORMATION SHEET**

**Evaluation of Prenatal Education Program on Pregnancy Health Practices in Mothers at a Tertiary Care Hospital of Belagavi**

**Research Scholar:** Ms. Arenlila Jamir

**Supervisor:** Prof. (Dr.) Sangeeta Kharde

**Introduction:**

We are requesting you to participate in the study entitled “Evaluation of Prenatal Education Program on Pregnancy Health Practices in Mothers at a Tertiary Care Hospital of Belagavi”, conducted by Ms. Arenlila Jamir, Ph.D Research scholar at KLE Academy of Higher Education and Research, under the guidance of Dr. Sangeeta Kharde, Vice Principal and HOD, dept. of Obstetrics and Gynaecology Nursing, KAHER Institute of Nursing Sciences, Belagavi.

**Explanation of the procedure:**

In this study, you will have to answer some questions about socio-demographic details and your attitude as father in prenatal care with the help of attitude questionnaire, followed by a planned health education of three sessions for your partner and one session will be for you during the antenatal visits. The content for the education program is prepared based on the needs of the program participants and this entire procedure will take approximately 30 minutes.

**Possible Benefits:**

There will be a health education provided to you regarding your role in prenatal care. Your participation is likely to help in the evaluation of prenatal education program on father's perception in prenatal care.

**Possible Risks:**

There is no risk involved in participating in this study.

**Confidentiality:**

Your identity will not be revealed and all the information will be collected, coded so that no one will know your identity.

**Withdrawal:**

Participation in study is voluntary. If you do not wish to participate in the study, you can refuse anytime. It is your choice and it will be respected.

**Cost of Participation:**

The cost of the study will be borne by the researcher. There will be no additional cost for participating in this study.

**Payment of Participation:**

There will be no incentives for participating in this study.

**Publication Rights:**

The results of this study may be used for publication. However, your identity will not be revealed.

**Contact Information:**

If you have any doubts or questions you can contact any time to:

**Ms. Arenlila Jamir**

Ph.D Research scholar,

KAHER Institute of Nursing Sciences,

Nehru Nagar, Belagavi-590010

Mobile No – 9900791035

Email id- arenlyjamir9@gmail.com

**Prof.(Dr.) Sangeeta Kharde**

Vice Principal and HOD

Dept. of OBG Nursing

KAHER Institute of Nursing Sciences,

Nehru Nagar, Belagavi-590010

Mobile No – 9481322656

**CONSENT FORM**

I have read this consent form and I have understood it. I have been given the opportunity to ask my query regarding the study & I have got satisfactory answers for them. I consent voluntarily to participate as a participant in this research.

**Signature of participant:** \_\_\_\_\_

**Signature of Researcher:** \_\_\_\_\_

**Date:**

**Place:**

**If Illiterate**

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

**Name of witness**\_\_\_\_\_

**Thumb print**

**of participant**

**Signature of witness** \_\_\_\_\_



**Date:**

**Place:**

**Statement by the researcher**

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands above mentioned procedure.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

**A copy of this Informed Consent Form has been provided to the participant.**

**Name of Researcher / person taking the consent**\_\_\_\_\_

**Signature of Researcher / person taking the consent**\_\_\_\_\_

**Date** \_\_\_\_\_

## ಮಾಹಿತಿ ಪತ್ರ

ಬೆಳಗಾವಿಯ ಎಲ್ಲ ಆಸ್ಪತ್ರೆಯ ತಾಯಿ ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿರುವ ಆರೋಗ್ಯ ಅಭ್ಯಾಸ ಶಿಕ್ಷಣದ ಮೌಲ್ಯ ಮಾಪನ

ಸಂಶೋಧನೆ ಸ್ನಾತಕಾರ್ಥಿ: ಕು. ಅರೇನಲಿಲಾ ಜಮೀರ

ಪರಿವೀಕ್ಷಕ: ಪ್ರೊ. ಡಾ. ಸಂಗೀತಾ ಕ

ಗುರುತು:

ನಾವು ತಮ್ಮಲ್ಲಿ ವಿನಂತಿಸಿಕೊಳ್ಳುವುದೇನೆಂದರೆ, “ಬೆಳಗಾವಿಯ ಎಲ್ಲ ಆಸ್ಪತ್ರೆಯ ತಾಯಿ ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿರುವ ಆರೋಗ್ಯ ಅಭ್ಯಾಸ ಶಿಕ್ಷಣದ ಮೌಲ್ಯ ಮಾಪನ” ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿರಾಗಬೇಕು. ಕು.ಅರೇನಲಿಲಾ ಜಮೀರ ಇವಳು ಅಭ್ಯಾಸವನ್ನು ಮಾಡುತ್ತಿದ್ದಾಳೆ ಕೆ.ಎಲ್.ಇ ಉಚ್ಚ ಶಿಕ್ಷಣ ಸಂಸ್ಥೆ ಮತ್ತು ಸಂಶೋಧನಾ ಕೇಂದ್ರದ ಪಿ.ಎಚ್.ಡಿ ಸಂಶೋಧನಾ ಸ್ನಾತಕೋತ್ತರ ಇದ್ದು ಸೌ. ಸಂಗೀತಾ ಕರಡೆ ಉಪ ಪ್ರಾಚಾರ್ಯರ ಮತ್ತು ಪ್ರಸುತಿ ಸ್ತ್ರೀರೋಗ ತಜ್ಞ ವಿಭಾಗದ ಮುಖ್ಯ ಇಲಾಖೆ, ಕೆ.ಎ.ಎಚ್.ಇ.ಆರ್ ನರ್ಸಿಂಗ ಸಂಸ್ಥೆ ಬೆಳಗಾವಿ ಇವರ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಇವಳು ಅಭ್ಯಾಸವನ್ನು ಮಾಡುತ್ತಿದ್ದಾಳೆ.

**ಕಾರ್ಯವಿಧಾನದ ವಿವರಣೆ :**

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪ್ರಶ್ನಾವಳಿಗಳ ಸಹಾಯದಿಂದ ನೀವು ಸಾಮಾಜಿಕ ಜನಸಂಖ್ಯಾ ವಿವರಗಳು ಮತ್ತು ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ಆರೋಗ್ಯ ಅಭ್ಯಾಸಗಳ ಸ್ವಯಂ ರೇಟೆದ ಸಾಮರ್ಥ್ಯಗಳ ಕುರಿತು ಕೆಲವು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ಆದ ನಂತರ ನಿಮಗಾಗಿ ತಾವು ಮೂರು ಅವಧಿಗಳ ಯೋಜಿತ ಆರೋಗ್ಯ ಶಿಕ್ಷಣ ಮತ್ತು ಒಂದ ಅವಧಿ ನಿಮ್ಮ ಹೆಂಡತಿಗಾಗಿ ಇರುತ್ತದೆ. ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ತಂದೆಯ ಪಾತ್ರದ ಕುರಿತು. ಹಾಗೆಯೇ ಹೆರಿಗೆಪೂರ್ವ ಭೇಟಿಗಳ ಸಮಯದಲ್ಲಿ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಅಗತ್ಯತೆಗಳ ಆಧಾರದ ಮೇಲೆ ಶಿಕ್ಷಣ ಕಾರ್ಯಕ್ರಮದ ವಿಷಯವನ್ನು ಸ್ಪಷ್ಟಪಡಿಸಲಾಗುತ್ತದೆ ಮತ್ತು WHO ಮತ್ತು ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಸಚಿವಾಲಯದ ಮಾರ್ಗಸೂಚಿಗಳ ಪ್ರಕಾರ ಆಭಿವೃದ್ಧಿಪಡಿಸಿದೆ. ಈ ಸಂಪೂರ್ಣ ಪ್ರಕ್ರಿಯೆಯು ಸುಮಾರು 30 ನಿಮಿಷ ಸಮಯವನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ.

**ಸಂಭವನೀಯ ಪ್ರಯೋಜನಗಳು :**

ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ದೇಹದ ಬದಲಾವಣೆಗಳು, ಭಾವನಾತ್ಮಕ ಬದಲಾವಣೆಗಳು, ಆರೋಗ್ಯಕರ ಮತ್ತು ಸಕ್ರಿಯವಾಗಿದೆ. ಎಚ್ಚರಿಕೆ ಚಿಹ್ನೆಗಳು ಮತ್ತು ಗರ್ಭಧಾರಣೆಯ ಸಾಮಾನ್ಯ ಅಸ್ವಸ್ಥತೆಗಳ ನಿರ್ವಹಣೆ, ಹೆರಿಗೆಯ ತಯಾರಿ, ಹೆರಿಗೆಯ ನಂತರದ ಆರೋಗ್ಯ ಮತ್ತು ಮಗುವಿನ ಆರೈಕೆಯ ಕುರಿತು ಕರಪತ್ರದ ಮೂಲಕ ನಿಮಗೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣದ ಮಾಹಿತಿಯನ್ನು ಒದಗಿಸಲಾಗುತ್ತದೆ. ನಿಮ್ಮ ಭಾಗವಹಿಸುವಿಕೆಯು ಗರ್ಭಾವಸ್ಥೆಯ ಆರೋಗ್ಯ ಅಭ್ಯಾಸಗಳ ಮೇಲೆ ಹೆರಿಗೆ ಪೂರ್ವ ಶಿಕ್ಷಣ ಕಾರ್ಯಕ್ರಮದ ಪರಿಣಾಮ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ನಿಮಗೆ ಸಹಾಯ ಮಾಡುವುದು.

**ಅದರ ಅನಾಹುತ :**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ತೊಡಗಿದ್ದರಿಂದ ಯಾವುದೇ ಅನಾಹುತ ಇರುವುದಿಲ್ಲ.

**ಗುಪ್ತತೆ:**

ನಿಮ್ಮ ಮಾಹಿತಿ ಬೇರೆಯಾರಿಗೂ ತಿಳಿಸುವುದಿಲ್ಲ ಈ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸುತ್ತ ಹೋಗುವುದರಿಂದ ಇದರ ಚಿಹ್ನೆಯನ್ನು (ಕೋಡ) ಸಂಚಾಲನೆ ಮಾಡುತ್ತ ಹೋಗುವುದು.

**ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವುದು:**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿರುವ ವಿಷಯದ ಇಚ್ಛೆ ಇರುತ್ತದೆ. ಒಂದು ವೇಳೆ ಈ ವಿಷಯದಲ್ಲಿ ಇಚ್ಛೆ ಇಲ್ಲದಿದ್ದರೆ ನೀವು ಇದನ್ನು ಬಿಟ್ಟು ಹೋಗಬಹುದು ಮತ್ತು ನಿಮ್ಮ ನಿರ್ಣಯ ನಿಮ್ಮ ಕಡೆಗೆ ಇರುತ್ತದೆ.

**ಭಾಗಿಯಾಗುವುದರ ಖರ್ಚು:**

ಈ ಅಭ್ಯಾಸದ ಖರ್ಚು ಸಂಶೋಧಕರು ನಿಗದಿಪಡಿಸಿರುತ್ತಾರೆ. ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿತ್ವ ಆಗುವುದರ ಸಲುವಾಗಿ ಯಾವುದೇ ಹೆಚ್ಚಿನ ಖರ್ಚು ಇರುವುದಿಲ್ಲ.

**ಸಹಭಾಗಿಯಾಗಿರುವುದರ ವೇತನ :**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ತೊಡಗುವುದರಿಂದ ಯಾವುದೇ ಆರ್ಥಿಕ ಹಣ ಲಭ್ಯವಾಗುವುದಿಲ್ಲ.

**ಪ್ರಕಟಣೆ ಹಕ್ಕು**

ಈ ಸಂಶೋಧನೆಯ ನಿಷ್ಪನ್ನ ನಿಮ್ಮ ಪ್ರಕಟಣೆ ಮಾಡುತ್ತ ಉಪಯೋಗ ಮಾಡಿಕೊಳ್ಳಬಹುದು. ಅದರ ಸಲುವಾಗಿ ನಿಮ್ಮ ಗುರುತನ್ನು ಬೆಳಕಿಗೆ ತರುವುದಿಲ್ಲ.

**ಸಂಪರ್ಕ ಮಾಹಿತಿ:**

ಒಂದು ವೇಳೆ ನಿಮಗೆ ಯಾವುದೇ ಸಂಶಯ ಮತ್ತು ಪ್ರಶ್ನೆ ಉದ್ಭವಿಸಿದರೆ ನೀವು ಯಾವ ವೇಳೆಯಲ್ಲಾದರೂ ಸಂಪರ್ಕಿಸಬಹುದು.

ಕು. ಅರೇನಲಿಲಾ ಸ್ನಾತಕ  
ಪೆ. ಎಚ್.ಡಿ. ಸಂಶೋಧನ ಸ್ನಾತಕ  
ಕಾಹೇರ ನರ್ಸಿಂಗ್ ಸಾಯನ್ಸ್ ಸಂಸ್ಥಾ  
ನೆಹರು ನಗರ, ಬೆಳಗಾವಿ - 590010  
ಮೊ. ನಂ. 9900791035

ಪ್ರೊ.ಡಾ. ಸಂಗೀತಾ ಕರಡ  
ಉಪಪ್ರಾಚಾರ್ಯ & ಒ. ಬಿ. ಜಿ  
ಖಾತೆ ಎಚ್.ಓ.ಡಿ  
ಕಾಹೇರ ನರ್ಸಿಂಗ್ ಸಾಯನ್ಸ್ ಸಂಸ್ಥಾ  
ನೆಹರು ನಗರ ಬೆಳಗಾವಿ-590 010  
ಮೊ. ನಂ. 9481322656

### ಸಮ್ಮತಿ ಪತ್ರ

ಈ ಮೇಲ್ಕಾಣಿಸಿದ ಸಮ್ಮತಿ ಪತ್ರವನ್ನು ಓದಿ ಎಲ್ಲ ವಿಷಯ ನನಗೆ ತಿಳಿದಿದ್ದು ಇರುತ್ತದೆ. ನನಗೆ ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ನನಗೆ ಇದರಲ್ಲಿ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶವನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಇದಕ್ಕೆ ನನಗೆ ಸರಿಯಾದ ಉತ್ತರ ಸಿಕ್ಕಿರುತ್ತದೆ. ನಾನು ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಐಚ್ಛಿಕ ರೂಪದಲ್ಲಿ ಸಹಭಾಗಿತ್ವವಾಗುವದರ ಸಲುವಾಗಿ ನನ್ನ ಸಂಪೂರ್ಣ ಸಮ್ಮತಿ ಇದೆ.

ಸಹಭಾಗಿದಾರರ ಸಹಿ : \_\_\_\_\_

ಸಂಶೋಧಕರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

ಸ್ಥಳ : \_\_\_\_\_

**ಒಂದು ವೇಳೆ ಅಶಿಕ್ಷಿತ ಇದ್ದರೆ ,**

ನಾನು ಈ ಸಮ್ಮತಿ ಪತ್ರಕ್ಕೆ ಸಹಭಾಗಿತ್ವವಾಗಿ ಒಳ್ಳೆಯ ರೀತಿಯ ಸಾಕ್ಷಿದಾರಳಾಗಿರುತ್ತೇನೆ. ಆ ವ್ಯಕ್ತಿ ಅದರ ಸಂಶಯಾಸ್ಪದ ಪ್ರಶ್ನೆ ಕೇಳುವ ಸಂದರ್ಭ ಒದಗಿ ಬರಬಹುದು. ನಾನು ನಿಶ್ಚಿತವಾಗಿ ಹೇಳುತ್ತೇನೆ. ಆ ವ್ಯಕ್ತಿ ತನ್ನ ಸಮ್ಮತಿ ಸಂಪೂರ್ಣ ಒಪ್ಪಿಗೆಯ ಮೇರೆಗೆ ನೀಡಿದ್ದು ಇರುತ್ತದೆ.

ಸಾಕ್ಷಿದಾರರ ಹೆಸರು : \_\_\_\_\_

ಹೆಚ್ಚುವರಿ ಗುರುತು

ಸಾಕ್ಷಿದಾರರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

ಸ್ಥಳ : \_\_\_\_\_

**ಸಂಶೋಧಕರ ಮನವಿ:**

ನಾನು ಈ ಮಾಹಿತಿ ಸಂಭಾವ್ಯ ಸಹಭಾಗಿತ್ವದಿಂದ ಸರಿಯಾಗಿ ಓದಿ ತಿಳಿಸಿರುತ್ತೇನೆ. ಮತ್ತು ನನ್ನ ಪೂರ್ಣ ಒಪ್ಪಿಗೆಯ ಸಹಭಾಗಿತ್ವ ಮೇಲ್ಕಾಣಿಸಿದ ಉಲ್ಲೇಖದಲ್ಲಿ ನೀಡಿದ ಮಾಹಿತಿಯು ಸಂಪೂರ್ಣವಾಗಿ ತಿಳಿದುಕೊಂಡಿರುತ್ತೇನೆ.

ನಾನು ಖಡಾಕಂಡಿತವಾಗಿ ಹೇಳುತ್ತೇನೆ ಸಹಭಾಗಿತ್ವ ಈ ಅಭ್ಯಾಸದ ಸಲುವಾಗಿ ಅವಕಾಶ ನೀಡಿ ಹೋಗಿರುತ್ತಾರೆ. ಮತ್ತು ಎಲ್ಲ ಪ್ರಶ್ನೆಗಳ ಉತ್ತರ ಸರಿಯಾಗಿ ನೀಡಿದ್ದು ಇರುತ್ತದೆ. ನಾನು ಈ ವ್ಯಕ್ತಿಗೆ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿತ್ವವಾಗಲು ಒತ್ತಾಯ ಮಾಡಿರುವುದಿಲ್ಲ. ಮತ್ತು ಅವರು ಸಮ್ಮತಿಯನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ತಮ್ಮ ಇಚ್ಛೆಯಿಂದ ನೀಡಿದ್ದು ಇರುತ್ತದೆ.

ಈ ಮಾಹಿತಿ ಪೂರ್ವ ಸಮ್ಮತಿ ಪತ್ರದ ಪ್ರತಿ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ ಕೊಡುತ್ತ ಬಂದಿದ್ದು ಇರುತ್ತದೆ.

ಸಂಶೋಧಕರ ಹೆಸರು/ಸಮ್ಮತಿ ಕೊಡುವವರ ಹೆಸರು : \_\_\_\_\_

ಸಂಶೋಧಕರ ಸಹಿ/ಸಮ್ಮತಿ ಕೊಡುವವರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

## ಮಾಹಿತಿ ಪತ್ರ

ಬೆಳಗಾವಿಯ ಎಲ್ಲ ಆಸ್ಪತ್ರೆಯ ತಾಯಿ ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿರುವ ಆರೋಗ್ಯ ಅಭ್ಯಾಸ ಶಿಕ್ಷಣದ ಮೌಲ್ಯ ಮಾಪನ

ಸಂಶೋಧನೆ ಸ್ನಾತಕಾರ್ಥಿ: ಕು. ಅರೇನಲಿಲಾ ಜಮೀರ

ಪರಿವೀಕ್ಷಕ: ಪ್ರೊ. ಡಾ. ಸಂಗೀತಾ ಕ

ಗುರುತು:

ನಾವು ತಮ್ಮಲ್ಲಿ ವಿನಂತಿಸಿಕೊಳ್ಳುವುದೇನೆಂದರೆ, “ಬೆಳಗಾವಿಯ ಎಲ್ಲ ಆಸ್ಪತ್ರೆಯ ತಾಯಿ ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿರುವ ಆರೋಗ್ಯ ಅಭ್ಯಾಸ ಶಿಕ್ಷಣದ ಮೌಲ್ಯ ಮಾಪನ” ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿವಾಗಬೇಕು. ಕು.ಅರೇನಲಿಲಾ ಜಮೀರ ಇವಳು ಅಭ್ಯಾಸವನ್ನು ಮಾಡುತ್ತಿದ್ದಾಳೆ ಕೆ.ಎಲ್.ಇ ಉಚ್ಚ ಶಿಕ್ಷಣ ಸಂಸ್ಥೆ ಮತ್ತು ಸಂಶೋಧನಾ ಕೇಂದ್ರದ ಪಿ.ಎಚ್.ಡಿ ಸಂಶೋಧನಾ ಸ್ನಾತಕೋತ್ತರ ಇದ್ದು ಸೌ. ಸಂಗೀತಾ ಕರಡೆ ಉಪ ಪ್ರಾಚಾರ್ಯರ ಮತ್ತು ಪ್ರಸುತಿ ಸ್ತ್ರೀರೋಗ ತಜ್ಞ ವಿಭಾಗದ ಮುಖ್ಯ ಇಲಾಖೆ, ಕೆ.ಎ.ಎಚ್.ಇ.ಆರ್ ನರ್ಸಿಂಗ ಸಂಸ್ಥೆ ಬೆಳಗಾವಿ ಇವರ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಇವಳು ಅಭ್ಯಾಸವನ್ನು ಮಾಡುತ್ತಿದ್ದಾಳೆ.

**ಕಾರ್ಯವಿಧಾನದ ಬಗ್ಗೆ ವಿವರಣೆ :**

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಸಾಮಾಜಿಕ ಜನಸಂಖ್ಯೆ ವಿವರಗಳ ಮತ್ತು ಹೆರಿಗೆ ಪೂರ್ವ ಆರೈಕೆಯಲ್ಲಿ ತಂದೆಯಾಗಿ ನಿಮ್ಮ ವರ್ತನೆಯ ಕುರಿತು ನೀವು ಕೆಲವು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ಅದರೊಂದಿಗೆ ನಿಮ್ಮ ಹೆಂಡತಿಗೆ ಮೂರು ಅವಧಿಗಳ ಯೋಜಿತ ಆರೋಗ್ಯ ತರಬೇತಿ ಮತ್ತು ನಿಮಗಾಗಿ ಒಂದು ಸೆಷನ್ ಇರುತ್ತದೆ. ಹೆರಿಗೆ ಪೂರ್ವ ಭೇಟಿಗಳ ಸಮಯದ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಅಗತ್ಯಗಳ ಆಧಾರದ ಮೇಲೆ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದ ವಿಷಯವನ್ನು ತಯಾರಿಸಲಾಗುತ್ತದೆ. ಮತ್ತು ಈ ಸಂಪೂರ್ಣ ಕಾರ್ಯವಿಧಾನವು 30 ನಿಮಿಷಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ.

**ಸಂಭವನೀಯ ಪ್ರಯೋಜನಗಳು :**

ಹೆರಿಗೆಪೂರ್ವ ಆರೈಕೆಯಲ್ಲಿ ನಿಮ್ಮ ಪಾತ್ರದ ಕುರಿತು ನಿಮಗೆ ಆರೋಗ್ಯ ತರಬೇತಿಯನ್ನು ಒದಗಿಸಲಾಗುತ್ತದೆ ಹಾಗೆಯೇ ಹೆರಿಗೆ ಪೂರ್ವ ಆರೈಕೆಯಲ್ಲಿ ತಂದೆಯ ಪಾತ್ರದ ಕುರಿತು ಹೆರಿಗೆ ಪೂರ್ವ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮದ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ನಿಮ್ಮ ಭಾಗವಹಿಸುವಿಕೆ ಯಾವ ರೀತಿ ಸಹಕಾರಿ ಯಾಗಬಹುದು.

**ಅದರ ಅನಾಹುತ :**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ತೊಡಗಿದ್ದರಿಂದ ಯಾವುದೇ ಅನಾಹುತ ಇರುವುದಿಲ್ಲ.

**ಗುಪ್ತತೆ:**

ನಿಮ್ಮ ಮಾಹಿತಿ ಬೇರೆಯಾರಿಗೂ ತಿಳಿಸುವುದಿಲ್ಲ ಈ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸುತ್ತ ಹೋಗುವುದರಿಂದ ಇದರ ಚಿಹ್ನೆಯನ್ನು (ಕೋಡ) ಸಂಚಾಲನೆ ಮಾಡುತ್ತ ಹೋಗುವುದು.

**ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವುದು:**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿರುವ ವಿಷಯದ ಇಚ್ಛೆ ಇರುತ್ತದೆ. ಒಂದು ವೇಳೆ ಈ ವಿಷಯದಲ್ಲಿ ಇಚ್ಛೆ ಇಲ್ಲದಿದ್ದರೆ ನೀವು ಇದನ್ನು ಬಿಟ್ಟು ಹೋಗಬಹುದು ಮತ್ತು ನಿಮ್ಮ ನಿರ್ಣಯ ನಿಮ್ಮ ಕಡೆಗೆ ಇರುತ್ತದೆ.

**ಭಾಗಿಯಾಗುವುದರ ಖರ್ಚು:**

ಈ ಅಭ್ಯಾಸದ ಖರ್ಚು ಸಂಶೋಧಕರು ನಿಗದಿಪಡಿಸಿರುತ್ತಾರೆ. ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿತ್ವ ಆಗುವುದರ ಸಲುವಾಗಿ ಯಾವುದೇ ಹೆಚ್ಚಿನ ಖರ್ಚು ಇರುವುದಿಲ್ಲ.

**ಸಹಭಾಗಿಯಾಗಿರುವುದರ ವೇತನ :**

ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ತೊಡಗುವುದರಿಂದ ಯಾವುದೇ ಆರ್ಥಿಕ ಹಣ ಲಭ್ಯವಾಗುವುದಿಲ್ಲ.

**ಪ್ರಕಟಣೆ ಹಕ್ಕು**

ಈ ಸಂಶೋಧನೆಯ ನಿಷ್ಕೃಷ್ಟ ನಿಮ್ಮ ಪ್ರಕಟಣೆ ಮಾಡುತ್ತ ಉಪಯೋಗ ಮಾಡಿಕೊಳ್ಳಬಹುದು. ಅದರ ಸಲುವಾಗಿ ನಿಮ್ಮ ಗುರುತನ್ನು ಬೆಳಕಿಗೆ ತರುವುದಿಲ್ಲ.

**ಸಂಪರ್ಕ ಮಾಹಿತಿ:**

ಒಂದು ವೇಳೆ ನಿಮಗೆ ಯಾವುದೇ ಸಂಶಯ ಮತ್ತು ಪ್ರಶ್ನೆ ಉದ್ಭವಿಸಿದರೆ ನೀವು ಯಾವ ವೇಳೆಯಲ್ಲಾದರೂ ಸಂಪರ್ಕಿಸಬಹುದು.

ಕು. ಅರೇನಲಿಲಾ ಸ್ನಾತಕ  
ಪೆ. ಎಚ್.ಡಿ. ಸಂಶೋಧನ ಸ್ನಾತಕ  
ಕಾಹೇರ ನರ್ಸಿಂಗ್ ಸಾಯನ್ಸ್ ಸಂಸ್ಥಾ  
ನಹರು ನಗರ, ಬೆಳಗಾವಿ - 590010  
ಮೊ. ನಂ. 9900791035

ಪ್ರೊ.ಡಾ. ಸಂಗೀತಾ ಕರಡ  
ಉಪಪ್ರಾಚಾರ್ಯ & ಒ. ಬಿ. ಜಿ  
ಖಾತೆ ಎಚ್.ಓ.ಡಿ  
ಕಾಹೇರ ನರ್ಸಿಂಗ್ ಸಾಯನ್ಸ್ ಸಂಸ್ಥಾ  
ನಹರು ನಗರ ಬೆಳಗಾವಿ-590 010  
ಮೊ. ನಂ. 9481322656

### ಸಮ್ಮತಿ ಪತ್ರ

ಈ ಮೇಲ್ಕಾಣಿಸಿದ ಸಮ್ಮತಿ ಪತ್ರವನ್ನು ಓದಿ ಎಲ್ಲ ವಿಷಯ ನನಗೆ ತಿಳಿದಿದ್ದು ಇರುತ್ತದೆ. ನನಗೆ ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ನನಗೆ ಇದರಲ್ಲಿ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶವನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಇದಕ್ಕೆ ನನಗೆ ಸರಿಯಾದ ಉತ್ತರ ಸಿಕ್ಕಿರುತ್ತದೆ. ನಾನು ಈ ಅಭ್ಯಾಸದಲ್ಲಿ ಐಚ್ಛಿಕ ರೂಪದಲ್ಲಿ ಸಹಭಾಗಿತ್ವವಾಗುವದರ ಸಲುವಾಗಿ ನನ್ನ ಸಂಪೂರ್ಣ ಸಮ್ಮತಿ ಇದೆ.

ಸಹಭಾಗಿದಾರರ ಸಹಿ : \_\_\_\_\_

ಸಂಶೋಧಕರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

ಸ್ಥಳ : \_\_\_\_\_

**ಒಂದು ವೇಳೆ ಅಶಿಕ್ಷಿತ ಇದ್ದರೆ ,**

ನಾನು ಈ ಸಮ್ಮತಿ ಪತ್ರಕ್ಕೆ ಸಹಭಾಗಿತ್ವವಾಗಿ ಒಳ್ಳೆಯ ರೀತಿಯ ಸಾಕ್ಷಿಧಾರಳಾಗಿರುತ್ತೇನೆ. ಆ ವ್ಯಕ್ತಿ ಅದರ ಸಂಶಯಾಸ್ಪದ ಪ್ರಶ್ನೆ ಕೇಳುವ ಸಂದರ್ಭ ಒದಗಿ ಬರಬಹುದು. ನಾನು ನಿಶ್ಚಿತವಾಗಿ ಹೇಳುತ್ತೇನೆ. ಆ ವ್ಯಕ್ತಿ ತನ್ನ ಸಮ್ಮತಿ ಸಂಪೂರ್ಣ ಒಪ್ಪಿಗೆಯ ಮೇರೆಗೆ ನೀಡಿದ್ದು ಇರುತ್ತದೆ.

ಸಾಕ್ಷಿದಾರರ ಹೆಸರು : \_\_\_\_\_

ಹೆಚ್ಚುವರಿ ಗುರುತು

ಸಾಕ್ಷಿದಾರರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

ಸ್ಥಳ : \_\_\_\_\_

**ಸಂಶೋಧಕರ ಮನವಿ:**

ನಾನು ಈ ಮಾಹಿತಿ ಸಂಭಾವ್ಯ ಸಹಭಾಗಿತ್ವದಿಂದ ಸರಿಯಾಗಿ ಓದಿ ತಿಳಿಸಿರುತ್ತೇನೆ. ಮತ್ತು ನನ್ನ ಪೂರ್ಣ ಒಪ್ಪಿಗೆಯ ಸಹಭಾಗಿತ್ವ ಮೇಲ್ಕಾಣಿಸಿದ ಉಲ್ಲೇಖದಲ್ಲಿ ನೀಡಿದ ಮಾಹಿತಿಯು ಸಂಪೂರ್ಣವಾಗಿ ತಿಳಿದುಕೊಂಡಿರುತ್ತೇನೆ.

ನಾನು ಖಡಾಕಂಡಿತವಾಗಿ ಹೇಳುತ್ತೇನೆ ಸಹಭಾಗಿತ್ವ ಈ ಅಭ್ಯಾಸದ ಸಲುವಾಗಿ ಅವಕಾಶ ನೀಡಿ ಹೋಗಿರುತ್ತಾರೆ. ಮತ್ತು ಎಲ್ಲ ಪ್ರಶ್ನೆಗಳ ಉತ್ತರ ಸರಿಯಾಗಿ ನೀಡಿದ್ದು ಇರುತ್ತದೆ. ನಾನು ಈ ವ್ಯಕ್ತಿಗೆ ಅಭ್ಯಾಸದಲ್ಲಿ ಸಹಭಾಗಿತ್ವವಾಗಲು ಒತ್ತಾಯ ಮಾಡಿರುವುದಿಲ್ಲ. ಮತ್ತು ಅವರು ಸಮ್ಮತಿಯನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ತಮ್ಮ ಇಚ್ಛೆಯಿಂದ ನೀಡಿದ್ದು ಇರುತ್ತದೆ.

ಈ ಮಾಹಿತಿ ಪೂರ್ವ ಸಮ್ಮತಿ ಪತ್ರದ ಪ್ರತಿ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ ಕೊಡುತ್ತ ಬಂದಿದ್ದು ಇರುತ್ತದೆ.

ಸಂಶೋಧಕರ ಹೆಸರು/ಸಮ್ಮತಿ ಕೊಡುವವರ ಹೆಸರು : \_\_\_\_\_

ಸಂಶೋಧಕರ ಸಹಿ/ಸಮ್ಮತಿ ಕೊಡುವವರ ಸಹಿ : \_\_\_\_\_

ದಿನಾಂಕ : \_\_\_\_\_

बेळगांवमधील निवडक हॉस्पिटलमधील मातांच्या गरोदरपणातील आरोग्य अभ्यासाच्या शिक्षण  
कार्यक्रमाचे मूल्यमापन.

संशोधन स्नातक : कु. अरेनलिला जमीर

पर्यवेक्षक : प्रो. डॉ. संगीता खर्डे

### माहिती पत्रक

#### ओळख :

आम्ही आपणास विनंती करीत आहोत की आपण “ बेळगांवमधील निवडक हॉस्पिटलमधील मातांच्या गरोदरपणातील आरोग्य अभ्यासाच्या शिक्षण कार्यक्रमाचे मूल्यमापन” या अभ्यासात सहभागी व्हावे. जो की कु. अरेनलिला जमीर या करीत आहेत. ज्या की के एल ई उच्च शिक्षण संस्था आणि संशोधन केंद्राच्या पी. एच. डी च्या संशोधन स्नातक असून त्या डॉ. संगीता खर्डे, उप प्राचार्या आणि प्रसुती आणि स्त्रीरोगतज्ञ, विभागाच्या हेड ऑफ डिपार्टमेंटा, के ए एच ई आर नर्सिंग संस्था बेळगांव यांच्या मार्गदर्शनाखाली हा अभ्यास करीत आहेत.

#### प्रक्रियेसंबंधी स्पष्टीकरण :

या अभ्यासामध्ये तुम्हास सामाजिक लोकसंख्येवर आणि पालक सुश्रुषासंबंधी एक बाप म्हणून तुमची काय भूमिका आहे यासंबंधी सविस्तर प्रश्न विचारले जातील. आणि याच्यानंतर तुमच्या भागीदारासह एक आखलेल्या आरोग्य शिक्षणाचे तीन सत्र घेतले जातील आणि तुमच्यासाठी गरोदरपणानंतरच्या तपासणीसाठी आल्यावर एक सत्र घेतले जाईल. या आरोग्य शिक्षण कार्यक्रमातील धोरणे ही या कार्यक्रमात भाग घेणाऱ्यांच्या आवश्यकतेनुसार बनविली गेली आहेत. आणि ही सम्पूर्ण प्रक्रिया 30 मिनीटे चालेल.

#### संभाव्य फायदे :

तुमच्या पालक या भूमिकेसंबंधी सुश्रुषेचे आरोग्य शिक्षण तुम्हास दिले जाईल. तुमच्या सहभागीपणामुळे पालक सुश्रुषेसंबंधी एक बाप म्हणून तुमच्या पालक शिक्षण कार्यक्रमातील भूमिकेचे मूल्यमापन करण्यास मदत मिळेल.

#### संभाव्य धोके :

या अभ्यासात सहभागी होण्यामुळे कोणताही धोका नाही.

#### गुप्तता :

तुमची ओळख उघड केली जाणार नाही आणि जी माहिती गोळा केली जाईल ती एका कोडद्वारे संचालित केली जाईल त्यामुळे तुमची ओळख कोणीही जाणू शकणार नाही.

**माघार :**

या अभ्यासातील सहभाग हा ऐच्छिक आहे. जर तुम्हास या अभ्यासात सहभागी व्हायचे नसेल तर तुम्ही नकार देऊ शकता. तुमच्या निर्णयाचा मान राखला जाईल.

**सहभागी होण्यासाठीचा खर्च :**

या अभ्यासाचा खर्च हा संशोधक उचलेल. या अभ्यासात सहभागी होण्यासाठी कोणताही अतिरिक्त खर्च नाही.

**सहभागी होण्यासाठी वेतन :**

या अभ्यासात सहभागी होणाऱ्यास कोणतेही आर्थिक फायदे मिळणार नाही.

**प्रकाशन हक्क :**

या संशोधनाचे निष्कर्ष यांच्या प्रकाशनाकरीता वापर केला जाऊ शकतो. पण तुमची ओळख उघड केली जाणार नाही.

**संपर्क माहिती :**

जर तुम्हास कोणतीही शंका आणि प्रश्न असतील तर तुम्ही कोणत्याही वेळी इथे संपर्क साधू शकता.

कु. अरेनलिला स्नातक  
पी.एच.डी संशोधन स्नातक  
KAHER नर्सिंग सायन्स संस्था  
नेहरु नगर, बेळगांवी - ५९००१०  
मो. नं. ९९००७९१०३५

प्रो. डो. संगीता खर्डे  
उपप्राचार्य आणि ओ.बी.जी  
खात्याचे HOD  
KAHER, नर्सिंग सायन्स संस्था  
नेहरु नगर, बेळगांवी - ५९००१०  
मो. नं. ९४८१३२२६५६

## संमती पत्रक

मी हे संमतीपत्रक वाचले असून मला ते समजले आहे. मला या अभ्यासाविषयक माझ्या शंका विचारण्याच्या संधी दिल्या गेल्या. आणि मला त्यांची समाधानकारक उत्तरे मिळाली. मी या अभ्यासामध्ये ऐच्छिक रुपाने सहभागी होण्यास माझी संमती दर्शवितो.

सहभागी होणाऱ्याची सही : \_\_\_\_\_

संशोधकाची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_

स्थळ : \_\_\_\_\_

जर अशिक्षित असेल,

मी या संमतीपत्राचे संभाव्य सहभागीस अचूक वाचन करताना साक्षीदार आहे. आणि त्या व्यक्तीस त्यांच्या शंका विचारण्याची संधी देण्यात आणि मी हे निश्चित सांगतो की या व्यक्तीने आपली संमती मोकळेपणाने दिली आहे.

साक्षीदाराचे नांव : \_\_\_\_\_

आंगठ्याचा

ठसा

साक्षीदाराची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_ स्थळ : \_\_\_\_\_

संशोधकाचे निवेदन :

मी ही माहिती संभाव्य सहभागीस अचूकपणे वाचून दाखविली आणि माझ्या पूर्ण क्षमतेने हे निश्चित केले की सहभागी याने वर उल्लेखलेली प्रक्रिया पूर्णपणे समजाऊन घेतली.

मी हे निश्चितपणे मागतो की सहभागीस या अभ्यासाविषयी प्रश्ने विचारण्याची संधी दिली गेली आणि सर्व प्रश्नांची उत्तरे सहभागीस अचूकपणे माझ्या योग्य क्षमतेप्रमाणे दिली गेली. मी हे निश्चित करतो की या व्यक्तीस अभ्यासामध्ये सहभागी होण्यास बळजबरीने प्रवृत्त केले गेले नाही आणि त्याने त्याची संमती ही मोकळेपणाने आणि ऐच्छिक रुपाने दिली आहे.

यामाहितीपूर्ण संमतीपत्राची नक्कल सहभागीस देण्यात आलेली आहे.

संशोधकाचे नांव / संमती घेण्याच्या व्यक्तीचे नांव : \_\_\_\_\_

संशोधकाची सही / संमती घेणाऱ्याची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_

बेळगांवमधील निवडक हॉस्पिटलमधील मातांच्या गरोदरपणातील आरोग्य अभ्यासाच्या शिक्षण  
कार्यक्रमाचे मूल्यमापन.

संशोधन स्नातक : कु. अरेनलिला जमीर

पर्यवेक्षक : प्रो. डॉ. संगीता खर्डे

### माहिती पत्रक

#### ओळख :

आम्ही आपणास विनंती करीत आहोत की आपण “ बेळगांवमधील निवडक हॉस्पिटलमधील मातांच्या गरोदरपणातील आरोग्य अभ्यासाच्या शिक्षण कार्यक्रमाचे मूल्यमापन” या अभ्यासात सहभागी व्हावे. जो की कु. अरेनलिला जमीर या करीत आहेत. ज्या की के एल ई उच्च शिक्षण संस्था आणि संशोधन केंद्राच्या पी. एच. डी च्या संशोधन स्नातक असून त्या डॉ. संगीता खर्डे, उप प्राचार्या आणि प्रसुती आणि स्त्रीरोगतज्ञ, विभागाच्या हेड ऑफ डिपार्टमेंटा, के ए एच ई आर नर्सिंग संस्था बेळगांव यांच्या मार्गदर्शनाखाली हा अभ्यास करीत आहेत.

#### प्रक्रियेसंबंधी स्पष्टीकरण :

या अभ्यासामध्ये तुम्हास सामाजिक लोकसंख्येवर आणि स्वतःची गरोदरपणामध्ये आरोग्याची काळजी स्वतः घेण्यासंबंधीची क्षमता यावर एका प्रश्नावलीच्या आधारे सविस्तर प्रश्ने विचारले जातील ज्याची उत्तरे तुम्हास देणेची आहेत. याच्यानंतर तुम्हासाठी तीन सत्रांचे एक आरोग्य शिक्षण योजण्यात येईल व तुमच्या साथीदारासाठी एक सत्र आयोजित केले जाईल. ज्यामध्ये गरोदरपणामध्ये एक वडीलांची भूमिका यासंबंधी ते जेव्हा ते गरोदरपणानंतरच्या भेटीमध्ये उपलब्ध असतील, कार्यशाळा घेतली जाईल. या आरोग्य शिक्षणातील मजकूर हा यामध्ये सहभागी होणाऱ्यांच्या आवश्यकतेनुसार बनविला गेला असून तो WHO (डब्ल्यु एच ओ) आणि आरोग्य आणि कौटुंबिक कल्याण मंत्रालयाने आखलेल्या मार्गदर्शनानुसार आखलेला आहे. या सम्पूर्ण प्रक्रियेस 30 मिनीटे लागतील.

#### संभाव्य फायदे :

तुम्हास आरोग्य शिक्षण दिले जाईल ज्याद्वारे तुम्हास गरोदरपणातील शारीरिक बदल भावनिक बदल, सदृढ आणि तत्पर राहणे, धोक्याची चिन्हे आणि गरोदरपणातील सर्व सामान्य असुविधा, प्रसुतीसाठी करावयाची तयारी, प्रसुतीनंतरची सुश्रुषा आणि बालकाची काळजी घेणे याबद्दल माहिती पुरविली जाईल. तुमच्या सहभागामुळे गरोदरपणातील आरोग्य अभ्यासाबद्दलच्या प्रसुतीपूर्व शिक्षण कार्यक्रमाचे मूल्यमापणास मदत मिळू शकेल.

**संभाव्य धोके :**

या अभ्यासात सहभागी होण्यामुळे कोणताही धोका नाही.

**गुप्तता :**

तुमची ओळख उघड केली जाणार नाही आणि जी माहिती गोळा केली जाईल ती एका कोडद्वारे संचालित केली जाईल त्यामुळे तुमची ओळख कोणीही जाणू शकणार नाही.

**माघार :**

या अभ्यासातील सहभाग हा ऐच्छिक आहे. जर तुम्हास या अभ्यासात सहभागी व्हायचे नसेल तर तुम्ही नकार देऊ शकता. तुमच्या निर्णयाचा मान राखला जाईल.

**सहभागी होण्यासाठीचा खर्च :**

या अभ्यासाचा खर्च हा संशोधक उचलेल. या अभ्यासात सहभागी होण्यासाठी कोणताही अतिरिक्त खर्च नाही.

**सहभागी होण्यासाठी वेतन :**

या अभ्यासात सहभागी होणाऱ्यास कोणतेही आर्थिक फायदे मिळणार नाही.

**प्रकाशन हक्क :**

या संशोधनाचे निष्कर्ष यांच्या प्रकाशनाकरीता वापर केला जाऊ शकतो. पण तुमची ओळख उघड केली जाणार नाही.

**संपर्क माहिती :**

जर तुम्हास कोणतीही शंका आणि प्रश्न असतील तर तुम्ही कोणत्याही वेळी इथे संपर्क साधू शकता.

कु. अरेनलिला स्नातक  
पी.एच.डी संशोधन स्नातक  
KAHER नर्सिंग सायन्स संस्था  
नेहरु नगर, बेळगांवी - ५९००१०  
मो. नं. ९९००७९१०३५

प्रो. डो. संगीता खर्डे  
उपप्राचार्य आणि ओ.बी.जी  
खात्याचे HOD  
KAHER, नर्सिंग सायन्स संस्था  
नेहरु नगर, बेळगांवी - ५९००१०  
मो. नं. ९४८१३२२६५६

## संमती पत्रक

मी हे संमतीपत्रक वाचले असून मला ते समजले आहे. मला या अभ्यासाविषयक माझ्या शंका विचारण्याच्या संधी दिल्या गेल्या. आणि मला त्यांची समाधानकारक उत्तरे मिळाली. मी या अभ्यासामध्ये ऐच्छिक रुपाने सहभागी होण्यास माझी संमती दर्शवितो.

सहभागी होणाऱ्याची सही : \_\_\_\_\_

संशोधकाची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_

स्थळ : \_\_\_\_\_

जर अशिक्षित असेल,

मी या संमतीपत्राचे संभाव्य सहभागीस अचूक वाचन करताना साक्षीदार आहे. आणि त्या व्यक्तीस त्यांच्या शंका विचारण्याची संधी देण्यात आणि मी हे निश्चित सांगतो की या व्यक्तीने आपली संमती मोकळेपणाने दिली आहे.

साक्षीदाराचे नांव : \_\_\_\_\_

आंगठ्याचा

ठसा

साक्षीदाराची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_ स्थळ : \_\_\_\_\_

संशोधकाचे निवेदन :

मी ही माहिती संभाव्य सहभागीस अचूकपणे वाचून दाखविली आणि माझ्या पूर्ण क्षमतेने हे निश्चित केले की सहभागी याने वर उल्लेखलेली प्रक्रिया पूर्णपणे समजाऊन घेतली.

मी हे निश्चितपणे मागतो की सहभागीस या अभ्यासाविषयी प्रश्ने विचारण्याची संधी दिली गेली आणि सर्व प्रश्नांची उत्तरे सहभागीस अचूकपणे माझ्या योग्य क्षमतेप्रमाणे दिली गेली. मी हे निश्चित करतो की या व्यक्तीस अभ्यासामध्ये सहभागी होण्यास बळजबरीने प्रवृत्त केले गेले नाही आणि त्याने त्याची संमती ही मोकळेपणाने आणि ऐच्छिक रुपाने दिली आहे.

यामाहितीपूर्ण संमतीपत्राची नक्कल सहभागीस देण्यात आलेली आहे.

संशोधकाचे नांव / संमती घेण्याच्या व्यक्तीचे नांव : \_\_\_\_\_

संशोधकाची सही / संमती घेणाऱ्याची सही : \_\_\_\_\_

तारीख : \_\_\_\_\_

## ANNEXURE IV

## SECTION - I

**SOCIO-DEMOGRAPHIC DATA FOR MOTHER**

Sample code. \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Dear respondent, you are requested to go through the following and put a tick mark  against the options which are appropriate to you.

1. Age (in years) .....
2. Religion
  - a) Hindu ( )
  - b) Christian ( )
  - c) Muslim ( )
  - d) Others, specify ( )
3. Educational status
  - a) No formal education ( )
  - b) Primary education ( )
  - c) Secondary education ( )
  - d) Graduate & above ( )
4. Occupation
  - a) Farmer ( )
  - b) Home maker ( )
  - c) Labourer/daily wager ( )
  - d) Employee ( )
5. Family income/month (in rupees) .....
6. Type of family
  - a) Nuclear ( )
  - b) Joint ( )
7. Area of residence
  - a) Urban ( )
  - b) Rural ( )
8. Diet
  - a) Pure vegetarian ( )
  - b) Vegetarian (with egg) ( )
  - b) Mixed (Veg and Non-veg) ( )

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**SECTION - I**  
**SOCIO-DEMOGRAPHIC DATA FOR FATHER**

Sample code. \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Dear respondent, you are requested to go through the following and put a tick mark  against the options which are appropriate to you.

1. Age (in years) .....
2. Religion
- a) Hindu ( )
- b) Christian ( )
- c) Muslim ( )
- d) Others, specify ( )
3. Educational status
- a) No formal education ( )
- b) Primary education ( )
- c) Secondary education ( )
- d) Graduate & above ( )
4. Occupation
- a) Farmer ( )
- b) Labourer/daily wager ( )
- c) Government employee ( )
- d) Private employee ( )
- d) Self employed ( )
5. Family income/month (in rupees) .....
6. Type of family
- a) Nuclear ( )
- b) Joint ( )
7. Area of residence
- a) Urban ( )
- b) Rural ( )

**ವಿಭಾಗ - I**  
**ತಾಯಿಯವರ ಸಾಮಾಜಿಕ ಜನಸಂಖ್ಯೆಯ ವಿಧಾನ**

ನಮೂನೆ ಕೋಡ \_\_\_\_\_ ದಿನಾಂಕ : \_\_\_\_\_

ಸೂಚನೆ : ಪ್ರೀಯರೆ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರ ಹೇಳುವವರಿಗೆ ನಿಮಗೆ ವಿನಂತಿ ಅದೆ ನೀವುಗಳು ಮುಂದಿನ ವಿಧಾನವನ್ನು ಓದಿಕೊಂಡು ಉತ್ತರಕ್ಕೆ ✓ ಹಾಕುವುದು.

- 1) ವಯಸ್ಸು (ವರ್ಷ) \_\_\_\_\_
- 2) ಧರ್ಮ
  - a) ಹಿಂದೂ ( )
  - b) ಕ್ರಿಶ್ಚಿಯನ್ ( )
  - c) ಮುಸ್ಲಿಂ ( )
  - d) ಇತರೆ ( )
- 3) ಶಿಕ್ಷಣ
  - a) ಔಪಚಾರಿಕ ಶಿಕ್ಷಣ ಇಲ್ಲ ( )
  - b) ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ ( )
  - c) ಮಾಧ್ಯಮಿಕ ಶಿಕ್ಷಣ ( )
  - d) ಡಿಪ್ಲೋಮಾ / ಪದವಿಧರರು ಇತರೆ ( )
- 4) ಉದ್ಯೋಗ
  - a) ರೈತ ( )
  - b) ಗೃಹಿಣಿ ( )
  - c) ಕಾರ್ಮಿಕ / ದೈನಂದಿನ ಪಂತ ( )
  - d) ಉದ್ಯೋಗಿ ( )
- 5) ಕುಟುಂಬದ ಆದಾಯ ತಿಂಗಳೊಳಗೆ (ರೂಪಾಯಿದಲ್ಲಿ) \_\_\_\_\_
- 6) ಕುಟುಂಬದ ಪ್ರಕಾರ
  - a) ವಿಭಕ್ತ/ಅವಿಭಕ್ತ ( )
  - b) ಸಂಯುಕ್ತ ( )
- 7) ರಹವಾಸಿಯ ಗುರುತ
  - a) ಶಹರ ( )
  - b) ಗ್ರಾಮಾಂತರ ( )
- 8) ಆಹಾರ ಪದ್ಧತಿ
  - a) ಶುದ್ಧ ಸಸ್ಯಾಹಾರಿ ( )
  - b) ಸಸ್ಯಾಹಾರಿ (ಮೊಟ್ಟೆಯೊಂದಿಗೆ) ( )
  - c) ಮಿಶ್ರಿತ (ಸಸ್ಯಾಹಾರಿ ಮತ್ತು ಮಾಂಸಾಹಾರಿ) ( )

**ವಿಭಾಗ - II**  
**ತಂದೆಯಾಗಿ ಸಾಮಾಜಿಕ ಜನಸಂಖ್ಯೆಯ ವಿಧಾನ**

ನಮೂನೆ ಕೋಡ \_\_\_\_\_ ದಿನಾಂಕ : \_\_\_\_\_

ಸೂಚನೆ : ಪ್ರೀಯರೆ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರ ಹೇಳುವವರಿಗೆ ನಿಮಗೆ ವಿನಂತಿ ಅದೆ ನೀವುಗಳು ಮುಂದಿನ ವಿಧಾನವನ್ನು ಓದಿಕೊಂಡು ಉತ್ತರಕ್ಕೆ ✓ ಹಾಕುವುದು.

- 1) ವಯಸ್ಸು (ವರ್ಷ) \_\_\_\_\_
- 2) ಧರ್ಮ
  - a) ಹಿಂದೂ ( )
  - b) ಕ್ರಿಶ್ಚಿಯನ್ ( )
  - c) ಮುಸ್ಲಿಂ ( )
  - d) ಇತರೆ ( )
- 3) ಶಿಕ್ಷಣ
  - a) ಔಪಚಾರಿಕ ಶಿಕ್ಷಣ ಇಲ್ಲ ( )
  - b) ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ ( )
  - c) ಮಾಧ್ಯಮಿಕ ಶಿಕ್ಷಣ ( )
  - d) ಡಿಪ್ಲೋಮಾ / ಪದವಿಧರರು ಇತರೆ ( )
- 4) ಉದ್ಯೋಗ
  - a) ರೈತ ( )
  - b) ಕಾರ್ಮಿಕ / ದೈನಂದಿನ ಪಂತ ( )
  - c) ಸರ್ಕಾರಿ ನೌಕರ ( )
  - d) ಖಾಸಗಿ ಉದ್ಯೋಗಿ ( )
  - e) ಸ್ವಯಂ ಉದ್ಯೋಗಿ ( )
- 5) ಕುಟುಂಬದ ಆದಾಯ ತಿಂಗಳೊಳಗೆ (ರೂಪಾಯಿದಲ್ಲಿ) \_\_\_\_\_
- 6) ಕುಟುಂಬದ ಪ್ರಕಾರ
  - a) ವಿಭಕ್ತ/ಅವಿಭಕ್ತ ( )
  - b) ಸಂಯುಕ್ತ ( )
- 7) ರಹವಾಸಿಯ ಗುರುತ
  - a) ಶಹರ ( )
  - b) ಗ್ರಾಮಾಂತರ ( )

विभाग - I  
आईसाठी सामाजिक-डेमोग्राफिक डेटा

नमुना कोड. तारीख

सूचना: प्रिय प्रतिसादक, तुम्हाला विनंती आहे की तुम्ही खालील गोष्टींमधून जा आणि तुम्हाला योग्य असलेल्या पर्यायांवर टिक मार्क P लावा.

1. वय (वर्षांमध्ये) .....
2. धर्म
  - a) हिंदू ( )
  - b) ख्रिश्चन ( )
  - c) मुस्लिम ( )
  - d) इतर, निर्दिष्ट करा ( )
3. शैक्षणिक स्थिती
  - a) औपचारिक शिक्षण नाही ( )
  - b) प्राथमिक शिक्षण ( )
  - c) माध्यमिक शिक्षण ( )
  - d) पदवीधर आणि त्यावरील ( )
4. व्यवसाय
  - a) शेतकरी ( )
  - b) होम मेकर ( )
  - c) मजूर/ रोजंदारी ( )
  - d) कर्मचारी ( )
5. कौटुंबिक उत्पन्न/महिना (रुपयांमध्ये) .....
6. कुटुंबाचा प्रकार
  - a) अणु ( )
  - b) संयुक्त ( )
7. निवासाचे क्षेत्र
  - a) शहरी ( )
  - b) ग्रामीण ( )
8. आहार
  - a) शुद्ध शाकाहारी ( )
  - b) शाकाहारी (अंड्यासह) ( )
  - c) मिश्रित (शाकाहारी आणि मांसाहारी) ( )

## विभाग - I

## वडिलांसाठी सामाजिक-डेमोग्राफिक डेटा

नमुना कोड.

तारीख

सूचना: प्रिय प्रतिसादक, तुम्हाला विनंती आहे की तुम्ही खालील गोष्टींमधून जा आणि तुम्हाला योग्य असलेल्या पर्यायांवर टिक मार्क P लावा.

1. वय (वर्षांमध्ये) .....
2. धर्म
  - a) हिंदू ( )
  - b) ख्रिश्चन ( )
  - c) मुस्लिम ( )
  - d) इतर, निर्दिष्ट करा ( )
3. शैक्षणिक स्थिती
  - a) औपचारिक शिक्षण नाही ( )
  - b) प्राथमिक शिक्षण ( )
  - c) माध्यमिक शिक्षण ( )
  - d) पदवीधर आणि त्यावरील ( )
4. व्यवसाय
  - a) शेतकरी ( )
  - b) मजूर/ रोजंदारी ( )
  - c) सरकारी कर्मचारी ( )
  - d) खाजगी कर्मचारी ( )
  - e) स्वयंरोजगार ( )
5. कौटुंबिक उत्पन्न/महिना (रुपयांमध्ये) .....
6. कुटुंबाचा प्रकार
  - a) परमाणु ( )
  - b) संयुक्त ( )
7. निवासाचे क्षेत्र
  - a) शहरी ( )
  - b) ग्रामीण ( )

## SECTION - II

**Self Rated Abilities for Health Practices Scale (SRAHP)**

**Instructions:** Please read the following statements and indicate how well you are able to do each of the health practices by placing a tick mark  in the appropriate column.

**I AM ABLE TO:**

1.	Find healthy foods that are within my budget	0	1	2	3	4
2.	Eat a balanced diet	0	1	2	3	4
3.	Figure out how much I should weight to be healthy	0	1	2	3	4
4.	Brush my teeth regularly	0	1	2	3	4
5.	Tell which foods are high in fiber content	0	1	2	3	4
6.	Figure out from the labels what foods are good for me	0	1	2	3	4
7.	Drink as much water as I need to drink every day	0	1	2	3	4
8.	Figure out things I can do to help me relax	0	1	2	3	4
9.	Keep myself from feeling lonely	0	1	2	3	4
10.	Do things that make me feel good about myself	0	1	2	3	4
11.	Avoid being bored	0	1	2	3	4
12.	Talk to friend and family about the things that are bothering me	0	1	2	3	4
13.	Figure out how I respond to stress	0	1	2	3	4
14.	Change things in my life to reduce my stress	0	1	2	3	4
15.	Do exercise that are good for me	0	1	2	3	4
16.	Fit exercise into my regular routine	0	1	2	3	4
17.	Find ways to exercise that I enjoy	0	1	2	3	4
18.	Find accessible places for me to exercise in the community	0	1	2	3	4

19.	Know when to quit exercising	0	1	2	3	4
20.	Do stretching exercises	0	1	2	3	4
21.	Keep from getting hurt when I exercise	0	1	2	3	4
22.	Figure out where to get information on how to take care of my health	0	1	2	3	4
23.	Watch for negative changes in my body's condition (pressure sores, breathing problems)	0	1	2	3	4
24.	Recognize what symptoms should be reported to a doctor or nurse	0	1	2	3	4
25.	Use medication correctly	0	1	2	3	4
26.	Find a doctor or nurse who gives me good advice about how to stay healthy	0	1	2	3	4
27.	Know my rights and stand up for myself effectively	0	1	2	3	4
28.	Get help from others when I need it	0	1	2	3	4

**Scoring:**

**0 = Not at all; 1 = A little; 2 = Somewhat; 3 = Mostly; 4 = Completely**

**Range of total score = 0 - 122**

**Higher score indicate greater abilities for health practices**

**Subscales:**

**Nutrition: Items 1-7**

**Psychological well being: Items 8-14**

**Exercise: Items 15-21**

**Responsible Health Practices: Items 22-28**

**There are no reversed scored items**

## ವಿಭಾಗ - II

ಆರೋಗ್ಯ ತರಬೇತಿ ಮೌಲ್ಯಮಾಪನದ ಸಲುವಾಗಿ ಸ್ವತಃ ಶ್ರಮಿಸುವುದು.

ಸೂಚನೆ : ಪ್ರೀಯರ ಮುಂದಿನ ವಿಷಯವನ್ನು ಓದಿಕೊಂಡು ಮತ್ತು ಮುಂದಿನ ಕಾಲದಲ್ಲಿ  $\sqrt$  ಗುರುತಿಸಿ ಚಿಹ್ನೆ ಹಾಕುವುದು.

ನಾನು ಇದರ ಸಲುವಾಗಿ ಸಿದ್ಧನಿದ್ದೇಳೆ/ನ.

1	ನನ್ನ ಆರ್ಥಿಕ ಪರಿಸ್ಥಿತಿಯ ಅನುಗುಣವಾಗಿ ಆರೋಗ್ಯದಾಯಿ ಅನ್ನ ಸಿಗಬಹುದು.	0	1	2	3	4
2	ಒಳ್ಳೆಯ ಪೌಷ್ಟಿಕ ಆಹಾರವನ್ನು ಸೇವಿಸಬೇಕು.	0	1	2	3	4
3	ನನ್ನ ವರ್ತನೆ ಒಳ್ಳೆಯ ಇದ್ದರೆ ಮಾತ್ರ ಸದೃಢವಾಗಿ ಇರುತ್ತೇವೆ.	0	1	2	3	4
4	ನನ್ನ ಹಲ್ಲನ್ನು ದಿನನಿತ್ಯ ಉಜ್ಜುತ್ತೇವೆ.	0	1	2	3	4
5	ನಾನು ಈ ವಿಷಯ ಹೇಳುತ್ತೇನೆಂದರೆ ಯಾವುದೇ ಆಹಾರದಲ್ಲಿ ಪೈಬರಿನ ಪ್ರಮಾಣ ಜಾಸ್ತಿ ಇದೆ.	0	1	2	3	4
6	ಗುರುತಿಸಿ ಅದಕ್ಕೆ ನಿಶ್ಚಿಯಿಸಿ ಯಾವುದು ಆಹಾರ ನಮ್ಮ ಸಲುವಾಗಿ ಒಳ್ಳೆಯದು ಇದೆ	0	1	2	3	4
7	ನನಗೆ ಎಷ್ಟು ಅವಶ್ಯಕತೆ ಇದೆ ಅಷ್ಟು ಪ್ರಮಾಣದಲ್ಲಿ ನಾನು ನೀರನ್ನು ಕುಡಿಯುತ್ತೇನೆ.	0	1	2	3	4
8	ನಾನು ಈ ವಿಷಯದ ಸಲುವಾಗಿ ಅ ವೇಳೆಯವರೆಗೆ ನಾನು ತೊಂದರೆಯನ್ನು ಮಾಡಿಕೊಳ್ಳುವುದಿಲ್ಲ.	0	1	2	3	4
9	ಒಬ್ಬನೇ/ಳಿ ಇದ್ದ ಸಲುವಾಗಿ ನಾನು ವಿಚಾರಣೆ ಮಾಡುವುದಿಲ್ಲ.	0	1	2	3	4
10	ನಾನು ಈ ವಿಷಯದ ಸಲುವಾಗಿ ನನಗೆ ಒಳ್ಳೆಯವರು ಅಂತಾ ಅನ್ನಲಾಗಿದೆ.	0	1	2	3	4
11	ನನಗೆ ಬೇಡವೆನಿಸುವವರೆಗೆ ಓದುತ್ತೇನೆ.	0	1	2	3	4
12	ಗೆಳೆಯ/ ಕುಟುಂಬದ ನನಗೆ ಸತಾಯಿಸುವವರೆಗೆ ಅವರ ಜೊತೆಗೆ ಹಂಚಿಕೊಳ್ಳುತ್ತೇನೆ.	0	1	2	3	4
13	ನನಗೆ ತೊಂದರೆಯಾದರೆ ಅದಕ್ಕೆ ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ ಉತ್ತರವನ್ನು ಕೊಡುತ್ತೇನೆ.	0	1	2	3	4
14	ಒತ್ತಡವನ್ನು ಬದಲಾಯಿಸುವುದರ ಸಲುವಾಗಿ ನನ್ನ ಜೀವನದ ಶಬ್ದ ಬದಲಾಯಿಸುತ್ತೇನೆ.	0	1	2	3	4
15	ಈ ರೀತಿ ತೆಗೆದುಕೊಳ್ಳುವ ಕ್ರಮಕ್ಕೆ ನನ್ನ ಸಲುವಾಗಿ ಒಳ್ಳೆಯದು ಇರುತ್ತದೆ.	0	1	2	3	4
16	ನನ್ನ ದಿನನಿತ್ಯದ ದಿನಚರಿಯ ಬಗ್ಗೆ ಶ್ರಮಪಟ್ಟಿರುವುದನ್ನು ಸಮಾವೇಶ ಮಾಡುತ್ತೇನೆ.	0	1	2	3	4
17	ಈ ಶ್ರಮದಿಂದ ನಾನು ನನ್ನ ಮನಸ್ಸಿಗೆ ನೆಮ್ಮದಿಯನ್ನು ತರುತ್ತೇನೆ.	0	1	2	3	4
18	ಸಮಾಜದಲ್ಲಿ ಈ ರೀತಿ ಜಾಗೆಯಲ್ಲಿ ಸಂಶೋಧನೆಯ ಸಲುವಾಗಿ ನಾನು ಶ್ರಮಪಡುತ್ತೇನೆ.	0	1	2	3	4

19	ಶ್ರಮಧಾನಕ್ಕೆ ಯಾವಾಗ ಬಂಧ ಮಾಡುವುದು ಈ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸುತ್ತೇನೆ.	0	1	2	3	4
20	ಸ್ವೀಚಿಂಗ ವ್ಯಾಯಾಮ ಮಾಡುವುದು	0	1	2	3	4
21	ಶ್ರಮ ಪಡುವ ಸಮದಲ್ಲಿ ಅವಘಡ ಆಗದಂತೆ ನೋಡಬೇಕು	0	1	2	3	4
22	ಈ ಸಂಶೋಧನೆಯಿಂದ ನನ್ನ ಆರೋಗ್ಯದ ಕಾಳಜಿಯನ್ನು ಹೇಗೆ ತೆಗೆದುಕೊಳ್ಳುವುದು ಇದರ ಸಲುವಾಗಿ ಮಾಹಿತಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದು.	0	1	2	3	4
23	ನನ್ನ ಶರೀರದ ನಕಾರಾತ್ಮಕ ಬದಲಾವಣೆ( ಮಾನಸಿಕ ತೊಂದರೆ ಮತ್ತು ಶ್ವಾಸದ ಸಮಸ್ಯೆ) ಲಕ್ಷ್ಯವನ್ನು ವಹಿಸಬೇಕು.	0	1	2	3	4
24	ಯಾವ ಲಕ್ಷಣದ ಸಲುವಾಗಿ ವೈದ್ಯರಿಗೆ ಮತ್ತು ನರ್ಸ್‌ಗಳಿಗೆ ಹೇಳುವುದು ಇದೆ.	0	1	2	3	4
25	ಔಷಧೋಪಚಾರ ವ್ಯವಸ್ಥಿತವಾಗಿ ತೆಗೆದುಕೊಳ್ಳುತ್ತೇನೆ.	0	1	2	3	4
26	ಇಂತಹ ವೈದ್ಯರ/ ನರ್ಸ್‌ರನ್ನು ಸಂಶೋಧಿಸಿ ಇವರು ನನಗೆ ಆರೋಗ್ಯದಿಂದ ಇರಲು ಸಲಹೆಯನ್ನು ನೀಡುತ್ತಾರೆ.	0	1	2	3	4
27	ನನ್ನ ಅಧಿಕಾರದ ಮೇಲೆ ಮಾಹಿತಿ ಇದೆ. ನನ್ನ ಸಲುವಾಗಿ ಪರಿಣಾಮಕಾರಿ ಎದ್ದ ನಿಲ್ಲಬಹುದು.	0	1	2	3	4
28	ಇತರರಿಂದ ನನಗೆ ಉಪಯೋಗವಾದಾಗ ಮಾತ್ರ ಅವರ ಉಪಯೋಗವನ್ನು ಪಡೆದುಕೊಳ್ಳುತ್ತೇನೆ.	0	1	2	3	4

ಗುಣ-0, ಇಲ್ಲ1=ಎ, ಜರಾಸೆ2: ಅದರಮದ್ಯ:3: ಸರ್ವಕಶ-4: ಸಂಪೂರ್ಣ

ಸಂಪೂರ್ಣ ಗುಣಾಚಿ ಪರಿಧಿ: 0-122

ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಆರೋಗ್ಯದ ಸಲುವಾಗಿ ಉಚ್ಚ ಕ್ಷಮತೆಯನ್ನು ತೋರಿಸುತ್ತಾರೆ.

ಉಪ ಪರಿಧಿ

ಸದ್ಯದ ಆಹಾರ: ಅ.ನಂ. 1-6

ಮಾನಸಿಕ ಆರೋಗ್ಯ: ಅ.ನಂ. 8-14

ಶ್ರಮಧಾನ : ಅ.ನಂ. 15-21

ಆವಾಬ್ದಾರ ಆರೋಗ್ಯ ಪ್ರಯತ್ನ ಅ.ನಂ.22-28

## विभाग - II

## आरोग्य प्रॅक्टीस मापासाठी स्वतःविषयक क्षमता

सुचना : कृपया पुढील विधान वाचा, आणि तुम्ही प्रत्येक आरोग्य प्रॅक्टीस किती चांगली करू शकता हे पुढील कॉलमवर ✓ टिक मार्क करून दाखवा.

मी यासाठी तयार आहे.

1	माझ्या आर्थिक क्षमतेनुसार आरोग्यदायी अन्न मिळवू शकतो	0	1	2	3	4
2	संतुलित आहाराचे सेवन करू	0	1	2	3	4
3	माझे वर्तन किती असले पाहिजे तर मी सट्ट असून	0	1	2	3	4
4	माझे दात नियमित पणे घासेन	0	1	2	3	4
5	मी हे सांगू शकेन की कोणत्या आहारामध्ये फायबरचे प्रमाण अधिक आहे.	0	1	2	3	4
6	लेबल वरून हे निश्चित करू शकेन की कोणते अन्न माझ्यासाठी चांगले आहे.	0	1	2	3	4
7	मला जितकी आवश्यकता आहे तेवढे पाणी मी रोज पिईन	0	1	2	3	4
8	मी अशा गोष्टी निर्धारित करीन ज्याद्वारे मी तणावरहीत राहीन	0	1	2	3	4
9	एकटा असल्याबद्दल मी विचार करणार नाही	0	1	2	3	4
10	मी अशा गोष्टी करीन ज्याद्वारे मला माझ्याबद्दल चांगली धारणा बनेल	0	1	2	3	4
11	कंटाळा येण्यापासून वाचवेन	0	1	2	3	4
12	मित्रांशी आणि कुटुंबांशी मला सतावणाऱ्या गोष्टीसंबंधी वार्तालाप करेन	0	1	2	3	4
13	मी दबावास कितपत तोंड देतो याची मोजणी करेन	0	1	2	3	4
14	दबाव झुगारण्यासाठी मी माझ्या जीवनातील गोष्टीत बदल करेन.	0	1	2	3	4
15	अशा कसरती करेन ज्या माझ्यासाठी चांगल्या असतील	0	1	2	3	4
16	माझ्या रोजच्या जिवनचर्येमध्ये कसरतीचा समावेश करेन	0	1	2	3	4
17	अशा कसरती करण्याचे मार्ग शोधीन ज्या मी एन्जॉय करतो	0	1	2	3	4
18	कम्युनिटीमध्ये अशा जागा शोधीन जिथे मी कसरती करू शकेन	0	1	2	3	4
19	कसरती केंव्हा बंद करायच्या ते माहिती करून घेईन.	0	1	2	3	4
20	स्ट्रीचिंग कवायती करेन	0	1	2	3	4
21	कसरती करताना दुखापत होवू देणार नाही	0	1	2	3	4
22	हे शोधीन की माझ्या आरोग्याची काळजी कशी घ्यावयाची याबद्दल कोठून माहिती मिळवायची	0	1	2	3	4
23	माझ्या शरीरातील नकारात्मक बदलाकडे (दबावाच्या जखमा, श्वसनाच्या समस्या) लक्ष देईन.	0	1	2	3	4
24	कोणत्या लक्षणासाठी डॉक्टरना अथवा नर्सना सांगायचे आहे हे ओळखेन	0	1	2	3	4

25	औषधोपचार अचुकपणे घेईन	0	1	2	3	4
26	अशा डॉक्टर अथवा नर्सना शोधेन जे मला आरोग्यदायी राहण्यासाठी योग्य सल्ले देतील.	0	1	2	3	4
27	माझे अधिकार माहिती आहेत आणि माझ्यासाठी परिणामकरित्या ठाम उभी राहीन	0	1	2	3	4
28	इतरांकडून मदत घेईन जेव्हा मला त्याची गरज असेल.	0	1	2	3	4

गुण: ०= नाही, १= जरासे २:त्यामध्ये :३: सर्वकश ४: संपूर्णता

संपूर्ण गुणांची परिघी : ०-१२२

उच्चतम गुण हे आरोग्य अभ्यासाठी उच्च क्षमता दर्शवितात.

उप-परीधी

सकस आहार : यादीतील १-७

मानसिक आरोग्य : यादीतील ८-१४

कसरत - यादीतील १५-२१

जबाबदार आरोग्य प्रॅक्टीस २२-२८

तेथे रिवर्सड स्कोर आईटम्स नाहीत

## SECTION - III

**ITEMS ASSESSING THE ATTITUDE OF FATHER IN PRENATAL CARE**

**Instructions:** Please indicate how much you agree or disagree with each of the following statement by placing tick mark  in the appropriate column. There is no right or wrong answer. All that is important is that you indicate your personal feeling.

**SA - Strongly agree, A - Agree, U - Undecided, D - Disagree, SD - Strongly Disagree**

SN	Items On Perception Of Father Regarding Prenatal Care	SA	A	U	D	SD
1.	I have a role to play in caring my spouse during pregnancy.					
2.	I should be conscious about my spouse's happiness and what she expects from me.					
3.	Pregnancy is a normal process for women and I don't have much to do with that.					
4.	It is not necessary to remind my spouse to go for antenatal check-ups.					
5.	A lot of my time is wasted just to accompany my spouse for antenatal visits.					
6.	Other women from the family should accompany my spouse for the antenatal visits.					
7.	I should be supportive in treatment decisions of my spouse during pregnancy process.					
8.	It is not required for me to participate in the prenatal education class					
9.	I should help my spouse in household work and share the responsibilities during pregnancy.					
10.	I should encourage my spouse to express her feelings to me, whenever she has stress.					
11.	I should take care of my spouse's likes and dislikes regarding food items during pregnancy.					
12.	Providing money for good diet like fruits, nuts, eggs, milk etc. is enough for me in pregnancy related care.					
13.	Purchasing things from the market should be done by my spouse only, as I'm busy.					
14.	It is not important for me to know whether my spouse is taking her medications regularly.					
15.	I should remain calm and try to be a good listener, during the times when my spouse complains or have mood swings.					

16.	I should give lot of emotional support to my spouse during discomfort and tiredness.					
17.	Getting prepared with advices and information from people about their experiences during pregnancy is not a good idea.					
18.	I should give physical support by massaging/rubbing the back and feet whenever my spouse has pain.					
19.	I should take my spouse for walks in the evenings.					
20.	I can just focus on my work, as other female family members are there to take care of my spouse.					
21.	I should make sure that my spouse feels wanted, loved and cared during pregnancy.					
22.	It is not necessary for me to reassure my spouse on her ability to be a good mother.					
23.	I should be included in diagnosis and treatment decisions during the antenatal visits.					
24.	Planning together for the preferred delivery place is not needed, as my spouse can decide that alone.					
25.	I should save up money for any emergency cesarean section.					
26.	It is not necessary to discuss about baby care and make the home neat and tidy to receive the baby after discharge.					
27.	Getting prepared for the delivery by keeping the hospital bag ready should be done by spouse only.					
28.	I will not be able to take care of the newborn, so my spouse should do that.					
29.	I should take care of my spouse because the child belongs to both of us.					
30.	The journey to parenthood is not a single person's job, but it is a joint effort.					

**Key:****Strongly Disagree=1, Disagree=2, Undecided=3, Agree=4, Strongly Agree=5****Reverse Score:****Strongly Disagree=5, Disagree=4, Undecided=3, Agree=2, Strongly Agree=1**

The scores are measured on the above 5 point likert scale. High score indicates having a positive attitude of father in prenatal care.

Total number of items: 30

Maximum score: 150

Minimum score: 30

## ಭಾಗ - 3

ಹೆರಿಗೆಯ ಪೂರ್ವದ ಆರೈಕೆಯಲ್ಲಿ ತಂದೆ ಪಾತ್ರವನ್ನು ನಿರ್ಣಯಿಸುವ ಅಂಶಗಳು -

ಸೂಚನೆಗಳು : ದಯವಿಟ್ಟು ಟಿಕ್ ಚೆನ್ನೆಗಳನ್ನು ಹಾಕುವ ಮೂಲಕ ಈ ಕೆಳಗಿನ ಪ್ರತಿಯೊಂದು ಹೇಳಿಕೆಗಳನ್ನು ನೀವು ಎಷ್ಟು ಒಪ್ಪುತ್ತೀರಿ ಅಥವಾ ಒಪ್ಪುವುದಿಲ್ಲ ಎಂಬುದನ್ನು ಸೂಚಿಸಿರಿ.

ಸೂಕ್ತವಾದ ಜಾಗೆಯಲ್ಲಿ ಯಾವುದೇ ಸರಿ ಅಥವಾ ತಪ್ಪು ಉತ್ತರವಿಲ್ಲ ಮುಖ್ಯವಾದುದು ನಿಮ್ಮ ವೈಯಕ್ತಿಕ ಭಾವನೆ

ಬಹು: ಬಲವಾಗಿ ಒಪ್ಪುತ್ತೇನೆ, ಒ- ಒಪ್ಪುತ್ತೇನೆ, ನಿ- ನಿರ್ಧರಿಸಿಲ್ಲ, ಒಲ್ಲ- ಒಪ್ಪುವುದಿಲ್ಲ, ಬಹು- ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ

ಅ.ನಂ.	ಹೆರಿಗೆ ಪೂರ್ವ ಆರೈಕೆಯಲ್ಲಿ ತಂದೆಯ ಪಾತ್ರವನ್ನು ನಿರ್ಧರಿಸುವ ಅಂಶಗಳು	ಬಹು	ಒ	ನಿ	ಒ.ಲ್ಲ	ಬ.ಹು
1.	ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ನನ್ನ ಹೆಂಡತಿಯನ್ನು ನೋಡಿಕೊಳ್ಳುವಲ್ಲಿ ನಾನು ನನ್ನ ಪಾತ್ರವನ್ನು ಹೊಂದಿದ್ದೇನೆ.					
2.	ನನ್ನ ಪತ್ನಿಯ ಸಂತೋಷದ ಬಗ್ಗೆ ಮತ್ತು ಅವಳು ನನ್ನಿಂದ ಏನನ್ನು ನಿರೀಕ್ಷಿಸುತ್ತಾಳೆ ಎಂಬುದರ ಬಗ್ಗೆ ನಾನು ಜಾಗೃತನಾಗಿರಬೇಕು.					
3.	ಗರ್ಭಾವಸ್ಥೆಯು ಮಹಿಳೆಯರಿಗೆ ಸಾಮಾನ್ಯ ಪ್ರಕ್ರಿಯೆಯಾಗಿದ್ದು ಅದರೊಂದಿಗೆ ನನಗೆ ಹೆಚ್ಚಿನ ಸಂಬಂಧವಿರುವುದಿಲ್ಲ					
4.	ಹೆರಿಗೆಯ ಮೊದಲು ತಪಾಸಣೆಗೆ ಹೋಗಲು ನನ್ನ ಪತ್ನಿಗೆ ನೆನಪಿಸುವ ಅಗತ್ಯವಿರುವುದಿಲ್ಲ.					
5.	ಹೆರಿಗೆಯ ಮೊದಲು ತಪಾಸಣೆಗಾಗಿ ನನ್ನ ಹೆಂಡತಿಯ ಜೊತೆ ಹೋಗಿ ಬರುವುದರಿಂದ ನನ್ನ ಸಾಕಷ್ಟು ಸಮಯ ವ್ಯರ್ಥವಾಗುತ್ತದೆ.					
6.	ಹೆರಿಗೆಯ ಪೂರ್ವ ತಪಾಸಣೆ ಭೆಟ್ಟಿಗಳಿಗಾಗಿ ಕುಟುಂಬದ ಇತರೆ ಮಹಿಳೆಯರು ನನ್ನ ಪತ್ನಿಯೊಂದಿಗೆ ಹೋಗಬೇಕು.					
7.	ಗರ್ಭಾವಸ್ಥೆಯ ಪ್ರಕ್ರಿಯೆಯಲ್ಲಿ ನನ್ನ ಹೆಂಡತಿಯ ಚಿಕಿತ್ಸೆಗಳ ನಿರ್ಧಾರಗಳಲ್ಲಿ ನಾನು ಬೆಂಬಲವಾಗಿ ನಿಲ್ಲಬೇಕು.					
8.	ನನಗೆ ಹೆರಿಗೆ ಪೂರ್ವ ಮಾಹಿತಿಗಳ ತರಗತಿಗಳಲ್ಲಿ ಭಾಗವಹಿಸುವ ಅಗತ್ಯವಿರುವುದಿಲ್ಲ.					
9.	ನಾನು ಮನೆಯ ಕೆಲಸದಲ್ಲಿ ನನ್ನ ಹೆಂಡತಿಗೆ ಸಹಾಯ ಮಾಡುವುದು ಮತ್ತು ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ಒದ್ದಾಡುವುದನ್ನು ಹಂಚಿಕೊಳ್ಳಬೇಕು.					
10.	ನನ್ನ ಹೆಂಡತಿಗೆ ಒತ್ತಡದಲ್ಲಿರುವಾಗ ಅವಳಿಗೆ ನನ್ನ ಮುಂದೆ ತನ್ನ ಭಾವನೆಗಳನ್ನು ವ್ಯಕ್ತಪಡಿಸಲು ನಾನು ಪ್ರೋತ್ಸಾಹಿಸಬೇಕು.					
11.	ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿರುವಾಗ ನನ್ನ ಹೆಂಡತಿಗೆ ಆಹಾರ ಪದಾರ್ಥಗಳ ಸೇರುವಿಕೆ ಹಾಗೂ ಸೇರದಿರುವಿಕೆ ಬಗ್ಗೆ ನಾನು ಕಾಳಜಿವಹಿಸಬೇಕು.					
12.	ಗರ್ಭಧಾರಣೆಯ ಸಮಯದಲ್ಲಿ ಹಣ್ಣುಗಳು, ಒಣಹಣ್ಣುಗಳು, ಮೊಟ್ಟೆಗಳು, ಹಾಲು ಮುಂತಾದ ಉತ್ತಮ ಆಹಾರಕ್ಕಾಗಿ ಹಣವನ್ನು ನೀಡುವುದು ನನ್ನ ಕರ್ತವ್ಯ.					
13.	ನಾನು ಕೆಲಸದಲ್ಲಿರುವಾಗ ಮಾರುಕಟ್ಟೆಯಿಂದ ವಸ್ತುಗಳನ್ನು ಖರೀದಿಸುವುದನ್ನು ನನ್ನ ಹೆಂಡತಿಯೇ ಮಾಡಬೇಕಾಗುವುದು.					
14.	ನನ್ನ ಹೆಂಡತಿಯು ನಿಯಮಿತವಾಗಿ ಔಷಧಿಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತಿದ್ದಲ್ಲಿಯೇ ಎಂಬುದನ್ನು ತಿಳಿದುಕೊಳ್ಳುವುದು ನನಗೆ ಮಹತ್ವವಲ್ಲ.					
15.	ನಾನು ಶಾಂತರೀತಿಯಿಂದ ನನ್ನ ಹೆಂಡತಿಯ ದೂರುಗಳನ್ನು ಕೇಳುವ ಹಾಗೂ ಅವಳ ಮನಸ್ಸಿನಲ್ಲಿ ಬದಲಾವಣೆಗಳಾಗುವ ಸಮಯದಲ್ಲಿ ಅವುಗಳನ್ನು ಕೇಳುವುದಕ್ಕೆ ಪ್ರಯತ್ನಿಸಬೇಕು.					

16	ನನ್ನ ಹೆಂಡತಿಗೆ ಆಯಾಸವಾದಾಗ ಹಾಗೂ ದಣವಾದಾಗ ನಾನು ಅವಳಿಗೆ ಭಾವನಾತ್ಮಕವಾಗಿ ಬೆಂಬಲವನ್ನು ನೀಡಬೇಕು.					
17	ಗರ್ಭಾವಸ್ಥೆಯ ಸಂದರ್ಭದಲ್ಲಿ ಬೇರೆಯವರ ಅನುಭವಗಳ ಬಗ್ಗೆ ಜನರಿಂದ ಸಲಹೆ ಸೂಚನೆಗಳನ್ನು ಪಡೆಯುವುದು, ಮಾಹಿತಿ ಕಲೆಹಾಕುವುದು ಒಳ್ಳೆಯದಲ್ಲ.					
18	ನಾನು ನನ್ನ ಹೆಂಡತಿಗೆ ನೋವುಂಟಾದಾಗ ಅವಳಿಗೆ ಮಸಾಜ್ ಮಾಡುವುದು ಇಲ್ಲವೇ ಬೆನ್ನು ಮತ್ತು ಪಾದಗಳನ್ನು ತಿಕ್ಕುವುದು ಹೀಗೆ ಮಾಡುವ ಮೂಲಕ ಅವಳಿಗೆ ದೈಹಿಕ ಬೆಂಬಲವನ್ನು ನೀಡುತ್ತೇನೆ.					
19	ನಾನು ನನ್ನ ಹೆಂಡತಿಯನ್ನು ಸಾಯಂಕಾಲದ ಸಮಯದಲ್ಲಿ ವಾಯುವಿಹಾರಕ್ಕೆ ಕರೆದುಕೊಂಡು ಹೋಗುತ್ತೇನೆ.					
20	ನನ್ನ ಹೆಂಡತಿಯ ಆರೋಗ್ಯವನ್ನು ನೋಡಿಕೊಳ್ಳಲು ಮನೆಯ ಇತರ ಮಹಿಳಾ ಸದಸ್ಯರು ಇರುವುದರಿಂದ ನಾನು ನನ್ನ ಕೆಲಸದ ಕಡೆಗೆ ಗಮನಸರಿಸಬಹುದು.					
21	ನಾನು ಖಾತ್ರಿ ಮಾಡಿಕೊಳ್ಳುವುದೇನೆಂದರೆ, ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ನನ್ನ ಹೆಂಡತಿಯು ಪ್ರೀತಿ, ಅವಳ ಕಾಳಜಿ ವಹಿಸುವಿಕೆಯನ್ನು ಬಯಸುತ್ತಿದ್ದಾಳೆಯೇ ?					
22	ನನ್ನ ಹೆಂಡತಿಗೆ ಉತ್ತಮ ತಾಯಿಯಾಗುವ ಸಾಮರ್ಥ್ಯದ ಬಗ್ಗೆ ಭರವಸೆ ನೀಡುವುದು ನನಗೆ ಅನಿವಾರ್ಯವಲ್ಲ.					
23	ಹೆರಿಗೆಯ ಪೂರ್ವದ ಭೆಟ್ಟಿಗಳ ಸಮಯದಲ್ಲಿ ರೋಗ ನಿರ್ಣಯ ಮತ್ತು ಚಿಕಿತ್ಸೆಯ ನಿರ್ಧಾರಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುವ ಸಮಯದಲ್ಲಿ ನನ್ನ ಅಭಿಪ್ರಾಯ ಪಡೆಯಬೇಕು.					
24	ಹೆರಿಗೆಯ ಸ್ಥಳವನ್ನು ಒಟ್ಟಾಗಿ ನಿರ್ಧರಿಸುವ ಅವಶ್ಯಕತೆ ಇರುವುದಿಲ್ಲ. ಅದನ್ನು ನನ್ನ ಹೆಂಡತಿಯು ಸಹ ನಿರ್ಧರಿಸಬಹುದು.					
25	ಯಾವುದೇ ತುರ್ತು ಸಿ-ಸೆಕ್ಷನ್ ಹೆರಿಗೆಗೆ ಹಣವನ್ನು ಸಂಗ್ರಹಿಸಬೇಕು.					
26	ಮಗುವಿನ ಆರೈಕೆಯ ಬಗ್ಗೆ ಚರ್ಚಿಸುವುದು ಮತ್ತು ಡಿಸ್ಚಾರ್ಜ್ ಮಾಡಿದ ನಂತರ ಮಗುವನ್ನು ಮನೆಗೆ ತರಲು ಮನೆಯನ್ನು ಸ್ವಚ್ಛವಾಗಿಟ್ಟುಕೊಳ್ಳುವುದು ಅನಿವಾರ್ಯ.					
27	ಆಸ್ಪತ್ರೆಯ ಬ್ಯಾಗ್‌ಗಳನ್ನು ಸಿದ್ಧವಾಗಿಟ್ಟುಕೊಂಡು ಹೆರಿಗೆಯ ತಯಾರಿ ಮಾಡುವುದು ಹೆಂಡತಿಯು ಮಾಡಬೇಕಾಗುವುದು.					
28	ನವಜಾತ ಶಿಶುವನ್ನು ನೋಡಿಕೊಳ್ಳಲು ನನಗೆ ಸಾಧ್ಯವಾಗುವುದಿಲ್ಲ. ಆದ್ದರಿಂದ ನನ್ನ ಹೆಂಡತಿಯೇ ಅದನ್ನು ಮಾಡಬೇಕಾಗುವುದು.					
29	ಮಗು ಇಬ್ಬರಿಗೂ ಸೇರಿರುವುದರಿಂದ ನಾನು ನನ್ನ ಹೆಂಡತಿಯನ್ನು ನೋಡಿಕೊಳ್ಳಬೇಕು.					
30	ಪಾಲನೆಯ ಕೆಲಸವು ಒಬ್ಬ ವ್ಯಕ್ತಿಯ ಕೆಲಸವಲ್ಲ. ಆದರೆ ಅದು ಜಂಟಿಯಾಗಿ ನಿರ್ವಹಿಸಬೇಕಾಗುವುದು.					

ಕೀ :

ಬಒಲ್ಲ- ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ = 1, ಒಲ್ಲ-ಒಪ್ಪುವುದಿಲ್ಲ = 2, ನಿ- ನಿರ್ಧರಿಸಿಲ್ಲ = 3, ಒ- ಒಪ್ಪುತ್ತೇನೆ = 4,

ಬಒಒ: ಬಲವಾಗಿ ಒಪ್ಪುತ್ತೇನೆ = 5.

ರಿವರ್ಸ್ ಸ್ಕೋರ್ :

ಬಒಲ್ಲ- ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ = 5, ಒಲ್ಲ-ಒಪ್ಪುವುದಿಲ್ಲ = 4, ನಿ- ನಿರ್ಧರಿಸಿಲ್ಲ = 3, ಒ- ಒಪ್ಪುತ್ತೇನೆ = 2,

ಬಒಒ: ಬಲವಾಗಿ ಒಪ್ಪುತ್ತೇನೆ = 1.

ಅಂಕಗಳನ್ನು ಮೇಲಿನ 5 ಅಂಶ ಲೈಕ್ ಸ್ಕೇಲ್‌ನಲ್ಲಿ ಅಳೆಯಲಾಗುತ್ತದೆ. ಹೆಚ್ಚಿನ ಅಂಕಗಳನ್ನು ಹೆರಿಗೆ ಪೂರ್ವ ಆರೈಕೆಯಲ್ಲಿ ತಂದೆಯ ಸಕಾರಾತ್ಮಕ ಮನೋಭಾವನೆಗಳನ್ನು ಸೂಚಿಸುತ್ತದೆ.

ಒಟ್ಟು ವಸ್ತುಗಳ ಸಂಖ್ಯೆ : 30

ಗರಿಷ್ಠ ಅಂಕಗಳು : 150

ಕನಿಷ್ಠ ಅಂಕಗಳು : 30

## भाग - ३

**बाळंतपणा पुर्वी काळजी मध्ये बापाचे भूमिका ठरविले जाणारे घटक**

सूचना : कृपया टिक चिन्ह घातल्या वरून या खालील प्रत्येक जवाब तुम्ही किती मान्य करता किंवा नाही या बाबत कळविणे.

योग्य जागेत कोणतेही खरे किंवा चुकीचे, उत्तर नाही, प्रमुख हे तुमचे वैयक्तिक भावना.

पू.स.-पूर्णपणे सहमत, स.-सहमती आहे, ठ- ठरविले नाही, स.ना.- सहमत नाही, पू.स.ना.- पूर्णपणे सहमत नाही.

अ.नं.	बाळंतपणा पुर्वी काळजी मध्ये बापाचे भूमिका ठरविले जाणारे घटक	पू.स.	स.	ठ.	स.नं.	पू.स.ना.
१.	गर्भावस्थेत माझ्या पत्नीची काळजी घेण्यात माझी भूमिका आहे.					
२.	माझ्या पत्नीचे आनंदात तीने माझ्या कडून काय अपेक्षा करते त्या बाबत मी जागृत राहणे आवश्यक.					
३.	गर्भावस्था हे महीलानां सामान्य प्रक्रिया असून त्या सोबत मला जास्त संबंद नाही.					
४.	बाळंतपणाच्या पुर्वी तपासणीला जाण्यासाठी माझ्या पत्नीला लक्षात आणण्याची गरज नाही.					
५.	बाळंतपणाच्या पुर्वी तपासणीसाठी माझ्या पत्नीच्या सोबत जाणे म्हणजे माझ्या वेळेचा अपव्यय आहे.					
६.	बाळंतपणाच्या पुर्वी तपासणी भेट साठी कुटुंबातील इतर महीलेनीं माझ्या पत्नी सोबत जाणे.					
७.	गर्भावस्थेच्या प्रक्रियेत माझ्या बायकोच्या उपचारांचा निर्णय घेताना मला समर्थनार्थ उभे राहावे लागेल.					
८.	मला बाळंतपणाच्या पुर्वी माहिती वर्गात सहभागी होण्याची गरज नाही					
९.	मी माझ्या पत्नीला घरातील कामात मदत करतो आणि गरोदरपणात जबाबदाऱ्या वाटून घेतो.					
१०.	जेव्हा माझी पत्नी तणावाखाली असते तेव्हा मी तिला तिच्या भावना माझ्यासमोर मांडण्यासाठी प्रोत्साहित केले पाहिजे.					
११.	माझ्या पत्नीने गरोदरपणात अन्नपदार्थ आवडणे किंवा नाआवडणे या विकारांबद्दल काळजी घ्यावी					
१२.	गरोदरपणाच्या संदर्भात फल, ड्रायफ्रुट, अंडी, दूध वगैरे उत्तम पदार्थां साठी पैसे देणे माझे कर्तव्य राहिल.					
१३.	मी कार्यरत असताना मार्केट मधून वस्तुंचे खरेदी वगैरे करणे माझी पत्नीच करावे लागेल.					
१४.	माझी पत्नी नियमितपणाने औषधे घेत आहे काय ? हे पाहणे मला आवश्यक नाही.					
१५.	मी, शांतपराने माझी पत्नीचे तक्रारी ऐकणे व तीच्या मनातील बदलावाच्या संदर्भात ते ऐकून घेणेस प्रयत्न करणे.					

१६	माझ्या पत्नी जेव्हा थकून जाते, थकते तेव्हा मला तिला भावनिक आधार द्यावा लागतो.					
१७	गर्भावस्थेच्या संदर्भात दुसऱ्यांचे अनुभवा बाबत लोकां कडून सल्ला सूचना घेणे, माहिती जमा करणे चांगली गोष्ट नाही.					
१८	जेव्हा माझ्या पत्नीला त्रास होईल तेव्हा मी तीला मालीश करणे किंवा तिच्या पाठीवर व पाऊल चौळणे असे करून तीला शारीरिक पाठीबा देऊ शकतो.					
१९	मी माझ्या पत्नीला सायंकाळच्या वेळाला वायुविहारास घेऊन जाईन					
२०	माझ्या पत्नीचा तब्यत पाहणेसाठी घरातील इतर महीला सदस्य असल्या मुळे मी माझ्या कामावर लक्ष्य देऊ शकतो.					
२१	मी असे खात्री करून घेतो की, गर्भावस्थेत माझी पत्नीला प्रेमाची व तीचे काळजी घेणेची ईच्छा करते.					
२२	माझ्या पत्नीला चांगली आई होण्याची क्षमता बाबत भरवसा देणे मला आवश्यक नाही.					
२३	बाळंतपणा पुर्वी भेटी वेळी रोग निर्णय व उपचाराचा निर्णय घेते वेळी माझे मत घेणे.					
२४	बाळंतपणाची जागा एकत्रपणे ठरविणे आवश्यक नाही. ते माझी पत्नी सुद्धा ठरवू शकते.					
२५	काणतेही तातडीचे सि-सेक्शन गरोदरपणाला रकम गुंतवून ठेवणे.					
२६	बाळाची काळजी बाबत चर्चा करणे व डिस्चार्ज केल्या नंतर बाळाला घरी आणण्या पुर्वी घरात स्वच्छता राखणे आवश्यक आहे.					
२७	हॉस्पिटल बॅग तयार करून ठेवणे, बाळंतपणाची तयारी करणे हे पल्लव करावी.					
२८	नवजात बाळाकडे लक्ष्य देणे मला शक्य होणार नाही. त्या मुळे माझी पत्नीनेच करावी लागेल.					
२९	बाळ दोघानांही सामील असल्या मुळे मी, माझी पत्नी दोघेही काळजी घेतली पाहिजे					
३०	पालन करणेचा कार्य एक व्यक्तीचे काम नाही. ते संयुक्तपणे करावी लागणार					

**की :**

पू.स.ना.- पूर्णपणे सहमत नाही - १, स.ना.- सहमत नाही-२, ठ-ठरविले नाही-३, स.- सहमत आहे-४,

पू.स.-पूर्णपणे सहमत आहे - ५.

**रिवर्स स्कोर :**

पू.स.ना.- पूर्णपणे सहमत नाही - ५, स.ना.- सहमत नाही-४, ठ-ठरविले नाही-३, स.-सहमत आहे-२,

पू.स.-पूर्णपणे सहमत आहे - १.

अंक वरील ५ अंश लाईक स्केलमध्ये मापण्यात येईल. अतीरीक्त अंक गरोदरपणा पुर्वी काळजी वडीलाचे सकारात्मक मनोभाव दर्शविते.


एकूण वस्तुंची संख्या : ३०

कमाल अंक : १५०


कमीत कमी : ३०

ANNEXURE V


CERTIFICATES




**KLE**  
ENGINEERING PROFESSIONALS



**SOCIETY OF MIDWIVES**  
KARNATAKA



Accredited 'A+' Grade by NAAC (3<sup>rd</sup> Cycle)  
Placed in 'Category A' by MoE, (Gol)



TRAINED NURSES ASSOCIATION OF INDIA  
KARNATAKA STATE BRANCH

**KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH**  
(Deemed-to-be-University)

**INSTITUTE OF NURSING SCIENCES**  
NEHRU NAGAR, BELAGAVI

*National Conference*

*Certificate of Award*

Is here by awarded to

Dr./Prof./Mr./Mrs. Arunila Jamis has Presented Paper/ Poster in

National Conference on “Fostering Innovation in Midwifery: Moving forward in maternal & Newborn Care” in association with SOMI and TNAI (KSB). Has Secured First Prize, Organized by KAHER Institute of Nursing Sciences Belagavi, Karnataka, India, on 22<sup>nd</sup> and 23<sup>rd</sup> March 2024

Title of the Paper/Poster: First - time Mothers' Health Seeking Practices During Pregnancy

<u>Girish</u>	<u>Abharde</u>	<u>Aravind</u>	<u>Aravind</u>
TNAI President	SOMI Secretary	Organizing Secretary	Organizing Chairperson



## Bharati Vidyapeeth (Deemed to be University), Pune

Ministry of Human Resource Development, Govt. of India

'A' Grade University Status

Re-accredited by NAAC with 'A' Grade



## COLLEGE OF NURSING, SANGLI.

### • Certificate of Participation •

This is to certify that,  
Dr./Mr./Ms./Mrs. ARENLLA JAMIR from KLE CON, BELAGAVI has participated as Delegate / Paper Presenter / Poster Presenter / Evaluator / Resource Person in International Conference on "Emerging Competencies in Midwifery & Neonatal Practices : The Nursing Perspective" organized by Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli, held on 11<sup>th</sup> & 12<sup>th</sup> January 2023.

*Title : Effect of Prenatal Education Program on First time Fathers' Attitude in Prenatal Care.*

Dr. (Mrs.) Vijaya Kumbhar  
 Organising Secretary,  
 BVDU, CON, Sangli.

Dr. (Mrs). Nilima R. Bhore  
 Dean Faculty of Nursing & Principal  
 Organising Chairperson BVDU, CON, Sangli

Dr. H. M. Kadam  
 Honorary Regional Director  
 Bharati Vidyapeeth Regional Office, Sangli.

**Jawaharlal Nehru Medical College**  
(A Constituent Unit of KLE Academy of Higher Education & Research)

(Deemed-to-be University)  
Accredited **A+ Grade** by NAAC (3<sup>rd</sup> Cycle) & Placed in **Category 'A'** by MHRD (Gol)



This is to certify that

**ARENLILA JAMIR**

has participated & presented a **Paper / Poster entitled**  
*Effectiveness of Prenatal Education Program in First-time Mothers*  
*Attending Selected Tertiary Care Hospital.*

in the **41<sup>st</sup> JNMC Scientific Society Annual CME - 2023**,  
organized by KAHER's J. N. Medical College, Belagavi, held on 8<sup>th</sup> & 9<sup>th</sup> April 2023

*M. B. Bellad*  
**Dr. (Mrs.) N. S. Mahantashetti**  
President

41<sup>st</sup> JNMC Scientific Society Annual CME 2023

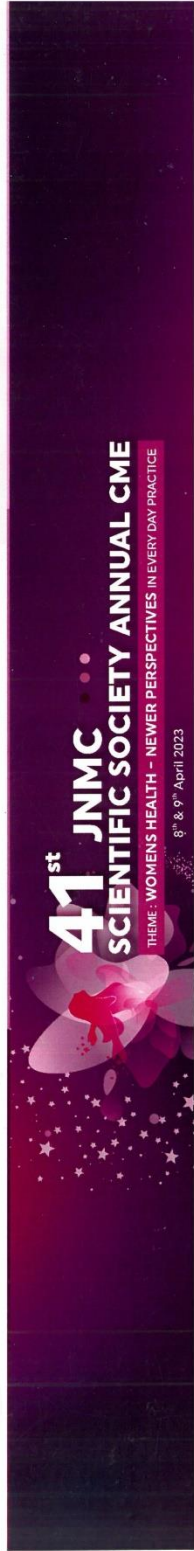
*M. B. Bellad*  
**Dr. M. B. Bellad**  
Organising Chairperson  
Scientific Committee

*Anita Dalal*  
**Dr. Anita Dalal**  
Organising Chairperson

41<sup>st</sup> JNMC Scientific Society Annual CME 2023

*Shantala Herekar*  
**Dr. Shantala Herekar**  
Scientific Society Secretary

*Swapnil Pattanshetti*  
**Dr. Swapnil Pattanshetti**  
Scientific Society Secretary



ANNEXURE VI

PRENATAL EDUCATION PROGRAM FOR FIRST-TIME PARENTS  
MODULE



Released on 22<sup>nd</sup> March, 2024 at National Conference Organized by Department of OBG Nursing, KAHER INS

ನವಜಾತ ಶಿಶುವಿನ ಆರೈಕೆ ಕೈಪಿಡಿ ಬಿಡುಗಡೆ | ಹಲವು ರಾಜ್ಯಗಳ 586 ಪ್ರತಿನಿಧಿಗಳು ಭಾಗಿ  
ಕೆಎಲ್‌ಐ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನಿಂದ ರಾಷ್ಟ್ರೀಯ ಸಮ್ಮೇಳನ

■ ವಿಳಂಬಿತರಾದ ಬೆಳಗಾವಿ ಇಲ್ಲಿನ ಕೆಎಲ್‌ಐ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನಲ್ಲಿ ಶುಕ್ರವಾರ ಮತ್ತು ಶನಿವಾರ ಸೇರಿದಂತೆ 2 ದಿನಗಳ ಕಾಲ 'ಪ್ರಸವ ಶಾಸ್ತ್ರದಲ್ಲಿ ಹೊಸ ಅವಿಷ್ಕಾರ ಮತ್ತು ಶಾಯಿ ಹಾಗೂ ನವಜಾತ ಶಿಶುವಿನ ಆರೈಕೆಯಲ್ಲಿ ಪ್ರಗತಿ' ಎಂಬ ವಿಷಯದ ಕುರಿತು ರಾಷ್ಟ್ರೀಯ ಸಮ್ಮೇಳನ ಹಮ್ಮಿಕೊಳ್ಳಲಾಗುತ್ತದೆ.

ಸೋಸೈಟಿ ಆಫ್ ಮಿಡ್‌ವೈವ್ಸ್ ಹಾಗೂ ಟ್ರೇನಿಂಗ್ ನರ್ಸಿಂಗ್ ಅಸೋಸಿಯೇಷನ್ ಆಫ್ ಇಂಡಿಯಾದ ಸಹಯೋಗದಲ್ಲಿ ಹಮ್ಮಿಕೊಂಡಿದ್ದ ಸಮ್ಮೇಳನದಲ್ಲಿ ಉಪನ್ಯಾಸ, ಚರ್ಚೆ, ವೇದಿಕೆ ಹಾಗೂ ಫೋನ್ಡ್ ಪ್ರದರ್ಶನ, ಸಾಂಸ್ಕೃತಿಕ ಕಾರ್ಯಕ್ರಮಗಳು ನಡೆದವು. ಕರ್ನಾಟಕ, ಮಹಾರಾಷ್ಟ್ರ, ಗೋವಾ, ಬಿಹಾರ್, ಗುಜರಾತ್, ತೆಲಂಗಾಣ, ಅಂಧ್ರಪ್ರದೇಶ, ಹರಿಯಾಣ, ಉತ್ತರ ಪ್ರದೇಶ, ಪಶ್ಚಿಮ ಬಂಗಾಳ, ಮದುವೆ ಮತ್ತು ತಮಿಳುನಾಡು ರಾಜ್ಯಗಳಿಂದ ಒಟ್ಟು 586 ಪ್ರತಿನಿಧಿಗಳು, ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿಗಳು,



ಕೆಎಲ್‌ಐ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನಿಂದ ಬೆಳಗಾವಿಯಲ್ಲಿ ಹಮ್ಮಿಕೊಂಡಿದ್ದ ರಾಷ್ಟ್ರೀಯ ಸಮ್ಮೇಳನದಲ್ಲಿ ಪ್ರಸವಪೂರ್ವ ಶಿಕ್ಷಣ ಮತ್ತು ನವಜಾತ ಶಿಶುವಿನ ಆರೈಕೆಯ ಕೈಪಿಡಿಯನ್ನು ಗಣ್ಯರು ಬಿಡುಗಡೆಗೊಳಿಸಿದರು.

ಪ್ರಸವಶಾಸ್ತ್ರ ಶಿಕ್ಷಣ ತಜ್ಞರು, ಶುಶ್ರೂಷಾ ಅಧಿಕಾರಿಗಳು, ಅಧ್ಯಾಪಕರು, ಆಸ್ಪತ್ರೆಯಾದ ಸರ್ವಿಸ್ ಕ್ರಾಸ್ ವಿವಿ ಮತ್ತು ಅಧ್ಯಾಪಕರು ಮತ್ತು ವಿದ್ಯಾರ್ಥಿಗಳು ಪಾಲ್ಗೊಂಡಿದ್ದರು. ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿ ಪಾಲ್ಗೊಂಡಿದ್ದ ಕಾರ್ಪೊರೇಷನ್ ಉಪ ಕುಲಪತಿ ಡಾ. ನಿತಿನಿ ಗಂಗನಿ ಮಾತನಾಡಿದರು. ಸೋಸೈಟಿ ಆಫ್ ಅಲ್ಟ್ರಾಸೌಂಡ್ ಅಧ್ಯಕ್ಷೆ ಡಾ. ಉಷಾ ಉಕಾಂಡೆ ಅವರು ಪ್ರಸವ ಶಾಸ್ತ್ರದ ಸವಾಲುಗಳ ಕುರಿತು

ತಮ್ಮ ಟಿಪ್ಪಣಿಯನ್ನು ಪ್ರಸ್ತುತಪಡಿಸಿದರು. ಹೈದರಾಬಾದಿನ ರಾಷ್ಟ್ರೀಯ ಪ್ರಸವ ಶಾಸ್ತ್ರ ತರಬೇತಿ ಸಂಸ್ಥೆಯ ಪ್ರಸವ ಶಾಸ್ತ್ರ ಶಿಕ್ಷಣ ತಜ್ಞ ಶೀತಲ್ ಸ್ವಾಮಿನ್ ಅವರು ಪ್ರಸವ ಶಾಸ್ತ್ರ ಶಿಕ್ಷಣದ ಮಹತ್ವ ಮತ್ತು ಸಾಮಾನ್ಯ ಹೆರಿಗೆಯಲ್ಲಿ ಅದರ ಪಾತ್ರದ ಕುರಿತು ಉಪನ್ಯಾಸ ನೀಡಿದರು. ಕೆಎಲ್‌ಐ ಸೋಸೈಟಿಯ ಸ್ವಲ್ಪ ಮುಖಾಂತರ ಸಬಲೀಕರಣ ಕೋಶದ ಮುಖ್ಯ ಸಂಯೋಜಕಿ ಡಾ. ಪ್ರೀತಿ ದೊಡ್ಡವಾಡ

ಅವರು ಮಹಿಳೆಯರ ಆರೋಗ್ಯ ಹೆಚ್ಚಿಸುವಲ್ಲಿ ಸರಕಾರದ ಸಂಸ್ಥೆಗಳ ಪಾತ್ರದ ಬಗ್ಗೆ ವಿವರಿಸಿದರು.

ಕೈಪಿಡಿ ಬಿಡುಗಡೆ: ಸಮ್ಮೇಳನದ ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿಗಳಾದ ಡಾ. ರಮ್ಯಾ ಚಿದಂಬರನ್, ಪ್ರೊ. ಡಾ. ಜ್ಯೋತಿ ನಾಯ್ಕ, ಸಾರಾ ಕಾಕ್ಸ್, ರೀನಾ ವಿಲ್ಸನ್ ಫ್ರಾಂಕ್ ಉಪನ್ಯಾಸ ನೀಡಿದರು. ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪ್ರಸವಪೂರ್ವ ಶಿಕ್ಷಣ ಮತ್ತು ನವಜಾತ ಶಿಶುವಿನ ಆರೈಕೆಯ ಕೈಪಿಡಿಯನ್ನು ಗಣ್ಯರು ಬಿಡುಗಡೆಗೊಳಿಸಿದರು.

ಬೆಳಗಾವಿ ಕೆಎಲ್‌ಐ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನ ಡೀನ್ ಡಾ. ಪ್ರೀತಿ ಭೂವಾಲಿ, ಜಂಟಿ ಸಂಘಟನಾ ಕಾರ್ಯದರ್ಶಿ ಡಾ. ಅಶಾ ಭಟ್ ಹಾಗೂ ವಿವಿಧ ಸಂಸ್ಥೆಗಳ ಗಣ್ಯರು ಉಪಸ್ಥಿತರಿದ್ದರು. ಕೆಎಲ್‌ಐ ನರ್ಸಿಂಗ್ ಕಾಲೇಜಿನ ಪ್ರಾಂಶುಪಾಲ ಪ್ರೊ. ಡಾ. ವಿಲೇಶ್‌ಕುಮಾರ್ ನಂದಗಾವ ಸ್ವಾಗತಿಸಿದರು. ಉಪ ಪ್ರಾಚಾರ್ಯ ಪ್ರೊ. ಡಾ. ಸಂಗೀತಾ ಖರಡೆ ವಂದಿಸಿದರು.

**BUILDING BONDS BEFORE BIRTH**

Unveiling the Ultimate  
Prenatal Education  
Program



**PRENATAL EDUCATION  
PROGRAM**

**FOR FIRST-TIME PARENTS**

**Empower Parenthood**

# Unlocking the Power of Parenthood:

**Transformative Prenatal Education Program for  
First-Time Parents**

**MARCH 2024**

**Prepared by:**  
**Ms. Arenlila Jamir & Dr. Sangeeta Kharde**

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## ACKNOWLEDGEMENTS

This module represents a collaborative effort, drawing inspiration from existing documents and training modules while incorporating modifications to suit our specific needs. A bibliography has been included to acknowledge our sources and provide further reference. We extend our sincere gratitude to the individuals listed below who supported us in this endeavor.

- Prof (Dr.) Veereshkumar Nandagaon, Principal, KAHER Institute of Nursing Sciences, Belagavi
- Prof (Dr.) Preeti Bhupali, Dean, KAHER Institute of Nursing Sciences, Belagavi
- OBG Nursing Department, KAHER Institute of Nursing Sciences, Belagavi
- Medical Director, KLE's Dr. Prabhakar Kore Hospital & MRC, Belagavi
- HOD, Department of Obstetrics & Gynaecology, J.N. Medical College, Belagavi, Karnataka
- OPD staffs of Obstetrics & Gynaecology Department, KLE's Dr. Prabhakar Kore Hospital & MRC, Belagavi
- All the experts / external evaluators
- All the participants of research project who took part in learning.

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**Edited by:** Ms. Arenlila Jamir & Dr. Sangeeta Kharde

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**Project Philosophy:**

**Equipping for Holistic Pregnancy**

Providing comprehensive knowledge to women and their partners, enabling informed choices for a healthy pregnancy, successful birth, and a smooth transition to parenthood.

**Empowering Through Informed Decision-Making**

Empowering pregnant women and partners through support for informed choices, allowing them to take actions aligned with their beliefs for an optimal start to parenthood, benefiting themselves, their child, and their family.

**Cultivating Supportive Environments**

Fostering care and compassion around the woman and her partner, promoting an atmosphere that encourages respect for her body and trust in her birthing capabilities, involving everyone in the support network.

**Addressing Diverse Support Needs**

Customizing support systems to meet the distinctive needs and experiences of parents, thereby amplifying their ability to offer effective assistance across the stages of pregnancy, childbirth, and early parenthood.

**Knowledge as the Cornerstone**

Empowering parents with knowledge and support, enabling them to confidently embrace parenthood, contributing to family strength and promoting positive parenting practices.



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## Chapter -1

# OVERVIEW OF NORMAL PREGNANCY

### Goal

To increase awareness and enhance understanding of typical physical and emotional changes during pregnancy, while promoting overall well-being.

### Objectives

By the end of the session, participants will be able to describe:

- Some common physical and emotional changes that occur during pregnancy
- How to maintain hygiene and grooming
- What foods are healthy to eat
- Minimum antenatal visits required
- Coping strategies for stress
- Harmful substances to avoid during pregnancy

## Physical Changes

### WHAT YOU CAN EXPECT AS YOUR BODY CHANGES

Pregnancy brings a variety of changes to your body. Here are some of the changes which you can expect:

#### Growing Belly:

- The emergence of a visible belly and the need to adjust clothing around the waistline become noticeable as your baby grows and your belly expands.
- The evolving physical changes are unique to each individual, and feelings about these changes vary, with everyone undergoing some level of adjustment.



#### Weight Gain:

- Weight gain during pregnancy is considered a positive sign of maternal adaptation and fetal growth. However, routine weighing is no longer deemed essential as it doesn't strongly correlate with pregnancy outcomes. For instance, early pregnancy may see a slight weight loss due to nausea and vomiting.
- The anticipated healthy weight gain for a singleton pregnancy is as follows:
- Approximately 2 kg in the first 20 weeks.

- Subsequently, around 0.5 kg per week until reaching full term at 40 weeks.
- A total weight gain of 9-12 kg throughout the pregnancy.

**Increased Breathing:**

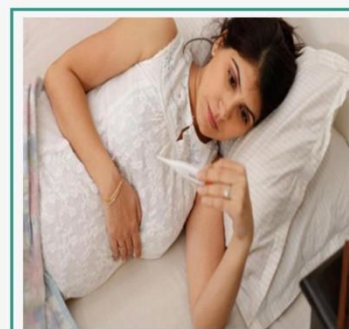
- The development of the fetus leads to various alterations in the respiratory system. These modifications encompass:
  - Congestion, a runny nose, or occasional nosebleeds.
  - Expansion of the chest.
  - Augmented inhalation and exhalation rates.
  - Reduced lung capacity.
  - Elevated oxygen consumption.
- As a consequence of these physiological adjustments, individuals may experience episodes of breathlessness or encounter difficulty in breathing throughout the course of pregnancy.

**Increased Heart Rate:**

- The heart undergoes multiple adjustments to meet the heightened demands of pregnancy.
- Increased blood flow to different organs is a natural response to address the escalated requirements of tissues during pregnancy.
- Consequently, there is a significant rise in heart rate throughout the pregnancy period.
- These adaptations often give rise to common concerns such as palpitations, reduced exercise tolerance, and occasional bouts of dizziness.

**Increased Body temperature:**

- One of the initial indicators of pregnancy is a rise in body temperature, which persists at a slightly elevated level throughout the entire pregnancy period.



### Frequently Passing Urine:

- Increased frequency of urination may become noticeable, primarily attributed to heightened blood flow to the kidneys, prompting an increased production of urine.
- It can be attributed to the gentle pressure exerted by the expanding uterus on the bladder, a phenomenon that persists throughout the entire pregnancy. This occurrence is common, particularly in the initial and final months of pregnancy.



### Enlargement of Breasts:

- During the early stages of pregnancy, the breasts may experience a sensation of fullness or tingling, accompanied by a gradual increase in size as the pregnancy advances.
- The breasts begin to produce colostrum, which is a yellowish secretion from the nipples, which thickens as pregnancy progresses. It is extremely high in protein and contains antibodies that help to protect the newborn baby from infection.
- Near the end of pregnancy, the nipples may produce enough colostrum to make wet patches on your clothes. This is normal and a good sign.

### Skin Changes:

- A dark line may emerge between the belly button and the pubic bone, fading after delivery but potentially not disappearing entirely.
- Additionally, a bronzed appearance known as the mask of pregnancy may develop on the face and forehead around the 16th week of pregnancy, diminishing post-delivery.
- As weight increases, skin stretching in areas of maximal growth, such as the abdomen, thighs, and breasts, can lead to pink or brownish stretch marks that typically fade after delivery, though they may not vanish completely.



**Vision Changes:**

- Vision changes in pregnancy may manifest as heightened nearsightedness, where close objects are clearer than distant ones.
- A common occurrence is blurred vision, with many women returning to their pre-pregnancy vision after childbirth.



## Emotional Changes

**EMOTIONS THAT YOU MAY EXPERIENCE DURING PREGNANCY****Mood swings:**

- Mood swings, psychological reactions triggered by factors like fatigue, sleep deprivation, and anxiety, can manifest as sudden bursts of anger, sadness, or spirited jubilation.
- Recognize that these intense emotions are a natural part of the journey, preparing you for the overwhelming emotions ahead.
- Management strategies for mood swings include:
  - Prioritize sufficient sleep.
  - Take breaks during the day to relax.
  - Engage in regular physical activity.
  - Maintain a balanced and nutritious diet.
  - Incorporate walks into your routine.
  - Allow yourself short naps for rejuvenation.



**Stress:**

- Stress is a common experience during pregnancy due to the multitude of changes occurring in family dynamics, body, and emotions. While some may embrace these changes, they can introduce new stressors.
- Prolonged and high levels of stress during pregnancy may contribute to health issues such as high blood pressure and heart diseases.
- Moreover, stress during pregnancy increases the risk of delivering a premature or low-birth weight baby.

**Coping strategies:**

- Eat healthy foods, get plenty of sleep and exercise.
- Surround yourself with positive people who lift you up.
- Don't be afraid to ask for support when you need it.
- Try relaxation activities like meditation or listen to music, which can help you manage stress.
- Figure out what is making you stressed and talk to your partner, a friend or a family member.

**Spirituality:**

- Pregnancy introduces physical, emotional, and mental stress, and navigating these challenges can be eased through spirituality and religiosity, essential components of overall health and well-being.
- Cultivating a healthy dose of spirituality is particularly vital for the well-being of the unborn life.
- Embarking on a spiritual journey offers a pathway from stress-induced darkness to the illumination of happiness, mental peace, and energy.
- Practices such as pooja, meditation, reading spiritual books, and listening to spiritual music contribute significantly to this journey. Regular engagement in these activities serves as a beneficial boon for both the mother and the baby.



## Staying healthy



### Maintaining Hygiene and Grooming:

Pregnancy demands increased attention to personal hygiene due to increased sweating and vaginal discharge, which can pose infection risks. To mitigate these concerns:

- Maintain regular washing of the genital area, axilla, and breasts to manage heightened discharge and sweating.
- Consider daily baths and clothing changes for cleanliness and comfort.
- Prioritize handwashing with soap, especially before food preparation and after using the toilet.
- Practice careful teeth brushing in the morning and after meals.
- Choose comfortable and appropriate clothing for the changing body, favoring loose and breathable cotton attire.
- Opt for new, well-fitting innerwear, including high-quality nursing bras, to accommodate size changes in the waist and breasts.
- Always wear breathable cotton panties, avoiding synthetic fabrics like chiffon.
- Opt for elastic-clothed items rather than tight zippers, ensuring comfort without constriction.
- Select comfortable, low-heeled, skid-free footwear in a size that accommodates potential changes during pregnancy.

### Nutrition For You And Your Baby:

- Maintaining a healthy diet is crucial, especially during pregnancy, as it significantly impacts your baby's well-being.
- While there's no need for a specialized diet, it's essential to consume a diverse range of foods daily to ensure both you and your baby receive the necessary balance of nutrients. Key vitamins and minerals vital for a healthy pregnancy include:



**Calcium:**

- Calcium is essential for the formation of the baby's bones and teeth, as well as for maintaining maternal bone density.
- Adequate intake of calcium helps prevent issues such as bone density loss in the mother and ensures proper skeletal growth for the baby
- Key sources of this nutrient include milk, yogurt, paneer, green vegetables, and fish.

**Iron:**

- Adequate iron intake during pregnancy is crucial for ensuring sufficient oxygen supply to both you and your baby.
- Insufficient iron levels can lead to fatigue and anemia.
- Sources of iron-rich foods encompass dark green leafy vegetables such as spinach, drumsticks, beetroot, potatoes, yams, along with chana, rajma, watermelon, pomegranate, fish, and meat—particularly liver, kidney, and other organ meats.

**Vitamin A:**

- Vitamin A is essential for the development of the baby's organs, immune system, and vision during pregnancy.
- Key sources of this nutrient include carrots, dark green leafy vegetables, carrots, sweet potatoes, pumpkins, muskmelons, mangoes, liver and dairy products.



**Antenatal Visits and Checkups:**

- Regular antenatal visits are important for you and your baby's health.
- You will have to go for your antenatal visits:
  - 1st month to 6th month: once a month
  - 7th month to 9th month: twice a month
  - Each week until delivery
- Additional appointments may be necessary in the presence of abnormalities or complications arising during pregnancy.
- A minimum of eight visits are recommended

**Harmful substances to avoid during pregnancy:**

- Avoid alcohol consumption, including beer, wine, and liquor, as it can lead to abnormal fetal development and cause mental and physical defects during pregnancy.
- Similarly, tobacco use and smoking are detrimental to the fetus, diminishing fetal growth and increasing the risk of birth defects, including cleft lip or cleft palate, along with elevating the likelihood of pregnancy complications.

**Immunization and Medications:**

- Inj.TT provides optimal protection against tetanus, safeguarding both you and your baby from infection risks. Upon receiving the first tetanus dose, you will be provided with a tetanus vaccination card, which should be brought to every antenatal visit. Adhering to the immunization schedule on the card is crucial.
- Only take medications as advised by your doctor, avoiding any other substances.
- Prenatal vitamins containing calcium, iron (60 mg), and folic acid (0.4 mg) are safe and essential during pregnancy to prevent anemia, sepsis, low birth weight, and preterm birth.
- Do not discontinue any medications without approval from your healthcare provider.



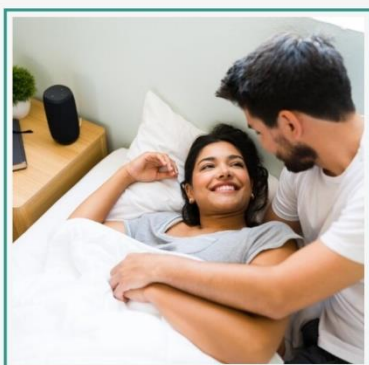
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**Covid-19 Care During Pregnancy:**

Employ the same preventive measures as the general population to avoid COVID-19 infection during pregnancy.

Safeguard yourself and your baby by:

- Frequent hand washing with soap and water or using alcohol-based hand sanitizer.
- Wearing a non-medical fabric mask.
- Refraining from touching your eyes, nose, and mouth.
- Maintaining distance from others.
- Avoiding crowded places.
- Covering your mouth and nose with your bent elbow or a handkerchief when coughing or sneezing.
- Seeking medical care early if you experience fever, cough, or difficulty breathing.

**Sexual Activity:**

- Sexual intercourse is generally safe and normal during pregnancy, provided there are no specific issues. However, changes in comfort and sexual desire may occur due to pregnancy.
- It is advisable to avoid sexual activity in the presence of any vaginal leaking or bleeding.

**Travel:**

- The second trimester (14-28 weeks) is the safest period for travel, while travel should be limited during the third trimester.
- When travelling by car, always ensure you wear a seat belt, and it is advisable to avoid locations that involve excessive jerking movements.



## Chapter 2

### SELF CARE DURING PREGNANCY

#### Goal

To increase awareness about healthy practices, exercises, recognizing warning signs, and managing common discomforts during pregnancy.

#### Objectives

By the end of the session, participants will be able to describe:

- Some healthy habits during pregnancy
- Exercises for healthy pregnancy
- When to avoid exercise
- Some warning signs during pregnancy
- At least one way to manage nausea, back pain, heart burn and leg cramps.

### Keeping an active lifestyle

#### Know What You Should Do

- Maintaining an active and fit lifestyle during pregnancy facilitates a smoother adjustment to changing body shape and weight gain. It aids in coping with labor and post-birth recovery.
- Continue your regular daily physical activities or exercise for as long as comfortable, being mindful not to exhaust yourself.
- Avoid lifting heavy weights to prevent any risk to the baby.
- Adequate rest is crucial for strength and the fetus's overall health.
- Consider lying down to relax or sleep for 1 to 2 hours in the afternoon.
- Ensure a minimum of 8 hours of nightly sleep, increasing as you approach term.
- Optimal sleeping position is on the left side to enhance blood and nutrient flow to the baby.
- For improved sleep, consider having a glass of warm milk before bedtime.



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## Exercises

Engaging in simple exercises is safe and beneficial for both you and your baby. While walking is an ideal activity, it's advisable to avoid prolonged periods of walking. This practice promotes overall mental and physical health, aids in stress management, improves sleep quality, and prepares the body for the challenges of labor and birth.

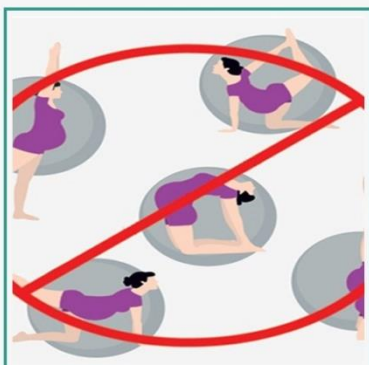


### Exercises for a healthy pregnancy:

- Stretching exercises
- Foot and Ankle exercises
- Pelvic tilt exercise
- Kegel exercise
- Brisk Walking (20-30 min)

### Exercises To Help In Labour:

- Breathing exercises
- Relaxation exercises



### Warning Signs For Exercise:

- Vaginal bleeding
- Severe anemia
- Chest pain
- Fast heartbeat or trouble breathing
- Dizziness or headache
- Muscle weakness



## 2. Swollen ankles and feet

Swelling in the ankles and feet is common during pregnancy due to increased water retention in the body. Towards the end of the day, particularly in warm weather or after prolonged standing, excess water tends to accumulate in the lower extremities.

### Management:

- Minimize prolonged standing.
- Avoid tight socks or stockings with elastic bands around the legs.
- Opt for comfortable footwear.
- Elevate your feet whenever possible, aiming for at least an hour of rest with your feet elevated higher than your heart.
- Engage in foot exercises.

## 3. Heartburn and indigestion

It occurs due to pressure on the intestines and stomach, causing stomach contents to reflux into the esophagus.

### Management:

- Prevent or reduce symptoms by opting for five to six smaller meals throughout the day instead of three large meals, and avoid lying down shortly after eating.
- Maintain an upright posture while eating to alleviate stomach pressure.
- Eat meals slowly without rushing.
- Steer clear of greasy, fatty, or spicy foods.
- Refrain from eating or drinking for a few hours before bedtime.





#### 4. Back Pain

Pregnancy induces softening and stretching of the tissues connecting two bones, preparing the body for labor, which can strain the joints in the lower back and pelvis, leading to back pain.

**Management:**

- Avoid lifting heavy objects.
- Rotate your feet while turning to prevent spinal twisting.
- Bend your knees and maintain a straight back when lifting or retrieving items from the floor.
- Opt for flat shoes that evenly distribute your weight.
- Sit with proper back support and maintain an upright posture.
- Consider massage for relief.

#### 5. Dizziness

Dizziness is a prevalent pregnancy symptom, often attributed to factors such as low blood pressure from the uterus compressing major arteries, low blood sugar, low iron levels, rapid shifts from sitting to standing, or dehydration.

**Management:**

- Mitigate the risk of injury from potential falls during episodes of dizziness by adopting a slow and gradual standing approach, using walls or stable structures for support and balance.



#### 6. Constipation

Early in pregnancy, hormonal changes can lead to constipation due to a slowdown in food processing within the body.

**Management:**

- Incorporate high-fiber foods such as vegetables, fruits, beans, dals, and nuts into your diet.
- Maintain regular exercise.
- Ensure an adequate intake of water.



### 7. Varicose vein

Swollen, purplish veins are a common occurrence in the legs and around the vaginal opening during pregnancy, typically resulting from increased leg pressure and elevated blood volume. These symptoms often improve after delivery.

#### Management:

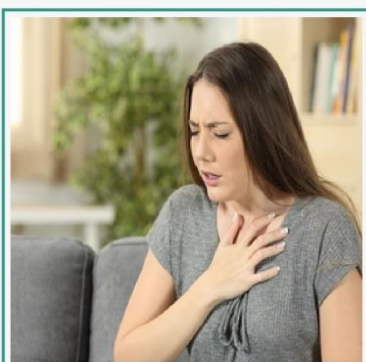
- Minimize prolonged periods of standing.
- Avoid sitting with crossed legs.
- Control weight gain to alleviate pressure.
- Sit with legs elevated whenever possible for comfort.
- Sleep with legs positioned higher than the rest of the body.
- Incorporate foot exercises or walking into your routine to promote circulation.

### 8. Insomnia

During the later stages of pregnancy, achieving a restful night's sleep can be challenging. Discomfort while lying down and frequent trips to the toilet disrupt the sleep pattern.

#### Management:

- Sleep on your side with a pillow under the belly and another between your legs.
- Prioritize a warm shower or bath before bedtime for relaxation.
- Engage in gentle exercises to promote better sleep.
- Ensure the bedroom is quiet and comfortable.
- Avoid consuming coffee, especially before bedtime.



### 9. Difficulty in breathing

Shortness of breath occurs when you sense insufficient air intake during breathing, often experienced in late pregnancy when the baby's size presses on the diaphragm.

#### Management:

- Maintain an upright sitting or standing position to provide ample room for lung expansion.
- Move at a gradual pace.
- Prioritize breathing clean air by avoiding secondhand smoke and other air pollutants.



### 10. Tiredness

Fatigue is common in the early stages of pregnancy and intensifies towards the end due to the additional weight and challenges in sleeping caused by the baby's movements and discomfort.

#### Management:

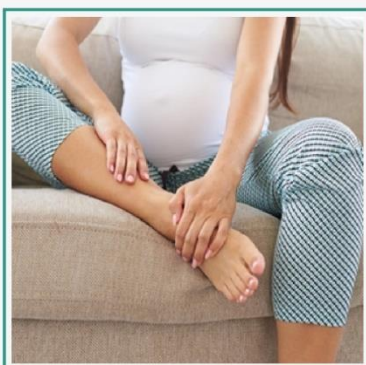
- Prioritize ample rest.
- Incorporate short naps into your routine.
- Follow consistent sleep patterns by going to bed and waking up at the same time each day.
- Engage in daily exercise | Ensure adequate hydration.
- Opt for small, frequent meals.

### 11. Frequent urination

Increased frequency of urination is common in pregnancy, especially in the early and late stages, attributed to the pressure exerted by the baby's head on the bladder. Urine leakage may occur during activities such as coughing, laughing, sneezing, or exercising.

#### Management:

- Incorporate kegel exercises to strengthen the muscles, controlling urine flow.
- Act fast on the urge to pee, don't hold it
- When urinating, lean forward slightly to ensure complete bladder emptying.
- Empty your bladder before engaging in exercise.
- Limit fluid intake about 2 to 3 hours before bedtime.



### 12. Leg Cramps

In the second and third trimesters, nighttime leg cramps can become a common discomfort, likely arising from altered blood circulation and increased stress on leg muscles due to the added weight.

#### Management:

- Perform calf stretches, especially before bedtime if experiencing nighttime cramps.
- Avoid prolonged sitting or standing in one position; maintain movement.
- Incorporate daily walks or regular exercise into your routine.
- Consider getting a massage to relax the muscles.



### How to know that you are in labor

Various signs and symptoms may suggest the imminent onset of labor.

#### These indicators include:

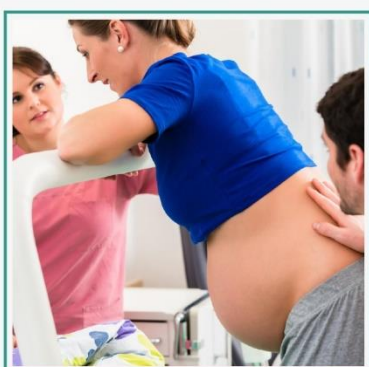
- Cramps resembling menstrual pain
- Lower back pain, Painful contractions
- Contractions occurring at intervals of approximately 3-4 minutes
- contraction lasting around 60 seconds
- The breaking of water
- Diarrhea, Nausea or vomiting
- Bloody show, characterized by a thick, pinkish, or blood-stained discharge.

### How to help yourself during labor

Several techniques can be employed to alleviate or manage labor pain.

#### These methods encompass:

- Breathing exercises
- Relaxation techniques
- Gentle rhythmic stroking of the abdomen
- Movement and changing positions
- Emptying the bladder
- Experimenting with standing, kneeling, sitting, and squatting positions, allowing nature to facilitate the baby's descent and delivery.



### How your labor partner can help you

Provide encouragement and emotional support during your labor.

- Offer back massages to alleviate pain.
- Continuous one-to-one support enhances your ability to cope with labor and fosters a more positive birthing experience.
- Assist in ensuring your comfort.
- Provide guidance on breathing techniques.
- Advocate for you, especially during intense labor when the strength of contractions may hinder your ability to communicate.



### What happens during labor and birth

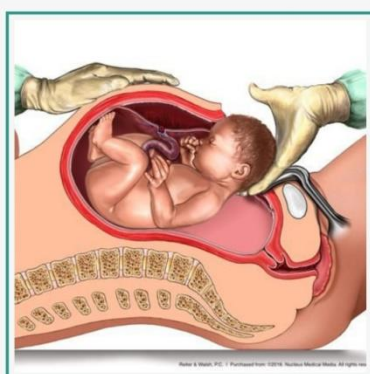
Each woman's labor experience is unique, and it's natural to feel concerned about how you'll manage the pain, especially during your first pregnancy when the process is unfamiliar. To guide you through the stages of labor:

#### First Stage of Labor:

- Vigilant monitoring and documentation of your well-being, the baby's status, and the progress of labor are essential. This ensures early recognition of any issues and effective communication.

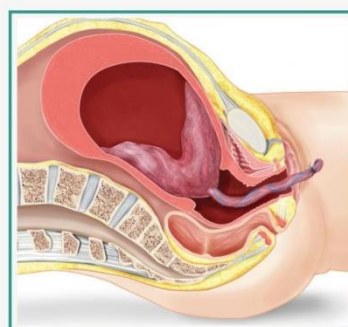
#### Second Stage of Labor - the Baby's Birth:

- Once your cervix is fully dilated, you can push during contractions.
- Begin pushing with two deep breaths at the onset of contractions.
- Take additional breaths as needed.
- Engage in several pushes until the contraction concludes.
- Rest between contractions, gathering strength for the next one.
- When the head becomes visible, the doctor and nurse will guide the baby's body, allowing the shoulders to emerge, followed by the rest of the body.



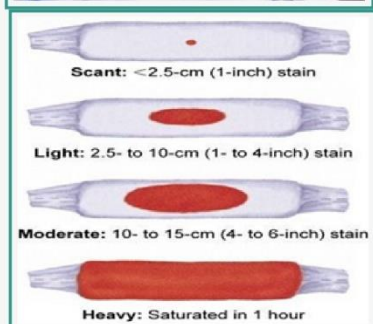
#### Third Stage of Labor:

- After your baby is born, the uterus will contract to expel the placenta, typically occurring within 5 to 30 minutes after birth.
- The uterus is massaged to contract and control bleeding.



## Care after delivery

Postpartum care is crucial, as it marks a period where diligent attention to your body, coupled with ample rest, nutrition, and sleep, is essential. Prioritizing these aspects is imperative for a swift recovery and the restoration of your overall health.



### 1. Things to focus on:

- Monitor your bleeding to ensure it is within normal limits; if you experience excessive bleeding, promptly notify the nurse.
- After being moved to your ward, make an effort to urinate.
- Stay hydrated by consuming 6 to 8 glasses of water daily.
- Prioritize a nourishing diet rich in fruits and vegetables to support your body's healing and recovery, which is crucial for breastfeeding.
- Allow yourself sufficient rest and sleep to recover from labor fatigue, syncing your sleep schedule with your baby's.
- Feed your baby every 3 hours, and cultivate a routine of regular handwashing, especially after bathroom visits, diaper changes, and before feeding.
- Maintain hygiene by taking regular baths, changing clothes, as post-delivery weakness increases susceptibility to infections.
- Trim your nails to ensure proper hygiene.

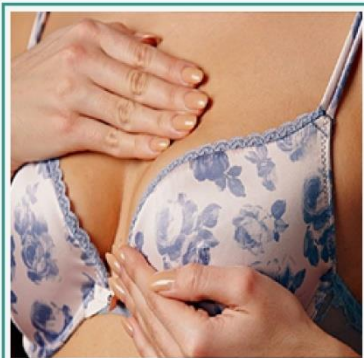
### 2. Episiotomy wound care:

An episiotomy involves a small incision made during childbirth to facilitate the baby's delivery by widening the vaginal opening.

#### Here are some post-episiotomy care instructions:

- Change pads every 2 to 4 hours to maintain cleanliness and prevent infection.
- Ensure the area around the stitches stays clean and dry; pat it dry with a clean towel after bathing.
- After urination or bowel movements, use warm water over the area and pat dry using a clean towel or baby wipe, avoiding the use of toilet paper.
- Take stool softeners and stay well-hydrated to prevent constipation, and incorporate a high-fiber diet.
- Engage in Kegel exercises to support pelvic floor muscle strength and recovery.





### 3. Breast care:

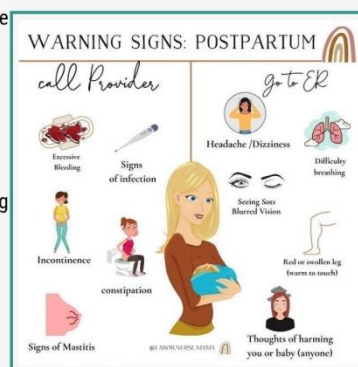
Ensure breast hygiene by following these guidelines:

- Clean the breasts using water only, avoiding the use of soap on the nipples.
- As part of general body hygiene, wash the breasts once a day.
- After feeding, clean and keep the nipples dry.
- Opt for a well-fitting bra that isn't too tight.
- Change your bra regularly, at least once a day.
- Perform daily breast checks to monitor for any changes.

### 4. Warning signs you shouldn't avoid:

Be attentive to the following danger signs that should not be overlooked:

- Escalating vaginal bleeding
- Seizures
- Rapid or difficult breathing
- Fever accompanied by extreme weakness, hindering the ability to get out of bed
- Intense headaches accompanied by blurred vision
- Pain, redness, or swelling in the calves
- Chest pain
- Heightened pain or signs of infection in the perineum
- Indications of infection in the wound area, such as redness, swelling, pain, or discharge.



## Neonatal care



### 1. Tests and vaccinations:

- Following delivery, your baby will receive an injection of vitamin K, hepatitis vaccine, BCG vaccine, and oral polio drops.
- A jaundice test will be conducted, along with additional screening tests to assess your baby's overall physical condition.



#### 4. Breastfeeding techniques and positions:

- Ensure a comfortable breastfeeding position by following these steps:
- Sit upright and provide ample support with pillows. If you have smaller breasts, use a pillow on your lap to bring your baby to the correct level. Be cautious not to position your baby higher than the natural fall of your breasts.
- Hold your baby behind her back and shoulders, avoiding her head, so that her chest is in contact with yours. Align her nose with your nipple.
- Gently stroke your nipple from your baby's nose to her lips to encourage her to open her mouth wide.
- Seize the opportunity when your baby's mouth is wide open to swiftly bring her to your breast, directing your nipple toward the roof of her mouth. Her mouth will close over your breast, initiating the sucking process.

#### 5. Benefits of breastfeeding:

##### For Babies:

- Easier to digest
- Adapts to baby's growth
- Provides immunity
- Decreases the risk of obesity
- Promotes infant-mother bonding
- Lower risk of SIDS (Sudden Infant Death Syndrome)
- Reduces susceptibility to diseases
- Diminishes risk of ear infections
- Gets sick less and are less likely to be hospitalized

##### For Mothers:

- Decreases risk of breast cancer
- Lowers risk of uterine and ovarian cancer
- Supports effective child spacing
- Helps to lose weight
- Shrinks uterus
- Saves money



## Chapter - 4

### FATHERS' ROLE IN PRENATAL CARE

Becoming a father brings a blend of pride and joy, yet it's natural to feel a tinge of anxiety about the changes it brings, like the potential loss of personal freedom and the added responsibilities at work and in life. However, actively participating in every stage of pregnancy, from conception to childbirth and beyond, can be a profound source of support for your partner. Your presence and involvement can alleviate their anxieties and fears, fostering a deeper sense of security and happiness. By offering unwavering support, you not only ease your partner's stress but also contribute significantly to the baby's optimal development and the mother's overall well-being. Shared responsibility between partners is essential for navigating this journey of pregnancy smoothly and harmoniously.

#### Goal

To increase awareness about father's role in pregnancy care

#### Objectives

By the end of the session, participants will be able to describe:

- Ways to physically and emotionally support partners
- How to take care of the finances
- Importance of planning together for parenthood
- How to prepare for birth and baby
- The need for birth spacing

### Responsibilities of first-time father



#### 1. Emotional Support

- Throughout the journey of pregnancy, it is crucial to consistently offer encouragement and reassure your partner that you are by her side, alleviating any concerns she may have. To actively support her, consider the following:
  - Inquire about her needs and how you can assist.
  - Express affection to create a comforting environment.
  - Advocate for breaks and naps, recognizing the impact of hormonal changes on energy levels and sleep requirements.
  - Engage in walks together, fostering both physical activity and meaningful conversations.
  - Acknowledge the range of emotions during pregnancy, from happiness and excitement to physical changes and uncertainties. It is paramount to provide unwavering support and encouragement during this significant phase of her life.



## 2. Physical Support

- Contribute to household chores by assisting with cleaning and cooking, particularly when your wife is fatigued or certain cooking odors trigger discomfort. Remember, the home is a shared space, and taking responsibility for its upkeep is a shared commitment.
- Anticipate and address her needs, even the small ones, without waiting for her to ask for assistance. Taking on some responsibilities proactively demonstrates your consideration.
- Lighten her workload by taking on more physical tasks and heavy lifting around the house, recognizing the challenges she faces with a growing belly. This proactive effort helps prevent her from becoming overly fatigued.
- Offer back and foot massages to alleviate stress and aches throughout the pregnancy. A brief ten-minute massage not only provides physical relief but also creates a tranquil space for meaningful conversations about each other's day or how she's feeling.

## 3. Be a good listener

The journey of pregnancy encompasses both magical and challenging moments, and it's quite probable that your wife may have some grievances. In these instances, being an attentive listener is invaluable.

- Take the time to hear your wife's concerns about pain, discomfort, cravings, and the milestones of her body changing.
- Providing a supportive ear not only allows her to express her frustrations but also contributes to her overall happiness, helping her return to a calm state of mind.





#### 4. Maintain strong relationship with healthy communication

- Effective communication serves as a cornerstone in any relationship, offering a platform to express and understand each other's concerns and difficulties.
- It is a pivotal element that allows both partners to speak and listen, ultimately serving as the key to a content and thriving relationship.
- Upholding a robust connection through healthy communication equips you to navigate challenges that may arise.
- For new parents, maintaining understanding and effectively managing conflicts becomes even more crucial for the well-being of both partners and the overall strength of the relationship.

#### 5. Make sure she eats nutritious food

- Ensuring the health of your wife and baby involves incorporating fruits and vegetables into your daily meals. These nutrient-rich foods provide essential vitamins and minerals crucial for the proper development of the baby.
- Additionally, it is vital for your wife to consume milk daily, preferably in the morning and at night, as both she and the growing fetus require ample calcium for their well-being.
- Being accommodating and supportive of your wife's pregnancy cravings is an important aspect of fostering a healthy environment during this time. Willingness to satisfy these cravings not only contributes to her comfort but also promotes a positive and supportive dynamic throughout the pregnancy journey.



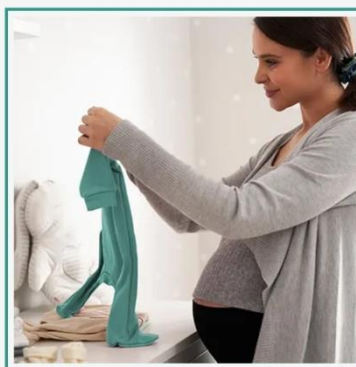


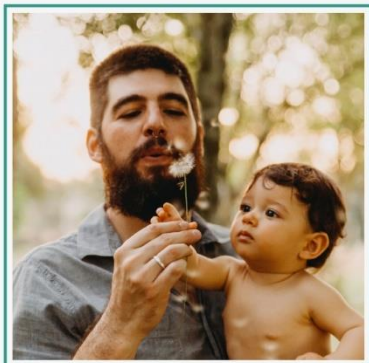
### 9. Prepare For The Baby

- Embark on a transformative journey that will leave a lasting impact on your life. As you step into this profound chapter, seeking guidance and insights from family members and friends who have experienced parenthood can be invaluable.
- Engaging in conversations with them about their own journeys as new parents can offer practical advice and emotional support.
- Reflect on individuals in your life who could potentially provide assistance and support during this significant time of change. Recognizing and establishing a support system is essential for navigating the challenges and joys of parenthood.
- Remember, the arrival of a baby is a true blessing, and the gender should not be a source of concern. Embrace the anticipation of welcoming a new life into your family with love and joy, regardless of whether it's a boy or a girl.

### 10. Prepare For The Delivery

- Prepare for the momentous day ahead. The anticipation leading up to the baby's arrival can be overwhelming for both of you, so it's crucial to have your resources ready for any eventualities. Assure your wife that you are fully capable of managing responsibilities while she takes much-needed rest and cares for the baby. Consistently express your unwavering support and love throughout this period.
- In readiness for the hospital visit, ensure a maternity bag is packed with all the essentials your wife will require. This thoughtful preparation ensures a smoother experience and helps create a reassuring environment for both of you.





### 11. Transition To Fatherhood

- Embarking on the journey to fatherhood involves a multifaceted transition that may require some time to fully adapt. Adjusting to this new role entails a learning process, complete with moments of trial and error.
- It's important to recognize that there is no definitive 'right' way to navigate fatherhood, so be compassionate with yourself if things don't unfold as initially planned.
- Appreciate the significance of your role as a father; it's an essential and meaningful responsibility. Embrace the learning curve and value the unique contributions you bring to your role as a dad.

#### Ways to care for your newborn:

- Help in breastfeeding
- Help to burp the baby after feed
- Change diapers: not just during the day, but at middle of the night wakings
- Spend time skin-to-skin to help establish a secure attachment
- Swaddle the baby to keep warm

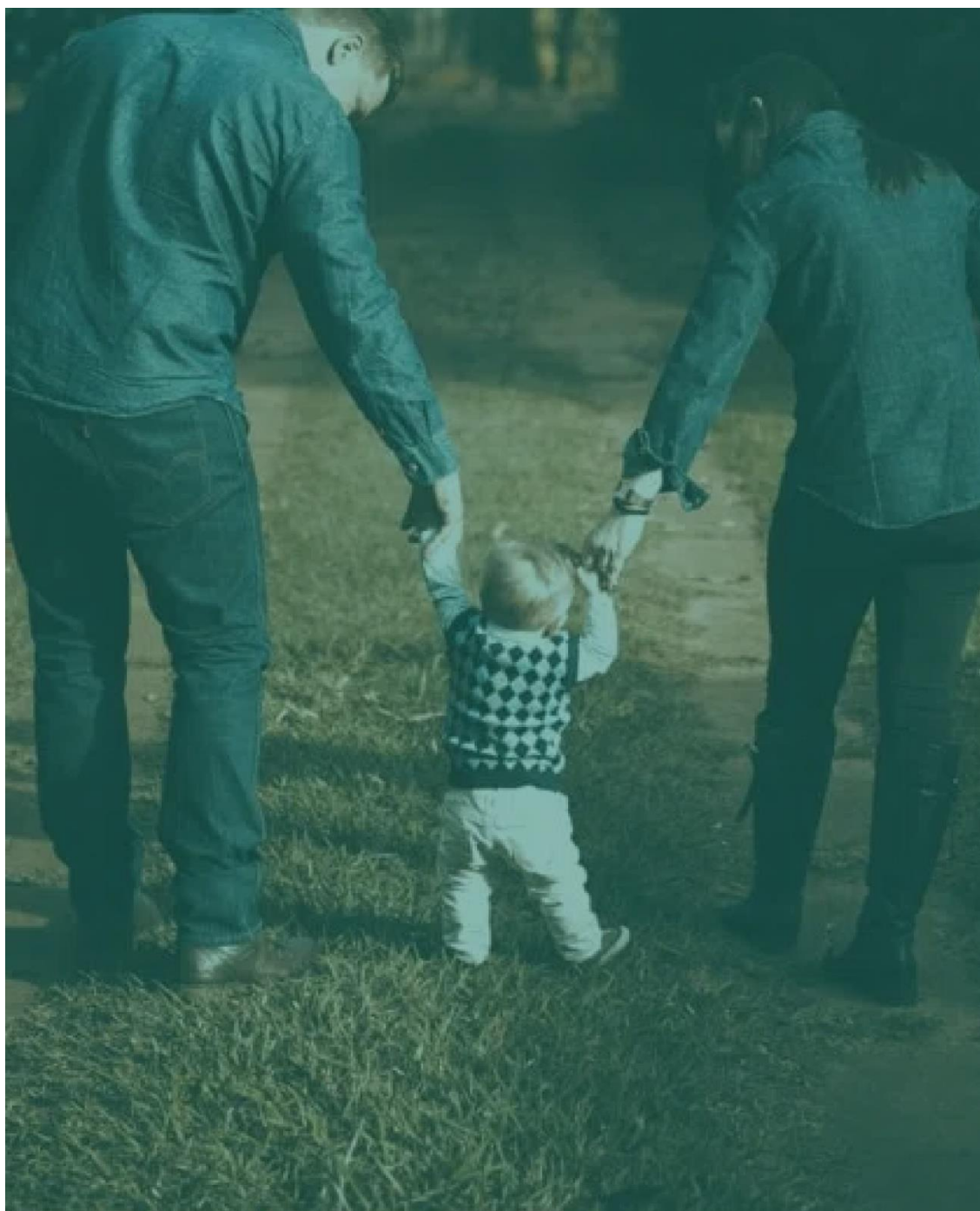
### 12. Importance of Birth Spacing

- Birth spacing, the intentional gap between pregnancies, is crucial for your wife's well-being. To allow her body adequate rest following childbirth, it's advisable to wait at least 2 years before considering another pregnancy. This pause is essential for her body to recover and replenish the lost blood from the previous pregnancy.
- Maintaining optimal birth spacing is linked to reduced risks, including stillbirth, maternal and child morbidity, and mortality.
- A shorter pregnancy interval, particularly less than 18 months, is associated with an elevated risk of preterm birth and low birth weight. Prioritizing a thoughtful and healthy spacing between pregnancies is fundamental for the overall health and outcomes of both the mother and the child.



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**REDEFINING PARENTHOOD  
FORGE A BRIGHTER FUTURE FOR YOUR FAMILY**

## ANNEXURE VII


## PAMPHLET

### Breastfeeding Technique



- Sit upright and support yourself with pillows
- Hold the baby behind her back and shoulders
- Bring baby's nose in line with your nipple and gently brush
- When the baby's mouth is wide open, quickly bring them to your breast. They'll start sucking


### Breastfeeding Benefits for Baby



- Easier to digest
- Adapts to baby's growth
- Provides immunity
- Promotes infant-mother bonding
- Gets sick less


### Father's Role During Pregnancy

- Show love and affection
- Help in household work
- Be a good listener
- Plan together
- Give massage when she is in pain
- Make sure that she eats nutritious foods
- Accompany her for antenatal check-ups
- Maintain good relationship with healthy communication
- Manage all the financial needs and keep emergency funds ready
- Talk to people about their experiences as parents
- Keep the maternity bag ready
- Help in breastfeeding and changing diapers
- Keep two years gap for next pregnancy




## Pregnancy Learning Guide

*for first time parents*



### Do's and Don'ts of Pregnancy



**Do's:**

- Maintain personal hygiene
- Take adequate rest and sleep
- Eat seasonal fruits and vegetables
- Drink plenty of water
- Exercise moderately
- Go for regular antenatal check-ups
- Take Iron folic acid tablets
- Take two tetanus toxoid (TT) injections

**Don'ts:**

- Avoid lifting heavy things
- Do not wear high heels
- Avoid tight clothes
- Avoid oily and spicy foods
- Avoid alcohol and tobacco
- Do not take unprescribed medications
- Avoid long journey and jerking

### Covid-19 Care During Pregnancy




- Wash hands with soap and water
- Avoid touching your eyes, nose and mouth
- Maintain Social distance
- Avoid crowded places
- Cough or sneeze into your bent elbow or a handkerchief
- If you have fever, cough or difficulty in breathing, seek care early

### Warning Signs During Pregnancy




- High fever
- Fits / convulsions
- Continuous abdominal pain
- Bleeding or leaking from vagina
- Excessive swelling in hands and feet
- Decreased or no fetal movements
- Vomiting lasting more than two days
- Pain or burning sensation while urinating

### Signs of Labour




- Period like cramps
- Water breaking
- Increased lower back pain
- Strong, frequent contractions
- Pinkish or reddish brown jelly like discharge from vagina

### Self Help During Labour




- Move around
- Empty the bladder
- Do deep breathing exercises
- Light rhythmic stroking of the abdomen
- Try standing, kneeling, sitting and squatting

### Postnatal Care



**Mother:**


- Check for bleeding
- Take adequate rest
- Check your breast for any changes
- Clean the nipple and keep dry after feeding
- Maintain healthy diet and drink plenty of fluids
- Maintain personal hygiene to prevent infection
- Get immediate medical help if any complications occur



**Newborn:**

- Feed every 2-3 hours and also on demand
- Burp after every feed
- Exclusive breastfeeding for the first six months
- Keep the baby warm and support the neck while holding
- Follow immunization schedule

### ಸ್ವಚ್ಛತಾ ಮಾಡಿಸುವ ವಿಧಾನ




- > ನೇರವಾಗಿ ಕುಳಿತುಕೊಳ್ಳಿ ಮತ್ತು ದಿಂಬುಗಳಿಗೆ ವರೆಗೂ ಕೊಳೆ
- > ಮಗುವನ್ನು ಸರಿಯಾಗಿ ಎತ್ತಿಕೊಳ್ಳಿ
- > ಮೊಲತೊಟ್ಟು ಮಗುವಿನ ಮೂಗಿಗೆ ತಾಗದಂತೆ ಎದೆಹಾಕಿ ಕುಡಿಸಿ
- > ಮಗುವಿನ ಬಾಯಿ ಆಗಲವಾಗಿ ತೆರೆದಿರುವಾಗ, ಹಾಲುನೋಡಿದರೆ ಅದು ಸರಿಯಾಗಿ ಕುಡಿಯುತ್ತದೆ.

### ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ತಂದೆಯ ಪಾತ್ರ

- > ಮಗುವಿನ ವಾತ್ಸಲ್ಯವನ್ನು ತೋರಿಸಿ
- > ಮನೆಯ ಕೆಲಸದಲ್ಲಿ ಸಹಾಯ ಮಾಡಿ
- > ಉತ್ತಮ ಕೇಳುಗರಾಗಿ
- > ಸುಟ್ಟಗೆ ಯೋಜನೆ ಮಾಡಿ
- > ಮಗು ತೊಂದರೆ ಅನುಭವಿಸುವಾಗ ಆತನಿಗೆ ಆತ್ಮ ಸ್ನೇಹ ತುಂಬಿ
- > ಮಗುವಿನ ಪೌಷ್ಟಿಕ ಆಹಾರಗಳನ್ನು ತಿನ್ನುತ್ತಾಳೆಯೇ ಎಂದು ಬಿಚ್ಚಿ ತಿಳಿಸಿ
- > ಪ್ರಸವಪೂರ್ವ ತಪಾಸಣೆಗಾಗಿ ಅವಳೊಂದಿಗೆ ನೀವು ಹೋಗಿ
- > ಆರೋಗ್ಯಕರ ಸಂವಹನದೊಂದಿಗೆ ಉತ್ತಮ ಸಂಬಂಧವನ್ನು ಕಾಪಾಡಿಕೊಳ್ಳಿ
- > ಎಲ್ಲಾ ಹಣಕಾಸಿನ ಅಗತ್ಯಗಳನ್ನು ನಿರ್ವಹಿಸಿ ಮತ್ತು ತುರ್ತು ನಿಧಿಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಿ
- > ಪೋಷಕಾಂಶ ಅಥವಾ ಅನುಭವಗಳ ಬಗ್ಗೆ ಜನರೊಂದಿಗೆ ಮಾತನಾಡಿ
- > ಹೆರಿಗೆಯಾದ ಮೇಲೆ ಬೇಕಾಗುವ ವಸ್ತುಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಿ
- > ಸ್ವಸ್ಥಜ್ಞ ಮತ್ತು ಡೈಪರ್ ಬದಲಾಯಿಸುವಲ್ಲಿ ಸಹಾಯ ಮಾಡಿ
- > ಮುಂದಿನ ಗರ್ಭಧಾರಣೆಗೆ ಎರಡು ವರ್ಷಗಳ ಅಂತರವನ್ನು ಇಟ್ಟುಕೊಳ್ಳಿ.


## ಪ್ರೆಡೈನ್ಡ್ ಅನಿಂಡರ್ ಡೈಟ್

ಮೊದಲ ಬಾರಿಗೆ ಪೋಷಕರಿಗೆ




### ಮಗುವಿಗೆ ಎದೆಹಾಲು ಕುಡಿಸುವುದರಿಂದ ಆಗುವ ಪ್ರಯೋಜನಗಳು

- > ಮಗುವಿಗೆ ಬೇರ್ಪಡಿಕೊಳ್ಳಲು ಸುಲಭ
- > ಮಗುವಿನ ಬೆಳವಣಿಗೆಗೆ ಹೊಂದಿಕೊಳ್ಳುತ್ತದೆ
- > ರೋಗನಿರೋಧಕ ಶಕ್ತಿಯನ್ನು ಒದಗಿಸುತ್ತದೆ
- > ಶಿಶು-ತಾಯಿ ಬಂಧವನ್ನು ಬಲಗೊಳಿಸುತ್ತದೆ
- > ಆರೋಗ್ಯ ಸಮಸ್ಯೆ ಕಾಡುವುದಿಲ್ಲ



### ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ಮಾಡಬೇಕಾದ ಮತ್ತು ಮಾಡಬಾರದು



**ಯಾವುದು ಮಾಡಬೇಕಾದ:**

- > ವೈಯಕ್ತಿಕ ಸ್ನೇಹವನ್ನು ಕಾಪಾಡಿಕೊಳ್ಳಿ
- > ಸಾಕಷ್ಟು ವಿಶ್ರಾಂತಿ ಮತ್ತು ನಿದ್ರೆ ಮಾಡಿ
- > ಕಾಲೋಚಿತ ಹೆಜ್ಜೆಗಳು ಮತ್ತು ತರಕಾರಿಗಳನ್ನು ಸೇರಿಸಿ
- > ಸಾಕಷ್ಟು ನೀರು ಕುಡಿಯಿರಿ
- > ವಿಶವಾಗಿ ವ್ಯಾಯಾಮ ಮಾಡಿ
- > ನಿಯಮಿತ ಪ್ರಸವಪೂರ್ವ ತಪಾಸಣೆಗೆ ಹೋಗಿ
- > ಐರನ್ ಫೋಲಿಕ್ ಆಸಿಡ್ ಮಾತ್ರೆಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಿ
- > ಎರಡು ಟೆಟನಸ್ ಟಾಕ್ಸಾಯ್ಡ್ (ಟಿಟಿ) ಚುಚ್ಚುಮದ್ದುಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಿ


**ಯಾವುದು ಮಾಡಬಾರದು:**

- > ಭಾರವಾದ ವಸ್ತುಗಳನ್ನು ಎತ್ತಬೇಡಿ
- > ಬಿಗಿಯಾದ ಬಟ್ಟೆಗಳನ್ನು ಧರಿಸಬೇಡಿ
- > ಎಣ್ಣೆಯುಕ್ತ ಮತ್ತು ಮಸಾಲೆಯುಕ್ತ ಆಹಾರವನ್ನು ತಿನ್ನಬೇಡಿ
- > ಆಲ್ಕೋಹಾಲ್ ಮತ್ತು ತಂಬಾಕನ್ನು ತಪ್ಪಿಸಿ
- > ವೈದ್ಯರು ಸೂಚಿಸದ ಇತರ ಯಾವುದೇ ಔಷಧಿಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಬೇಡಿ
- > ದೀರ್ಘ ಪ್ರಯಾಣ ಮತ್ತು ನೂಕು ನುಗ್ಗಲಿನಿಂದ ದೂರವಿರಿ

**ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ಕೊವಿಡ್-19 ಆರೈಕೆ**


- > ಸೋಪು ಮತ್ತು ನೀರಿನಿಂದ ಕೈಗಳನ್ನು ತೊಳೆಯಿರಿ
- > ನಿಮ್ಮ ಕಣ್ಣು, ಮೂಗು ಮತ್ತು ಬಾಯಿಯನ್ನು ಮುಚ್ಚುವುದನ್ನು ತಪ್ಪಿಸಿ
- > ಸಾಮಾಜಿಕ ಅಂತರವನ್ನು ಕಾಪಾಡಿಕೊಳ್ಳಿ
- > ಜನಸಂದಣಿ ಇರುವ ಸ್ಥಳಗಳಲ್ಲಿ ಹೋಗಬೇಡಿ
- > ನಿಮ್ಮ ಬಾಗಿಲ ಮೋಣಕ್ಕೆ ಅಥವಾ ಕರವಸ್ತ್ರದಲ್ಲಿ ಕೆಮ್ಮು ಅಥವಾ ಸೀಸುವುದು ಮಾಡಿ
- > ನಿಮಗೆ ಡ್ರೆಸರ್, ಕೆಮ್ಮು ಅಥವಾ ಉಸಿರಾಟದ ತೊಂದರೆ ಇದ್ದಲ್ಲಿ, ಬೇಗನೆ ಆರೈಕೆಯನ್ನು ಪಡೆಯಿರಿ

### ಗರ್ಭಾವಸ್ಥೆಯಲ್ಲಿ ಎಚ್ಚರಿಕೆ ಬಿಡ್ಡುಗಳು




- > ಧೂಮಪಾನ ಸ್ವೀಕರಿಸಬೇಡಿ
- > ಫಿಟ್ನೆಸ್ ಸೆಳೆತ
- > ನಿರಂತರ ಹೊಟ್ಟೆ ನೋವು
- > ಯೋನಿಯಿಂದ ರಕ್ತಸ್ರಾವ ಅಥವಾ ಸೋರಿಕೆ
- > ಸ್ವಲ್ಪ ಕಾಲಗಳಲ್ಲಿ ವಿಪರೀತ ಊತ
- > ಭ್ರೂಣದ ಚಲನೆ ಗಮನಿಸಿ
- > ಎರಡು ದಿನಗಳಿಗಿಂತ ಹೆಚ್ಚು ಕಾಲ ವಾಂತಿ ಮಾಡುವುದು
- > ಮೂತ್ರ ವಿಸರ್ಜನೆಯಾಗುವ ನೋವು ಅಥವಾ ಸುಡುವ ಸಂವೇದನೆ

**ಪ್ರಸವದ ಲಕ್ಷಣಗಳು**




- > ಸೆಳೆತದಂತಹ ನೋವು
- > ನೀರು ಒಡೆಯುವುದು
- > ಹೆಚ್ಚಿನ ಬೆನ್ನು ನೋವು
- > ಯೋನಿಯಿಂದ ಸ್ವಮಿಶ್ರವಂತಹ ಗುಲಾಬಿ ಅಥವಾ ಕೆಂಪು ಕಂದು ಬಣ್ಣದ ಸ್ರಾವ

**ಪ್ರಸವದ ಸಮಯದಲ್ಲಿ ಸ್ವಯಂ ಆರೈಕೆ ಹೀಗಿರಲಿ**




- > ಕಾಲ ಕಾಲಕ್ಕೆ ಮೂತ್ರ ವಿಸರ್ಜನೆ ಮಾಡಿ
- > ಮೂತ್ರಕೋಶವನ್ನು ಖಾಲಿ ಮಾಡಿ
- > ಆಳವಾದ ಉಸಿರಾಟದ ವ್ಯಾಯಾಮಗಳನ್ನು ಮಾಡಿ
- > ಹೊಟ್ಟೆಯ ಲಘು ಲಯದ ಸ್ವೀಕಾರಿ
- > ನಿಲ್ಲಲು, ಮಂಡಿಯೂರಿ, ಕುಳಿತುಕೊಳ್ಳಲು ಮತ್ತು ಕುಳಿತುಕೊಳ್ಳಲು ಪ್ರಯತ್ನಿಸಿ

### ಪ್ರಸವಪೂರ್ವ ಆರೈಕೆ



- > ರಕ್ತಸ್ರಾವವನ್ನು ಪರೀಕ್ಷಿಸಿ
- > ಸಾಕಷ್ಟು ವಿಶ್ರಾಂತಿ ತೆಗೆದುಕೊಳ್ಳಿ
- > ಸ್ನಾನಗಳಲ್ಲಿ ಆಗುವ ಬದಲಾವಣೆ ಗಮನಿಸಿ
- > ಮೊಲತೊಟ್ಟುಗಳನ್ನು ಸ್ವಚ್ಛಗೊಳಿಸಿ
- > ಆರೋಗ್ಯಕರ ಆಹಾರವನ್ನು ಕಾಪಾಡಿಕೊಳ್ಳಿ ಮತ್ತು ಸಾಕಷ್ಟು ನೀರಿನಂತೆ ಇತರ ಸೇವಿಸಿ, ಸರಿಯಾಗಿ ನೀರು ಕುಡಿಯಿರಿ
- > ವೈಯಕ್ತಿಕ ಸ್ನೇಹವನ್ನು ಕಾಪಾಡಿಕೊಂಡು ಯಾವುದೇ ಸೋಕು ಬಾರದಂತೆ ಎಚ್ಚರಿಕೆ ವಹಿಸಿ
- > ಯಾವುದೇ ಸಮಸ್ಯೆಯ ಲಕ್ಷಣ ಕಂಡು ಬಂದರೆ ತಕ್ಷಣ ವೈದ್ಯಕೀಯ ಸಹಾಯ ಪಡೆಯಿರಿ



**ನವಜಾತ ಶಿಶುವಿನ ಆರೈಕೆ:**

- > ಪ್ರತಿ 2-3 ಗಂಟೆಗಳಿಗೊಮ್ಮೆ ಮತ್ತು ಬೇಡಿಕೆಯೇರಲಿ ಆಹಾರ ನೀಡಿ
- > ಹಾಲುನೋಡಿದ ನಂತರ ಮಗುವಿಗೆ ಡೇಗ ತೆಗಿಸಿ
- > ಮೊದಲ ಆರು ತಿಂಗಳ ಕಾಲ ವಿಶೇಷ ಸ್ವಸ್ಥಜ್ಞನ
- > ಮಗುವನ್ನು ಬೆಚ್ಚಗೆ ಇರಿಸಿ ಮತ್ತು ಮಗುವನ್ನು ಎತ್ತಿಕೊಂಡಾಗ ಕುತ್ತಿಗೆಯನ್ನು ಓಡಿಯಿರಿ
- > ರೋಗನಿರೋಧಕ ವೇಕಾಪಟ್ಟಿಯನ್ನು ಅನುಸರಿಸಿ

### स्तनपान तंत्र



- सरळ बसा आणि स्वतःला उशाने आधार घ्या
- बाळाला तिच्या पाठीमागे आणि खांद्यावर घरा
- बाळाचे नाक तुमच्या निप्पलच्या रेषेत आणा आणि हळूवारपणे ब्रश करा
- जेव्हा बाळाचे तोंड उघडे असते तेव्हा त्वरीत ते तुमच्या स्तनाजवळ आणा, ते सुरु करतील चोखण

### बाळासाठी स्तनपान फकायदे

- पचायला सोपे
- बाळाच्या वाढीशी जुळवून घेते
- रोगप्रतिकार शक्ती प्रदान करते
- अर्भक-माता संबंधांना प्रोत्साहन देते
- कमी आजारी पडतात

### गर्भधारणेदरम्यान वडिलांची भूमिका

- भैम आणि आपुलकी दाखवा
- घरच्या कामात मदत
- चांगला श्रोता व्हा
- एकत्रितपणे योजना करा
- तला वेदना होत असताना मसाज घ्या
- तिने पौष्टिक पदार्थ खाल्ल्याची खात्री करा
- प्रसूतीपूर्व तपासणीसाठी तिच्यासोबत या
- निरोगी संवादासह चांगले संबंध ठेवा
- सर्व आर्थिक गरजा व्यवस्थापित करा आणि आपत्कालीन निधी तयार ठेवा
- पालक म्हणून लोकांशी त्यांच्या अनुभवांबद्दल बोला
- प्रसूती पिशवी तयार ठेवा
- स्तनपान आणि डायपर बदलण्यात मदत
- पुढील गर्भधारणेसाठी दोन वर्षांचे अंतर ठेवा



### गर्भधारणा शिक्षण मार्गदर्शक

प्रथमच पालकांसाठी



### गरोदरपणात काय करावे आणि काय करू नये



**करा:**

- वैयक्तिक स्वच्छता राखा
- पुरेशी विश्रांती आणि झोप घ्या
- हृगामी फळे आणि भाज्या खा
- भरपूर पाणी प्या
- मध्यम व्यायाम करा
- नियमित प्रसूतीपूर्व तपासणीसाठी जा
- आयर्न फर्माॅलिक अॅसिडच्या गोळ्या घ्या
- दोन टिर्टेनस टॉक्सॉइड (TT) इंजेक्शन घ्या

**करू नका:**

- द्रव्यजड वस्तू उचलणे टाळा
- उंच टाच घालू नका
- घट्ट कपडे टाळा
- तेलकट आणि मसालेदार पदार्थ टाळा
- मद्य आणि तंबाखू टाळा
- लिहून न दिलेली औषधे घेऊ नका
- लांबचा प्रवास आणि धक्काबुक्की टाळा

### गर्भधारणेदरम्यान कोविड-१९ काळजी

- साबणाने व पाण्याने हात धुवा
- आपले डोळे, नाक आणि तोंडाला स्पर्श करणे टाळा
- सामाजिक अंतर राखा
- गर्दीची ठिकाणे टाळा
- आपल्या वाकलेल्या कोपर किंवा रुमालामध्ये खोकला किंवा शिकणे
- जर तुम्हाला ताप, खोकला किंवा श्वास घेण्यास त्रास होत असेल तर लवकर काळजी घ्या



### गर्भधारणेदरम्यान चेतावणी चिन्हे



- जास्त ताप
- फिफ्ट / आकुंचन
- सतत पोटदुखी
- योनीतून रक्तस्राव होणे किंवा गळणे
- हात पायांना जास्त सूज येणे
- गर्भाची हालचाल कमी होणे किंवा होत नाही
- दोन दिवसांपेक्षा जास्त काळ उलट्या होणे
- लघवी करताना वेदना किंवा जळजळ होणे

### श्रमाची चिन्हे

- क्रॅम्पस सारखा कालावधी
- पाणी तुटणे
- पाठीच्या खालच्या भागात दुखणे वाढणे
- मजबूत, वारंवार आकुंचन
- योनीतून स्राव सारखा गुलाबी किंवा लालसर तराकिरी जेली

### श्रम दरम्यान स्वतः ची मदत



- फिफरा
- मृत्राशय रिकामे करा
- दीर्घ श्वासनाचे व्यायाम करा
- ओटीपोटात हलके तालबद्ध स्ट्रेक
- उभे राहण्याचा, गुडघे टेकून, बसण्याचा आणि बसण्याचा प्रयत्न करा

### जन्मानंतरची काळजी



**आई:**

- रक्तस्राव तपासा
- पुरेशी विश्रांती घ्या
- कोणत्याही बदलांसाठी तुमचे स्तन तपासा
- स्तनाग्र स्वच्छ करा आणि आहार दिल्यानंतर कोरडे ठेवा
- निरोगी आहार ठेवा आणि भरपूर द्रव प्या
- संसर्ग टाळण्यासाठी वैयक्तिक स्वच्छता ठेवा
- कोणतीही गुंतागुंत झाल्यास त्वरित वैद्यकीय मदत घ्या

**नवजात:**

- दर २-३ तासांनी आणि मागणीनुसार आहार घ्या
- प्रत्येक फ्रीड नंतर बर्प
- पहिले सहा महिने विशेष स्तनपान
- बाळाला उबदार ठेवा आणि धरताना मानेला आधार घ्या
- लसीकरणाचे वेळापत्रक पाळा



## ANNEXURE VIII

## PUBLICATIONS

## CLINICAL EVALUATION &amp; IMPROVEMENT

*childbearing*

## Attitudes of First-Time Fathers in South India Toward Their Role in Their Wives' Prenatal Period

Arenlila Jamir, Sangeeta Kharde & Anita Dalal

### ABSTRACT

**Objective:** To assess the attitudes of first-time fathers toward their role during their wives' prenatal period.

**Design:** Cross-sectional study.

**Setting:** Tertiary care hospital in South India.

**Participants:** First-time fathers accompanying their pregnant wives to an antenatal clinic.

**Methods:** Participants were surveyed to collect information on their attitudes toward their role during the prenatal period. The survey captured attitudes about fathers' role in pregnancy care; role as financial provider; and need to provide physical, emotional, moral, and social support.

**Results:** Two hundred fathers were included in the sample. Approximately 17.5% ( $n = 35$ ) had a positive attitude toward their role in the prenatal period, whereas 40% ( $n = 80$ ) had a negative attitude. Having a joint family (i.e., husband, wife,

children, and husband's parents) was found to be negatively associated with fathers' attitudes toward their role during the prenatal period ( $p < .05$ ).

**Conclusion:** The findings revealed that the presence of a joint family structure was associated with a more negative attitude among fathers toward their role in their wives' pregnancies. Antenatal care should include education programs aimed at enhancing husbands' knowledge, awareness, and active participation during the prenatal period.

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**KEYWORDS:** attitudes, first-time father, husband, paternal involvement, pregnancy, prenatal care

### CLINICAL IMPLICATIONS

- First-time fathers need to be identified and included in prenatal education by health care providers at antenatal clinics.
- Health care providers should prioritize health promotion strategies that empower men with information concerning anticipating and preparing for pregnancy and labor.
- To promote increased male attendance during antenatal clinics, it is crucial to design antenatal care processes with a supportive physical environment that actively encourages male participation and recognizes their sociocultural roles.

Becoming a first-time father and embracing the role of fatherhood can be a profoundly valuable and transformative experience (Ghaffari et al., 2022). The active involvement of a father during the prenatal period can significantly affect the health outcomes of the mother and child (Eddy & Fife, 2021). When fathers actively participate during pregnancy, it can foster a positive environment; contribute to a decrease in negative maternal health behaviors; and lower the risks associated with preterm birth, low birth weight, and fetal growth restriction (Alio et al., 2010). Fathers' involvement in pregnancy is also associated with lower rates of maternal mortality (Mersha, 2018; Yargawa & Leonardi-Bee, 2015). Although the mechanisms by which fathers' involvement influences maternal and neonatal outcomes are not fully understood, studies suggest that fathers' involvement can influence care-seeking behaviors, home care practices, and the dynamics of couple relationships (Sitefane et al., 2020; Tokhi et al., 2018). Despite the growing evidence supporting fathers' involvement during pregnancy, Indian social behavior may interfere with this involvement.

The health and well-being of women and newborns can be significantly influenced by the approaches fathers adopt during their wives' pregnancies. These acts include accompanying their wives to antenatal visits, giving physical and emotional support, providing nutritious foods and financial support, showing care and empathy, and being a good listener (Souza Vidal Lima et al., 2021). However, men in South India face lower expectations around caregiving, leaving many first-time fathers uncertain about their roles during their wives' pregnancies (Chattopadhyay & Govil, 2021). In this culture, the nurturing role for a father is not emphasized, and as a result, ambiguity surrounding men's roles during pregnancy

persists. Moreover, the absence of paternity leave creates hurdles for fathers to fully engage in the prenatal period process.

Although there has been a growing emphasis on the involvement of fathers during the prenatal period, research on knowledge and attitudes regarding their role in pregnancy care remains limited. Men's knowledge and attitudes toward maternal health may be influenced by patriarchal standards, which are detrimental to maternal health care in many ways (Craymah et al., 2017). In India, a husband's attitude toward pregnancy care, nonviolent interactions, and respect toward his wife greatly influences his likelihood of accompanying her to antenatal care (ANC) visits. The presence of men at ANC visits is a crucial factor in determining the occurrence of births in health care institutions. Promoting a healthy husband-wife relationship and improving a husband's understanding of maternal care are positively associated with greater rates of institutional births (Chattopadhyay & Govil, 2021). Institutional births in India have seen a marked increase because maternal death is a major public health issue due to home births without skilled care (Bajeli-Datt, 2023). Therefore, a father's participation is essential to achieve positive maternal and neonatal health outcomes and to encourage social and behavioral changes that inspire men to take on more responsible roles in maternal health care. To better understand South Indian men's perspectives toward their involvement during the prenatal period, we assessed the attitudes of first-time fathers attending ANC visits in a tertiary care center in South India.

### Methods

This cross-sectional study was conducted in a prenatal clinic of a tertiary care hospital in South India from September 2022 to December 2022. The study received approval from the Institutional Ethics Committee on Human Subjects, indicating that all ethical standards have been adhered to in the study design (KAHER/EC/21-22/013, dated July 29, 2021). Furthermore, the study was conducted in alignment with the principles outlined in the Declaration of Helsinki.

Two hundred fifteen fathers were invited to participate; of these, 200 consented to participate and were enrolled from the antenatal outpatient department as they accompanied their wives during their ANC visits. Inclusion criteria for the study included being a first-time father and expressing a willingness to partake in the study. Once eligibility was determined, an informed consent form was administered, reviewed, and signed. The participants then completed a survey that captured their sociodemographic information and attitudes toward their role during the prenatal period.

### Measures

We collected data on various demographic characteristics of the fathers, including their age group, religious beliefs, educational background, occupation, family income, family type, and area of residence (see Table 1).

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Attitudes of First-Time Fathers in South India

**TABLE 1 DEMOGRAPHIC VARIABLES**

Variables	n (%)
<b>Age of father, years</b>	
21–25	51 (25.5)
26–30	118 (59.0)
≥31	31 (15.5)
<b>Religion</b>	
Hindu	131 (65.5)
Christian	18 (9.0)
Muslim	51 (25.5)
<b>Education</b>	
No formal education	10 (5.0)
Primary education	61 (30.5)
Secondary education	78 (39.0)
Diploma/graduate and above	51 (25.5)
<b>Occupation</b>	
Farmer	18 (9.0)
Laborer/daily wager	20 (10.0)
Government employee	36 (18.0)
Private employee	79 (39.5)
Self-employed	47 (23.5)
<b>Family income/month, INR/US\$</b>	
≤10,000/≤\$120	53 (26.5)
10001–20000/\$121–\$240	103 (51.5)
20,001–30,000/\$241–\$360	40 (20.0)
>30,000/>\$360	4 (2.0)
<b>Type of family</b>	
Nuclear	77 (38.5)
Joint	123 (61.5)
<b>Area of residence</b>	
Urban	81 (41.0)
Rural	119 (59.0)

Note. INR = Indian rupee.

Participants' attitudes toward their role during the prenatal period were assessed using a 30-item scale that comprised positive and negative statements using a 5-point Likert scale. The scale included the following topics: father's role in pregnancy care, emotional support, physical support, being a good listener, maintaining healthy communication, providing nutritious foods, planning together for parenthood, accompanying

their pregnant spouse to ANC visits, financial responsibilities, preparing for the birth and baby, and becoming a father. For positive statements, the response items ranged from 5 (*strongly agree*) to 1 (*strongly disagree*); opposite scoring was used for negative statements. Total scores ranged from 30 to 150, with total scores ranging from 31 to 70 indicating a negative attitude, 71 to 110 a neutral attitude, and 111 to 150 a positive attitude. To determine the reliability of this questionnaire, Cronbach's alpha was used ( $\alpha = .80$ ).

### Data Analysis

Data were entered into a spreadsheet (Microsoft Office Excel 2019) and imported to SPSS software version 20.0 for analysis. Data were subjected to exploratory analysis to ensure data consistency and completeness. Descriptive statistics were analyzed to describe traits and attitudes of the participants. Additionally, a chi-square test was performed to examine the association between the sociodemographic variables and attitude scores. Sociodemographic characteristics were the independent variables, and attitude was the dependent variable.

## Men in South India face lower expectations around caregiving, leaving many first-time fathers uncertain about their roles during their wives' pregnancies

### Results

The majority of the study participants were Hindu ( $n = 131$ , 65.5%), had a formal education ( $n = 190$ , 95%), held private employment positions ( $n = 79$ , 39.5%), had a family income that fell within 10,001 to 20,000 Indian rupees (equivalent to US\$121–US\$240;  $n = 103$ , 51.5%), had a joint family system ( $n = 123$ , 61.5%), and resided in rural areas ( $n = 119$ , 59%; see [Table 1](#)).

Regarding participants' attitudes toward their involvement during the prenatal period, a relatively small proportion (17.5%,  $n = 35$ ) exhibited a positive attitude toward their role in the prenatal period. In contrast, 40% ( $n = 80$ ) of participants held negative attitudes, and 42.5% ( $n = 85$ ) maintained a neutral stance on this matter.

At a significance level of  $p < .05$ , the results presented in [Table 2](#) demonstrate a statistically significant relationship between fathers' attitudes toward prenatal care and the type of family they belong to. A greater percentage ( $n = 59$ , 73.8%) of fathers from joint families had a negative attitude. This indicates that there is strong evidence to suggest that fathers' attitudes toward their role in their wives' prenatal period are influenced by the type of family they are a part of.

TABLE 2 ASSOCIATION OF ATTITUDE SCORE WITH SELECTED DEMOGRAPHIC VARIABLES

Sociodemographic Variables	Attitude					
	Negative		Neutral		Positive	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age, years $\chi^2(df = 4) = 2.05, p = .727$						
21-25	19	23.8	21	24.7	11	31.4
26-30	51	63.7	49	57.6	18	51.4
≥31	10	12.5	15	17.7	6	17.1
Religion $\chi^2(df = 4) = 2.09, p = .719$						
Hindu	53	66.3	53	62.4	25	71.4
Christian	7	8.8	7	8.2	4	11.4
Muslim	20	25	25	29.4	6	17.1
Educational status $\chi^2(df = 6) = 4.768, p = .574$						
No formal education	3	3.8	5	5.9	2	5.7
Primary education	23	28.7	26	30.6	12	34.3
Secondary education	38	47.5	29	34.1	11	31.4
Diploma/graduate	16	20	25	29.4	10	28.6
Occupation $\chi^2(df = 8) = 7.603, p = .473$						
Farmer	6	7.5	10	11.8	2	5.7
Laborer/daily wager	9	11.3	9	10.6	2	5.7
Government employee	14	17.5	17	20	5	14.3
Private employee	28	35	36	42.4	15	42.9
Self-employed	23	28.7	13	15.3	11	31.4
Family income/month, INR/US\$ $\chi^2(df = 6) = 2.38, p = .882$						
≤10,000/\$120	24	30	22	25.9	7	20
10,001-20,000/\$121-\$240	39	48.8	46	54.1	18	51.4
20,001-30,000/\$241-\$360	15	18.8	16	18.8	9	25.7
>30,000/>\$360	2	2.5	1	1.2	1	2.9
Type of family $\chi^2(df = 2) = 18.464, p < .05$						
Nuclear	21	26.2	32	37.6	24	68.6
Joint	59	73.8	53	62.4	11	31.4

(continued)

Attitudes of First-Time Fathers in South India

TABLE 2 CONTINUED

Sociodemographic Variables	Attitude					
	Negative		Neutral		Positive	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Area of residence $\chi^2(df = 2) = 1.116, p = .572$						
Urban	29	36.3	36	42.4	16	45.7
Rural	51	63.7	49	57.6	19	54.3

Note. INR = Indian rupee.

Additionally, fathers in the age group of 26 to 30 years were found to have a more ( $n = 51, 63.7\%$ ) negative attitude, although it was not statistically significant at  $p < .05$ .

## Discussion

In this study, we assessed the attitudes of first-time fathers toward their role in their wives' prenatal period. The results indicated that only 17.5% of men had a positive attitude regarding their role in the prenatal period, whereas the majority of fathers had a negative (40%) or neutral (42.5%) attitude. The current study findings align with those of a previous study by Matseke et al. (2017) in which a significant proportion of the male participants showed unwillingness and embarrassment (negative attitude) toward their involvement in pregnancy care. This finding may be due to prevailing patriarchal norms in Indian society, which assign men the role of the primary breadwinner and give decision-making authority to elder family members (Singh & Ram, 2009). Additionally, authors of previous research found that fathers believed that pregnancy is a normal process and that they have no role to play in pregnancy care. They viewed their involvement in maternal health care as an unnecessary intrusion (Aborigo et al., 2018). This perspective aligns with the findings of a study conducted by Pruthi et al. (2016), in which virtually all (94%) fathers held a similar viewpoint. Sarvar et al. (2018) also found that approximately one fourth of men studied expressed that their paternal involvement was restricted because of work and various other obligations. Furthermore, men in the sample attributed their lack of involvement during their spouses' pregnancies to traditional male roles, lack of knowledge, previous negative experiences in health care, and perceived low accessibility to join ANC visits (Sarvar et al., 2018).

Our study not only confirms but also sheds light on the association between fathers' attitudes toward their role during the prenatal period and family structures. Specifically, joint family types were associated with fathers exhibiting a negative attitude toward their involvement in their wives' pregnancies. A large percentage of the fathers in this study were from rural areas (59%,  $n = 119$ ) and belonged to joint families (61.5%,  $n = 123$ ), in which decisions are made by the elders

of the family, and traditional gender roles may be more dominant than seen in urban areas and metropolitan cities (Allendorf, 2010). Family type can significantly shape a man's understanding and attitude toward his role during his wife's prenatal period. In parallel studies conducted by Pruthi et al. (2016) and Gundluru et al. (2022), it was observed that individuals from nuclear families (i.e., a family composed of a husband, wife, and their children) tended to exhibit slightly higher levels of knowledge and participation in the prenatal period. Additionally, according to Singh & Ram, 2009, in nuclear families, a husband often assumes greater responsibility for the care of his wife and is more likely to make decisions as the head of the household. Conversely, in joint families, there may be numerous family members available to support a pregnant woman, leading the husband to be less concerned and less involved (Carter, 2002).

## Limitations

Although this study provides valuable insights into the attitudes of first-time fathers toward their role in their wives' prenatal period, it is important to acknowledge its inherent limitations, which add context to the findings. First, the study faced constraints due to a relatively small sample size. The inclusion criteria were deliberately selective, focusing on fathers who not only accompanied their spouses to antenatal clinics but were also willing to participate in the study. This selectivity, although necessary for the study's objectives, could potentially introduce bias into the results. A larger and more diverse sample might have provided a broader perspective on the subject matter. Second, the study's geographic focus on a single setting restricts the universality of its results. Cultural, socioeconomic, and regional differences may not be fully represented, limiting the generalizability of our findings. Additionally, the study used a 5-point Likert attitude scale that had not been used in other studies. The absence of established benchmarks from previous studies makes it challenging to place our results in a broader research context. These limitations underscore the need for further research to validate and expand on these findings, enhancing our understanding of first-time fathers' attitudes

toward their wives' prenatal period in a more universally applicable manner.

**These findings underscore the need to consider family dynamics when assessing and promoting men's participation in their wives' prenatal period**

### Implications for Practice

These findings underscore the need to consider family dynamics when assessing and promoting men's participation in their wives' prenatal period. To promote men's active involvement in their spouses' pregnancies and ensure healthier pregnancies, a holistic approach should be adopted throughout every aspect of prenatal care services. First, structured health education programs for couples could serve as a consistent platform for fathers to gain essential knowledge about the prenatal period and better comprehend the complexities of their partners' pregnancy journeys. Equipped with this knowledge, expectant fathers can actively engage in the prenatal period and provide effective support to their partners. Simultaneously, awareness campaigns could be conducted across various settings, including hospitals (such as ANC outpatient departments, labor rooms, and postpartum units), community health centers, and subcenters. A single subcenter is the first point of contact for those seeking health care services in the Indian health care system; a single subcenter serves 3,000 to 5,000 individuals (Bashar & Goel, 2017). These campaigns would aim to increase male involvement in women's health and bolster husbands' social support during the prenatal period and childbirth. Furthermore, hospitals could adopt policies that promote the initiation of parenting classes for first-time parents attending antenatal clinics.

In rural settings, addressing the challenges posed by joint family dynamics, especially the influence of elder family members such as fathers-in-law and mothers-in-law, is crucial. These respected figures often hold control over family decisions, including health care and family planning. To overcome these barriers effectively, informal and formal group discussions should be initiated and led by accredited social health activists, Anganwadi workers, and auxiliary nurse-midwives. In India, these individuals are all health care providers trained at the community level who facilitate access to health care and play a pivotal role in community mobilization, ensuring that residents have access to essential health care services (Kalne et al., 2022). These individuals are not just health care providers—they are trusted pillars of support in the community. They are well placed to initiate regular communication, provide essential information, and offer

counseling services to families and women. Their influence extends not only to households but also to local village leaders. Through this comprehensive approach, a supportive ecosystem that empowers expectant fathers and ultimately contributes to healthier pregnancies and childbirth experiences for women could be created.

### Conclusion

Cultural and traditional beliefs as well as gender role perceptions may strongly influence the attitude of first-time fathers in South India toward their involvement during their spouses' pregnancies. Overall, there was a small percentage of first-time fathers who held positive attitudes toward participating and supporting their wives' pregnancies. The findings from this study also showed that family type—joint or nuclear—may also influence a father's attitude and involvement in his wife's pregnancy. Because fathers in South India often play significant roles as decision-makers in families, a positive shift in their attitudes could make a considerable difference in ensuring a favorable and healthy pregnancy outcome. Health education programs, hospitals, and health care providers involved in the prenatal care of women should involve fathers and, when appropriate, their parents to promote their active participation and support throughout the prenatal period.

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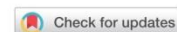
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## RESEARCH ARTICLE

## Health-seeking behavior of first-time mothers toward pregnancy

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### Abstract

This study was done to evaluate the health behaviors of first-time mothers during pregnancy. A hospital-based cross-sectional study was conducted among 220 first-time expectant mothers who attended the antenatal OPD. Non-probability purposive sampling technique was used to recruit the participants. The participants then completed a survey that captured their socio-demographic information and health practices during pregnancy using self-rated abilities for health practices (SRAHP) scale. SPSS software was used to analyze the data, using frequency, percentage, mean, standard deviation and chi-square test. Around 75% had poor adherence to health practices during pregnancy, while about a quarter (25%) showed average practices, and none demonstrated good health practices. Though they had low levels of health practices overall, participants had better nutritional practices, followed by psychological well-being and responsible health practices. Whereas, incorporating exercise into their daily routine was relatively lower. The study also identified significant associations between health practices and demographic variables such as the mother's age, educational background, occupation, and family income at  $p < 0.001$ . The study highlights poor adherence to health practices of expectant mothers. Therefore, promoting healthy practices during pregnancy through effective education and counseling strategies is strongly advised to raise awareness and enhance overall well-being.

**Keywords:** Pregnancy, Health-seeking behavior, Health practices, Primi mothers, Pregnant mothers.

### Introduction

Pregnancy is a transformative experience that introduces new responsibilities, joys, and concerns, potentially altering the physical, mental, and health behaviors of mothers (Lou *et al.*, 2017). The lifestyle changes demand the health of both the mother and the baby (Moshki and Cheravi, 2016). WHO emphasizes proactive engagement with pregnant women regarding health-related practices such as maintaining a nutritious diet, incorporating regular physical activity,

ensuring adequate intake of food supplements, and refraining from substance use or abuse (World Health Organization, 2016). Such practices are fundamental during pregnancy and serve as determinants of the general health status of the mother (Ghahremani *et al.*, 2017). The health practices and lifestyles of expectant mothers typically influence the frequency and severity of common pregnancy discomforts, encompassing nausea, back pain, urinary incontinence, sleep quality, mental well-being, and notably, mood (Foxcroft *et al.*, 2013).

A woman's chance of ensuring the health of her baby improves as she incorporates healthy behaviors. Embracing health-seeking practices not only positively influences the well-being of expectant mothers, but also contributes to the optimal development of their offspring (Górnaczyk *et al.*, 2017). Some of the demographic factors need to be kept in mind, like educational attainment, employment status, income, religion, depression, and social support as it got impact on pregnancy outcomes. It is noteworthy that suboptimal health practices have repercussions, both in the short and long term, impacting the well-being of both the mother and the developing fetus (Alhusen *et al.*, 2016). Access to and utilization of antenatal care (ANC) emerge as crucial factors influencing the overall pregnancy experience. Healthy pregnancy culminates into a healthy baby and reduced pregnancy-related complications (World Health Organization, 2014). Hence, the current study is undertaken

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to assess the health practices of expectant mothers during pregnancy and explore the associated factors.

### Materials and Methods

This cross-sectional study was conducted in a prenatal clinic of a tertiary care hospital in North Karnataka, India, to investigate the health practices during pregnancy and its associated factors among 220 first-time mothers. Participants were enrolled from the antenatal outpatient department during their ANC visits, using a non-probability purposive sampling technique. The study's inclusion criteria encompassed individuals who were first-time mothers, at 20 to 24 weeks of gestation, had a singleton fetus, and demonstrated a willingness to participate in the research. Once eligibility was determined, an informed consent form was administered, reviewed, and signed. The participants then completed a survey that captured their socio-demographic information and health practices during pregnancy using a self-rated abilities for health practices (SRAHP) scale. This 28-item tool utilized a 5-point scale to assess the self-perceived ability to engage in health-promoting behaviors. It comprised of four sub-scales: Nutrition, Psychological Well-being, Exercise, and Responsible Health Practices, each containing seven items. Responses ranged from 0 (not at all) to 4 (completely), with total scores ranging from 0 to 112, and each sub-scale had a potential range of 0 to 28. Total scores were obtained by summing sub-scale scores, where higher scores signified enhanced self-efficacy for health practices. The scores underwent conversion into percentages, where  $\leq 50\%$  denoted poor health practices, 51 to 75% represented average practices, and  $\geq 76\%$  signified good health practices. Participants were subsequently classified based on their scores, categorizing them into groups with good, average, or poor health practices.

The study received approval from the Institutional Ethics Committee on Human Subjects, indicating that all ethical standards have been adhered to the study.

### Statistical Analysis

Data gathered were entered into MS Office Excel 2019 and subsequently imported into SPSS software version 20.0 (Armonk, IBM\_SPSS-NY, USA) for thorough analysis. An exploratory analysis was conducted to verify the consistency and completeness of the data. Descriptive statistics were then employed to characterize participant traits. Furthermore, a chi-square test was carried out to investigate the association between socio-demographic variables and health practices during pregnancy. A significance level of  $p < 0.05$  was employed to ascertain statistical significance.

### Results

Overall, most of the participants were in the age group of 21 to 25 years (57.7%,  $n = 127$ ), with a formal education (92.7%,

$n = 204$ ), engaged as homemakers (71.4%,  $n = 157$ ) and their family incomes fell within 10,001 to 20,000 Indian Rupees (47.3%,  $n = 104$ ). More than half of the participants lived in joint family setups (65%,  $n=143$ ), resided in rural areas (57.3%,  $n = 126$ ), and adhered to a mixed diet (56.4%,  $n = 124$ ) (Table 1).

Table 2 provides insights into the health practices adopted by mothers during pregnancy. It was found that the majority of participants (75%,  $n = 165$ ) exhibited a poor adherence to healthy practices. In contrast, one-fourth of the participants (25%,  $n = 55$ ) demonstrated an average level, while none had good health practices during pregnancy. Table 3 indicates participants' belief that they have a better

**Table 1:** Socio-demographic characteristics of the participants,  $n = 220$

Variables	Frequency	Percentage
<b>Age group (in years)</b>		
$\leq 20$ years	43	19.5
21–25 years	127	57.7
$\geq 26$ years	50	22.7
<b>Religion</b>		
Hindu	144	65.5
Christian	23	10.5
Muslim	53	24.1
<b>Educational Qualification</b>		
No education	16	7.3
Primary education	82	37.3
Secondary	85	38.6
Graduate and above	37	16.8
<b>Occupation</b>		
Farmer	23	10.5
Homemaker	157	71.4
Laborer/daily wager	28	12.7
Employee	12	5.5
<b>Family Income/month (in INR)</b>		
1–10000	99	45.0
10001–20000	104	47.3
$\geq 20001$	17	7.7
<b>Type of family</b>		
Nuclear	77	35.0
Joint	143	65.0
<b>Area of residence</b>		
Urban	94	42.7
Rural	126	57.3
<b>Diet</b>		
Pure Vegetarian	44	20.0
Vegetarian with egg	52	23.6
Mixed	124	56.4

ability to engage in nutritional practices, with a mean of 12.26, followed by psychological well-being (11.87) and responsible health practices (11.85). Whereas, incorporating exercise into their daily routine was relatively lower, with a mean score of 6.63.

With a significance level set at  $p < 0.05$ , the findings presented in Table 4 demonstrate a statistically significant relationship between health practices during pregnancy and various socio-demographic variables among the study participants. Specifically, the age of the mother, educational status, maternal occupation, and family income exhibited significant associations with health practices, at  $p < 0.001$ .

### Discussion

The results of the current study indicate that a significant majority (75%) of participants exhibited poor health practices during pregnancy. In contrast, one-fourth (25%) demonstrated average practices, with none falling into the category of good health practices during pregnancy. A similar study by Gebremariam *et al.* (2023) also showed that 45% of the mothers had poor health practices during pregnancy. The health behaviors of expectant mothers have the potential to impact both maternal and fetal well-being, influencing the overall outcomes of pregnancy. (Widen and Siega-Riz, 2010).

The comprehensive mean score for health practices in this study was relatively low, amounting to 42.62 out of the attainable range of 0 to 112. This is in contrast to studies conducted by Hadian *et al.* (2021) in Iran, Yanikkerem *et al.* (2012) in Turkey, and Canella (2006) in New Jersey, which reported higher levels of health practices among pregnant women. According to Güney (2022), higher health practices during pregnancy were related to improved health behaviors, increased social support, and higher levels of education. These findings may be attributed to variances in socio-cultural and demographic factors across different countries. Additionally, in this study, exercise was the least adhered health practice with a mean score of 6.63 out of 28, which indicates that pregnant women did not incorporate exercise into their daily routine during pregnancy. Nguyen *et al.* (2022) in Vietnam also found that only 13% of pregnant women did physical exercise during pregnancy. Conversely, findings by Lindqvist *et al.* (2017) revealed a common desire among pregnant women to enhance their well-being by increasing physical activity and managing weight. Their motivation for lifestyle changes was deemed equal to their perceived ability to implement them.

**Table 2:** Level of health practices during pregnancy

Levels	Frequency	Percentage
Poor ( $\leq 50\%$ )	165	75.0
Average (51–75%)	55	25.0
Good ( $\geq 76\%$ )	0	0
Total	220	100

**Table 3:** Sub-scale scores and total score of Self Rated Abilities for Health Practices scale (SRAHP),  $n = 220$

Sub-scales	Mean and SD
Nutrition	12.26 $\pm$ 4.34
Psychological well-being	11.87 $\pm$ 3.52
Exercise	6.63 $\pm$ 3.99
Responsible health practices	11.85 $\pm$ 3.03
Total Score	42.62 $\pm$ 12.30

**Table 4:** Association between levels of SRAHP with demographic variables

Variables	Levels of Health Practices			
	Poor		Average	
	n	%	n	%
Age group (in years)	Chi-square (d.f. = 2) = 42.292, $p = 0.001^*$			
$\leq 20$	37	86.0	6	14.0
21–25	108	85.0	19	15.0
$\geq 26$	20	40.0	30	60.0
Religion	Chi-square (d.f. = 2) = 2.513, $p = 0.285$			
Hindu	105	72.9	39	27.1
Christian	16	69.6	7	30.4
Muslim	44	83.0	9	17.0
Educational Status	Chi-square (d.f. = 3) = 19.771, $p = 0.001^*$			
No Education	14	87.5	2	12.5
Primary Education	70	85.4	12	14.6
Secondary	63	74.1	22	25.9
Graduate and above	18	48.6	19	51.4
Occupation	Chi-square (d.f. = 3) = 54.865, $p = 0.001^*$			
Farmer	22	95.7	1	4.3
Home Maker	129	82.2	28	17.8
Laborer/Daily Wager	14	50.0	14	50.0
Employee	0	0	12	100.0
Family Income/month (in INR)	Chi-square (d.f. = 2) = 17.880, $p = 0.001^*$			
1–10000	85	85.9	14	14.1
10001–20000	73	70.2	31	29.8
$\geq 20001$	7	41.2	10	58.8
Type of family	Chi-square (d.f. = 1) = 0.806, $p = 0.369$			
Nuclear	55	71.4	22	28.6
Joint	110	76.9	33	23.1
Area of residence	Chi-square (d.f. = 1) = 0.025, $p = 0.875$			
Urban	70	74.5	24	25.5
Rural	95	75.4	31	24.6
Diet	Chi-square (d.f. = 2) = 3.436, $p = 0.179$			
Pure Vegetarian	31	70.5	13	29.5
Vegetarian with Egg	44	84.6	8	15.4
Mixed	90	72.6	34	27.4

\* $p < 0.05$

Our study findings also highlighted that there was a statistically significant association between health practices and age, education, occupation, and family income. Likewise, a study by Montazeri *et al.* (2023) found a notable relationship between health practices and variables such as educational attainment, occupational status, marital satisfaction and family income. On the contrary, Gebremariam *et al.* (2023) found that gravidity and parity had a significant association with health practices during pregnancy.

Poor health practices of mothers during pregnancy can significantly impact the well-being and development of the child, leading to enduring consequences for both the mother and the fetus. Expectant mothers, especially those experiencing pregnancy for the first time, might lack awareness regarding the significance of adopting healthy practices and their beneficial impact on pregnancy outcomes. Therefore, healthcare providers must prioritize the evaluation of pregnant women regarding their health practices. In instances where suboptimal practices are recognized, it is crucial to extend the necessary support by conducting health programs to increase mothers' awareness on healthy behaviors during pregnancy.

### Conclusion

Our study found that most of the participants displayed poor adherence to health practices by expectant mothers during pregnancy. Despite displaying a low adherence to health practices overall, participants showed better self-efficacy for nutritional practices, followed by psychological well-being and responsible health practices. Whereas, their adherence to incorporating exercise into their routine was comparatively lower. Factors such as the mother's age, educational background, occupation, and family income were significantly associated with health practices. Encouraging awareness and improving overall well-being during pregnancy is highly recommended through the implementation of effective educational and counseling approaches that promote healthy practices.

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## ANNEXURE IX

**LIST OF VALIDATORS**

Sl. No	Name	Designation
1.	Dr. P.S. Remani	MD Obstetrics & Gynaecology; DGO DNB Professor and HOD (Dept. of OBG) Amala Institute of Medical Sciences Thrissur, Kerala
2.	Dr. Yaruiyam Mahongnao	MS Obstetrics & Gynaecology Medical Officer (District Hospital) Ukhrul, Manipur
3.	Dr. Anita Dalal	MD Obstetrics & Gynaecology Professor and HOD (Dept. of OBG) J.N. Medical College Belagavi, Karnataka
4.	Dr. Nidhi Patel	MS Obstetrics & Gynaecology; DNB Senior Resident (Dept. of OBG) J.N. Medical College Belagavi, Karnataka
5.	Dr. Jyoti Salunkhe	Professor and Dean Krishna Institute of Nursing Sciences, KIMSDU Karad, Maharashtra
6.	Dr. Christy Simpson	Professor and Principal College of Nursing Christian Institute of Health Sciences and Research Dimapur, Nagaland
7.	Dr. Sabitha Nayak	Professor and Vice Principal Nitte Usha Institute of Nursing Sciences Mangaluru, Karnataka
8.	Mrs. Sheetal Samson	Professional Midwife Fernandez Hospital Hyderabad, Andhra Pradesh
9.	Dr. S.S.Chate	MD Psychiatry Professor and HOD (Dept. of Psychiatry) J.N. Medical College Belagavi, Karnataka
10.	Dr. Bheemsain Tekkalaki	MD Psychiatry Associate Professor J.N. Medical College Belagavi, Karnataka