

Knowledge and Practice of Observing Daily Fetal Movement among Primigravid Women in Kellambakkam, Kanchipuram District, Tamil Nadu, India

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Abstract

A study to assess the Knowledge and practice of observing daily fetal movement among primigravid women under the selected tertiary care hospital, Kanchipuram District, Tamil Nadu, India. The objectives to assess the level of knowledge and practice of daily fetal movement, to determine the association of knowledge and practice of daily fetal movement in the primigravid women, selected tertiary care hospital. The convenience sampling was 53 in the Obstetrical and Gynaecological OPD . The data collection tool was validated and reliability was established. The data were collected by structured questionnaire . The collected data was tabulated and analysed. Descriptive and inferential statistical method were used. That study shows that the majority of 18(33.96%) primigravid women has Moderate knowledge 32(60.37%) of primigravid women has Inadequate knowledge 3 and (5.6%) of primigravid women has Adequate knowledge. Hence the result frequency and distribution of knowledge and practice of observing daily fetal movement among primigravid women (60.37%) Inadequate knowledge there is a risk of intrauterine death. Thus there is a need of assessment of knowledge of daily fetal movement among primigravid women.

Keywords: *Daily Fetal Movement, Primigravid Women.*

Introduction

“There is no better feeling than movement of life inside of you”

Mother can usually feel that their babies, moving in their wombs, around 16 to 20 weeks. Babies’ activities in the womb can vary considerably, some being very active and some being not so active. A decrease in a baby’s normal pattern of movements may be a sign that

the baby is struggling for some reason and it might be better for the baby to be born early. Hence, it has been suggested that if the mother her babies’ movements each day and there are several ways of doing this, she may be able to identify a decreased movement in her baby. It is further suggested that if the mother informs to caregivers of this, then the caregivers can do additional tests and some babies can be prevented from dying before birth. However, sometimes fetal movement tests may cause considerable anxiety for women and it is not easy for some women, especially when a mother is busy at work or caring for other children, so it is important to assess if these tests are helpful in identifying babies in difficulty in time.

The review of trails found (**WHO 2016**) five studies, which involving 71,458 women, comparing two fetal movement method, fetal movement versus hormonal analysis and routine fetal movement which is compared with standard antenatal care, as defined by trail authors.

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In studies that compared routine of baby's movements in the womb with mixed or undefined, there was no difference in stillbirths, caesarean sections, birth weight less than 10th centile and mother – baby attachment; there was reduction in women anxiety in the group the baby's movements. There was a tendency to more antenatal admissions. When baby's movement which was compared with hormonal analysis, there were fewer hospital visits among women who were and fewer babies in the hormonal analysis group who had low Apgar scores, which assess the baby's condition after birth. There was no difference between the groups in terms of caesarean sections was done and other outcomes. 'Perinatal death or severe morbidity' was not reported. When different types of fetal movement method (once a day compared to more than once a day) were compared, women were more compliant in using the once a day method, citing less interruption with daily activities as one is the reasons; the incidence of caesarean section did not differ and perinatal death or severe illness was not reported. The numbers and the methodological quality of studies were insufficient to assess stillbirths accurately. Further trails are suggested and it would be very important to assess women's anxiety and views in addition to the ability to prevent stillbirths.⁽¹⁾

Need for the Study: Since biblical times, fetal movements have been viewed as a reassuring sign of a healthy pregnancy. By the fetal movements in utero are an expression of fetal wellbeing. By the fetal movement's patient can therefore; monitor the condition of the fetus. Assessment of fetal movements is a non invasive method of monitoring the wellbeing of the fetus. 'Quickening' is the first point at which the women experiences fetal movements in early pregnancy. It is a significant point in pregnancy for many women. A fetal movement chart records the frequency of fetal movements and thereby assess the condition of the fetus. It is simple, valuable, effective, reliable and harmless screening of fetal well being in low and high risk pregnancies.^[2]

Obstetrical & Gynecological survey–England, 2016 Decreased fetal movements are present in 6% to 15% of pregnancies and are associated with intrauterine fetal death and intrauterine growth restriction.⁽³⁾

MOMS (Maternal Observing and memories of still births) study showed that mother perceived gradual decreased fetal movements seven days prior to death of the fetus and 56% of the mother reported decreased fetal movement as the first reason to believe that the

baby is not doing well. Only 50% of mothers were told to do kick by their doctor. The current scientific research conference—about decreased fetal movement in Norway revealed that fetal deaths are not sudden; 50% of unexplained stillbirths are growth restricted, suggesting that there is time window for intervention and prevention of deaths.⁽⁴⁾

FEMINA (Fetal Movement Intervention Assessment) is an outgoing International Research Collaboration to improve pregnancy outcome. The findings reveal that women still do not get enough information on the importance of fetal activity to act in such a way to protect their baby. They reported that 50% of affected mother waited more than 24 hours without any fetal activity before contacting health professional – one in there waited more than 48 hours.⁽⁵⁾

NFHS Survey (2018), the IMR in India is 57/1000 live births. Still birth is a high global burden and according to survey (2003), the still birth rate of India is 9/1000 and that of Tamil Nadu is 20/1000 deliveries, which is highest among all other states. Some still births are unexplained and some are unavoidable. But in some cases, still births can be preventive if the mother is highly aware of her fetal movements.⁽⁶⁾

I LUDWICK 2015 in his study in Denmark among 2250 pregnant women regarding the value of material monitoring of fetal movements. Half of the women were taught to fetal movement methodically and contact the hospital if they felt less than 3 fetal movements per hour. The controls were not given any specific instructions about fetal movements. The result demonstrates that the material monitoring of fetal movement can aid the opportune delivery of infants, who are at increased risk of intrauterine death. ⁽²⁾

St. John's Medical college hospital 2017 census showed 84 (38/1000 deliveries) still births in the year 2015 and 79 37/1000 deliveries) in the year 2016. The number of stillbirths in 2017 (January – September) is 87 (52/100) which is alarming. The still birth rate is higher than the national rate of 9/1000, as it is a referral hospital, catering to high pregnancy cases. The investigator from her experience of working in the hospital have found that the mother, who had still birth, experienced decreased fetal movements few days before the event could occur, but they failed to report to the health personnel. It is also seen that there are many unnecessary hospital admissions of antenatal due to lack of awareness about normal and abnormal fetal activity.⁽⁷⁾

Discussions with experts and review of literature also helped investigator to realize that giving information on the importance of monitoring fetal activity to mother is essential to reduce the perinatal mortality and morbidity rates. During the literature review the investigator found that, studies in these areas are rare, especially in India, which shows the increasing need of this study.

Materials and Method

Research approach and design: A research approach is frame work or guide used for the planning, implementation and analysis of the study. It also involves the plan to investigate the phenomenon under the study and research design is a master plan specifying a method and procedure for collecting and analyzing the needed information in a research study.

Quantitative approach and Descriptive design.

Research Setting: A research setting is a physical, social and cultural site in which the research conduct the study. Obstetric and Gynecological outpatient department.

Population: Population is a aggregation of all units in which a researcher is interested in other words, population is a set people or entities to which a results of a research to be generalized.

All antenatal mother.

Sample: Sample is a representative unit of a target population, which is to be worked upon by the researcher during the study in other words sample consists of subsets of unit which comprise the population selected by the researcher to participate in the research project.

Primigravid women, between the gestational age of 30- 39 weeks.

Sampling Technique: Non probability convenience sampling.

Sampling Size: According to open source Epidemiologic statistics for public Health.

Population size (n) =60

Hypothesis%frequency (p) =50%+/-5

Confidence limits (d) =5%

Design effect (DEFF) =1

Sample size (n) for 95%confidence level=53

Sampling Criteria

Inclusion Criteria:

1. Primigravid women between 30-39 weeks of gestation, attending to Antenatal OPD.
2. Primigravid women, who are able to read Tamil or English.

Exclusion Criteria:

1. Women, who are health professionals.
2. Multi gravid mother are not included in this study.

Description Tool: A structured questionnaire was developed as a tool for data collection . The tool consists of the following–

Section-1: consists of demographic profile of mother

Section-2: A structured questionnaire to assess the level of knowledge and practice on primigravid mother regarding daily fetal movement.

Data Analysis Plan: Data analysis was done by using descriptive and inferential statistics.

Level of knowledge and practice Score in Percentage (%)

Level of Knowledge	Percentage
Adequate Knowledge	≥75%
Moderately adequate Knowledge	51-74%
Inadequate Knowledge	<50%

Objectives 1: Assess the level of knowledge and practice on daily fetal movement among primigravid women.

The findings of the present study refers that:

- 5.66% has adequate knowledge
- 33.96% has moderate knowledge
- 60.37% has inadequate knowledge

Objectives 2: The level of knowledge and practice on daily fetal movement among primigravid women with selected demographic variables.

Findings: Including of the study was presented under the following headings based on study objectives.

Findings 1: Knowledge on daily fetal movement at the time of marriage among primigravid women was

13 has inadequate knowledge among the age group of (20-25) and 8 has inadequate knowledge among the age group of(26-30).

Finding 2: Knowledge on daily fetal movement among primigravid women between the type of education qualification 8 has inadequate knowledge among higher school, degree and 4 has inadequate knowledge among middle school.

Finding 3:

Knowledge on daily fetal movement among primigravid women between the occupation 17 has inadequate knowledge among the housewife and 3 has inadequate knowledge among self employee and 1 has inadequate knowledge among private employee.

Finding 4: Knowledge on daily fetal movement among primigravid women between the type of family 11 has inadequate knowledge among joint family and 10 has inadequate knowledge among nuclear family.

Finding 5: Knowledge on daily fetal movement among primigravid women between the duration of marital life 14 has inadequate knowledge among less than one year and 6 has inadequate knowledge among 2-3years 1 has inadequate knowledge in above five years.

Finding 6: Knowledge on daily fetal movement among primigravid women information regarding Daily Fetal Movement among primigravid women 17 has inadequate knowledge.

Finding 7: Knowledge on daily fetal movement among primigravid women source of information 8 has inadequate knowledge health professional 4 has inadequate knowledge among relative 3 has inadequate in mass media.

Finding 8: The level of knowledge on daily fetal movement among primigravid women with regard to Gestational age in weeks and the level of knowledge of daily fetal movement among praimigravid women 11 has inadequate knowledge above 32 week and 10 has inadequate knowledge 29-32 week.

Finding 9: The level of knowledge on daily fetal movement among primigravid women with the complication of daily fetal movement in Obesity 13 has inadequate knowledge, In hypertension 5 has inadequate knowledge and In Diabetes mellitus 3 has inadequate knowledge

Finding 10: The level of knowledge of daily fetal movement among primigravid women with the hobbies watching Television 17 has inadequate knowledge and reading books 4 has inadequate knowledge.

Finding 11: The level of knowledge of daily fetal movement among primigravid women with the number of TT injection received has 15 inadequate knowledge .

Finding 12: The level of knowledge of daily fetal movement among primigravid women regarding past medical illness 17 has inadequate knowledge

Finding 13: The level of knowledge of daily fetal movement among primigravid women with the use of drugs 19 members has inadequate knowledge regarding uses of drugs.

Finding 14: The level of knowledge of daily fetal movement among primigravid women about present medical illness was 20 members has inadequate knowledge regarding present medical illness.

Conclusion

That study shows that the majority of 18(33.96%) primigravid women has Moderate knowledge 32(60.37%) of primigravid women has Inadequate knowledge 3 and (5.6%) of primigravid women has Adequate knowledge. Hence the result frequency and distribution of knowledge and practice of observing daily fetal movement among primigravid women (60.37%) Inadequate knowledge there is a risk of intrauterine death. Thus there is a need of assessment of knowledge of daily fetal movement among primigravid women.

Conflicts of Interest: No conflict interest

Source of Funding: No funding sources

Ethical Clearance: The study was done with the approval of the institutional ethics committee informed consent was obtained from the primigravid women who were assured of strict anonymity and confidentiality during this study.

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