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Review Article

A Comparative Study to assess the Level of Uncertainty Towards Childbirth Among Primigravida and Multigravida Women in a Selected Hospital, Kolkata, West Bengal

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Abstract

A descriptive study assessed the perceived uncertainty towards childbirth among primi and multigravida women in a tertiary care hospital, Kolkata, West Bengal. The investigator adopted an extensive comparative study to assess the level of uncertainty towards childbirth among primigravida and multigravida women in a selected Medical College and Hospital, Kolkata, West Bengal. Investigators selected 90 primi gravida and 90 multigravida women by simple random sample techniques. A structured knowledge questionnaire and a semi-structured questionnaire were used to collect the data. The result showed that the mean difference in perceived uncertainty towards childbirth among primi and multigravida women is statistically significant for calculated unpaired 't' test value is higher than the table value of (1.96) with 178 df at $p < 0.01$ significance level. This prospective type of original research study has important implications for nursing practice and nursing education to compare the level of perceived uncertainty towards childbirth among primi and multigravida women. The result also showed that the levels of uncertainty towards childbirth among primigravida and multigravida women with their selected sociodemographic factors as the calculated value of Chi-square($\chi 2$) is more than the table value of Chi-square($\chi 2$) at the 0.05 level of significance.

Keywords: Perceived Uncertainty; Childbirth; Primigravida; Multigravida

Introduction

Childbirth is a profoundly transforming life event for women. Although often joyful, this period can be marked by significant fear and uncertainty, particularly among first-time mothers and primigravida women. Two pivotal psychological factors shape primigravida women's experience with childbirth, including expectations of childbirth and fear of childbirth [1].

About 10–34% of all childbearing women are faced with uncertainties and lack of information such as negative experiences in childbirth, feelings of inadequacy, ambiguity, loss of control during birth, unbearable labor pain, negative information from other women, disruption to interpersonal relationships, dysfunctional maternal infancy bonding reduction in rates of exclusive breastfeeding, inappropriate utilization of maternal and newborn care services, fear of childbirth and increased desire for an elective cesarean section in future pregnancies [2].

Uncertainty may be regarded as a degree of fear where the most common fears are found to relate to the well-being of the fetus, the course of pregnancy, and the actual birth of the baby. Uncertainty has been associated with higher levels of distress, anxiety, and diminished quality of life. Stressful conditions endured by mothers have been associated with poor birth outcomes including preterm birth and low birth weight, and long-term consequences such as poor neurodevelopmental outcomes, insulin resistance, and cardiovascular disease related to forthcoming childbirth are found to increase from mid-pregnancy onwards with potentially harmful consequences and could lead to them feeling isolated and unsupported, and impact on their psychological health and the health of their baby [3].

The expectations that a woman has about childbirth before or during pregnancy play a crucial role in shaping her experience and behavior during the birthing process [4]. Most women have expectations or plans for how they hope for labor and delivery [4,5].

Korukcu O, Bulut O, Kukulu K. Arch., *et al*. (2018), a cross-sectional study was conducted with 200 pregnant women (100 primiparous and 100 multiparous women) to compare fear, anxiety, and self-efficacy. The result showed that the mean score of the Delivery Fear Scale in primiparous women was significantly higher than that of multiparous women. The mean of the overall score of childbirth self-efficacy of primiparous women was significantly lower than that of multiparous women [6].

O'Reilly (2004) found that the birth of a second child added strain on the marriage and that a woman›s increased focus on her children was likely to cause decreased focus on the spousal relationship [7].

Durkin, Morse, and Buist (2001) found that personal psychological functioning (couple relationship, social support satisfaction, and quality of childhood family relationships) is important to positive experiences in expectant parents [8].

Background of the study

Pregnancy is a time of uncertainty and anxiety (intrapersonal experiences). All nine studies referred to pregnancy as a time of uncertainty and anxiety. Although women reported the positive aspects and happiness of expecting their baby, participants commented on the pregnancy itself being, at times, an unpleasant experience, particularly due to the level of uncertainty and anxiety it generated. The experience of anxiety could be categorized into broad sub-themes of physical, psychological, and emotional experiences and the impact these had on women's lives and relationships [9].

Throughout pregnancy, women need support from the family to gain better maternal and fetal outcomes. Emotional distress in women during pregnancy has been shown to increase the risk of adverse outcomes for women and newborns. Maternal mortality is unacceptably high. About 2,95,000 women died during and after pregnancy and childbirth in 2017. Most of these deaths (94%) occurred in low-resource settings, and most could have been prevented [10].

The uncertainty associated with labour and birth is a stressful situation for some women and their partners. To allay the stress of uncertainty and achieve a sense of control, some women choose to develop a birth plan before labour and birth. Preparing for childbirth is one of the most exciting times for a woman; however, it may also be a time of fear and anxiety for a mom-to-be. During this transitional period as a woman may start preparing for the special new addition to her family, she may also have to come to terms with the many adjustments that will have to be made. Staying organized, positive, relaxed and planning properly can help make the childbirth process easier [11].

Need of the study

Especially pregnant women experience common complaints during pregnancy such as ambiguity, complexity, lack of information, lack of social support, fear from the process of childbirth, fetal death, prematurity, and poor quality of life. This study is designed to determine the effects of the perceived level of uncertainty of childbirth, and possible reasons for variability in perceived uncertainty are presented [12].

Aims and Objectives

To assess the level of uncertainty and their comparison between primi and multigravida women towards childbirth during their pregnancy and to associate the level of uncertainty with demographic variables among primi and multigravida women.

Materials and Methods

For this study, the researcher adopted the Quantitative research approach, and the research design was considered a non-experimental descriptive comparative study design. The total population for this study was selected for the final study 180 pregnant women. Among them, 90 were selected from Primigravida, and 90 were selected from multigravida women. For the pilot study, 8 primigravida women and 8 multigravida women were selected from the Antenatal outdoor clinic of R. G. Kar Medical College and Hospital, Kolkata, West Bengal. A structured questionnaire schedule was used for background information, educational status, monthly family income, trimester, any medical disorder, gravida, and willingness or unwillingness of pregnant. A Semi-structured questionnaire was scheduled to assess the level of Perceived Uncertainty towards Childbirth among primi and multigravida women also developed. For data collection, the participants' inclusion criteria included all primi and multigravida women who attended the antenatal outdoor clinic for routine check-ups, who were available during the study period, and who were willing to participate in the study.

Mishel's Perceived Uncertainty of Illness (2020) was used as a conceptual framework. Mishel's original uncertainty in illness theory is an explanation of "how patients cognitively structure a schema for the subjective interpretation of uncertainty with treatments and outcomes. The desired outcome is a return to the previous level of adaptation or functioning". The scores of each item on

a 5-point Likert scale from 1 ("strongly disagree") to 5 ("strongly agree"). Higher scores indicate a greater feeling of uncertainty. The validated Spanish 17-item version of the instrument was used (range: 17–85) [13].

Results

A pilot study was implemented on twenty (10%) primi and multigravida women from NRS Medical College and Hospital, Kolkata to test the applicability of the tools and to estimate the time needed. Based on the pilot study result the investigator determined the feasibility of data collection procedures, developed an interview schedule, and identified the most suitable time to visit subjects. The results of the pilot study helped in refining the interview questionnaire, and to set the final schedule, some modifications were done because of the length of the sheet as it took a long time and effort. The final study findings revealed that 55.55% of primigravida women and 50% of multigravida women belong to the age group of 18-22 years and 23-27 years, 47.77% of primigravida women belong to the secondary level, and 55.55% of multigravida women belong the non-formal level of education. 54.44% of primigravida and 35.55% of multigravida women were at 24-32 weeks and > 32 weeks of gestational period. Items are scored on a five-point Likert scale; 1 "strongly disagree", 2 "disagree", 3 "uncertain", 4 "agree", and 5 "strongly agree". The mean score of ambivalence was (4.59), stress was (5.93), Inaccurate information was (6.28), anxiety score was (5.84) and the mean score of fear was (5.67) in primigravida women.

In contrast, the mean score of ambivalence was (3.31), the stress score was (4.00), inaccurate information was (3.62), the anxiety score was (3.64), and the fear score was (3.78) in the multigravida women. Overall, the study result revealed that there were statistically significant differences in mean values between primi and multigravida women in the five areas of the uncertainty of childbirth on ambivalence, stress, inaccurate information, anxiety, and fear as the calculated value of 't' is higher than the table value of 't' (1.96) with 178 df at 0.05 level of significance.

Sl. No	Selected factors	At and above median	Below median	Chi-square	Df	'p' value
1.	Age (in yrs.)					
	18-22	5	45			
	23-27	30	0	72.000	2	<0.001*
	28-32	10	0			
2.	Educational status:					
	Non-formal	0	6			
	Primary	0	32			
	Secondary	36	7			
	HS	7	0	66.558	4	<0.001*
	Above	2	0			
3.	Type of Family:					
	Nuclear	1	45			
	Joint	41	0	86.087	2	<0.001*
	Extended	3	0			
4.	Occupational status:					
	Housewife	39	45			
	Pvt. Job	3	0	6.429	2	.040*
	Self-Employee	3	0			
5.	Monthly Family Income:					
	<5000	0	3			
	6000-10000	5	42			
	11000-15000	22	0			
	16000-20000	16	0	72.128	4	<0.001*
	>20000	2	0			

6.	Pregnancy:					
	Planned	0	40	72.000	1	<0.001*
	Unplanned	45	5			
7.	Gestational Age (In weeks):					
	15-23	0	26			
	24-32	13	19	59.125	2	<0.001*
	>33	32	0			
8.	Foetal Movements (In weeks):					
	16-18	0	40	72.000	1	<0.001*
	18-20	45	5			
9.	Any Medical Problem:					
	Yes	0	10	11.250	1	.001*
	No	45	35			
10.	Unpleasant Event:					
	Yes	0	5	5.294	1	.021*
	No	45	40			

Table 1: Association between the Level of Uncertainty towards childbirth among primigravida women with their selected factors ($n_{1=90}$).

Table 1 shows a statistically significant association between the levels of uncertainty towards childbirth among primigravida women and their selected factors, as the calculated value of Chi-square(χ^2) is more than the table value of Chi-square(χ^2) at the 0.05 level of significance.

Table 2 shows a statistically significant association between the levels of uncertainty towards childbirth among primigravida women and their selected factors, as the calculated value of Chi-square(χ^2) is more than the table value of Chi-square(χ^2) at the 0.05 level of significance.

The study findings were supported by the findings of Giurgescu. C. (2018), Shirzad M. (2020), Fisher C. (2006) and K. Holmgren N Uddenberg., *et al.* (1993).

Discussion

The results of this study suggest that primigravid and multigravid women have unique needs during pregnancy. Anticipatory guidance and health promotion specifically designed for primigravid women should include interventions designed to focus on inaccurate information, ambivalence, fear, social support, anxiety, stress, and the process of labour. Separate prenatal classes for primigravid and multigravid women and their partners are recommended.

Study Recommendations

Study recommendations are the following :

- Longitudinal Study can be done to see the outcome of the pregnant women as well as the postpartum mothers and newborns.
- A qualitative study can be conducted to assess the anxiety and stress among pregnant women.
- The quasi-experimental study can be conducted to assess the effectiveness of the interventions.

Sl. No	Selected factors	At and above median	Below median	Chi-square	df	'p' value
1.	Age (in years)					
	18-22	0	12			
	23-27	14	31	51.346	3	<0.001*
	28-32	27	0			
		6	0			
2.	Educational status:					
	Non-formal	0	5			
	Primary	0	5			
	Secondary	17	33	45.031	4	<0.001*
	HS	22	0			
	Above	0	5			
3.	Type of Family:					
	Nuclear	12	43			
	Joint	31	0	52.398	2	<0.001*
	Extended	4	0			
4.	Occupational status:					
	Housewife	38	45			
	Pvt. Job	7	0	9.149	1	.002*
	Self-Employee	0	0			
5.	Monthly Family Income:					
	<5000	0	3			
	6000-10000	0	22			
	11000-15000	36	18	41.905	4	<0.001*
	16000-20000	7	0			
	>20000	4	0			
6.	Pregnancy:					
	Planned	19	43	37.186	1	<0.001*
	Unplanned	28	0			
7.	Gestational Age (In weeks):					
	15-23	0	19			
	24-32	25	24	40.923	2	<0.001*
	>33	22	0			
8.	Foetal Movements (In weeks):					
	16-18	0	22	31.826	1	<0.001*
	18-20	47	21			
9.	Any Medical Problem:					
	Yes	0	12	15.134	1	<0.001*
	No	47	31			
10.	Unpleasant Event:					
	Yes	0	9	10.930	1	.001*
	No	47	34			

Table 2: Association between the Level of Uncertainty towards childbirth among multigravida women with their selected factors ($n_{1=90}$).

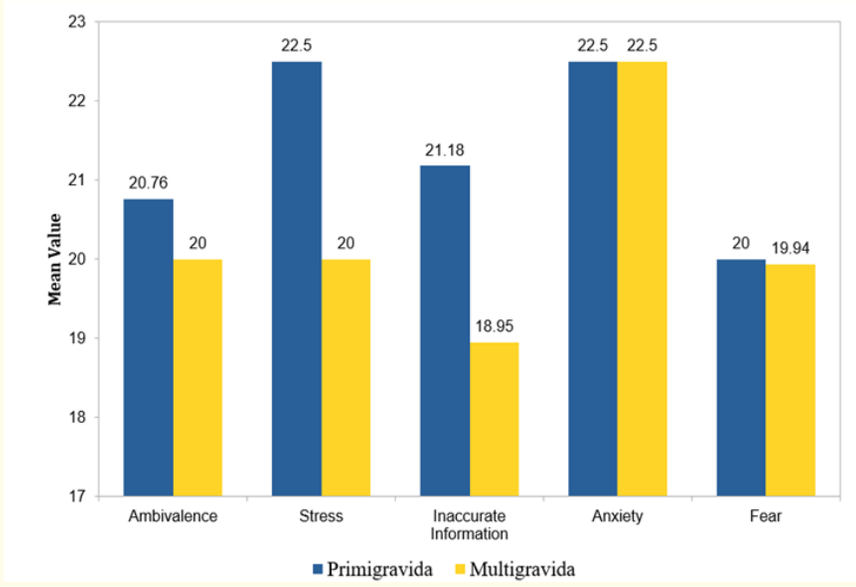

Figure 1: Comparison of the effects of perceived uncertainty towards childbirth among primi and multigravida women.

Conclusion

Based on the findings, it can be concluded that the effects of perceived uncertainty of childbirth are higher in primigravida women than in multigravida women. So it must be concluded that pregnant women who undergo the uncertainty of childbirth, including fear, anxiety, stress, inaccurate information, unavailability of social support, and ambivalence must be worth mentioning before pregnancy and caregivers would provide a vital step towards implementing effective plans to improve pregnant and postpartum women's health and particular attention to personal well-being to both primi and multigravida women of their childbirth, especially those who undergo unplanned birth procedures, as many who endure negative childbirth experiences later feel negative health-related consequences.

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