

Original Research Article

A Study to Assess the Knowledge and Practice of Postnatal Mothers on Prevention of Infections in Early Puerperium

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Abstract

Puerperal infection is the leading cause of maternal morbidity and mortality. The objectives are to assess the knowledge and practices of postnatal mothers regarding prevention of infection in early puerperium, to correlate the knowledge and practices of postnatal mothers regarding prevention of infection in early puerperium with each other. A descriptive, quantitative and cross sectional study was conducted among 80 postpartum mothers who attended postnatal OPD at Govt. Civil hospital, Gidherbaha, Muktsar and Kamboj hospital, Gidherbaha, Muktsar. Purposive sampling technique was used to select the study participants. Participants were assessed using tools which consisted of demographic variables, knowledge questionnaire and practice checklist regarding prevention of puerperal infection. The study revealed that half of the mothers had good knowledge towards prevention of infection in early Puerperium. The mean % of knowledge score was highest i.e.74.7% in 'personal hygiene' area and lowest i.e. 47.6% in the area of rest and exercise. Overall knowledge score was 65.8% in postnatal mothers. 94% of the subjects had unsatisfactory practice regarding prevention of infection. A strong positive correlation ($r = +0.88$) was found between scores of knowledge and practice score. The conclusions drawn from the study were that even though, the knowledge score of the postnatal mother was good, there is need to improve the healthy practices during Puerperium to prevent infection.

Keyword: Maternal mortality, Morbidity, Postnatal, Puerperal Infection.

Introduction

The term puerperal infection refers to a bacterial infection following child birth. It is an important public health problem contributing to maternal mortality and morbidity. Maternal mortality rate is defined internationally, as the maternal death rate per 1,00,000 live births [1]. Maternal mortality rate is the sensitive index to know the quality of obstetric care. Globally every year over 500,000 die of pregnancy related causes and 99 percent of these occurs in developing countries. In India, where population is more than one hundred crore, to get the status of maternal mortality is a complex problem [2]. In India, 70% deliveries are being conducted by traditional birth attended and most of them are untrained. New WHO global report says that globally one woman die every minute due to complication during pregnancy and childbirth [3]. Despite long term efforts to reduce maternal mortality the risk of dying during pregnancy or childbirth remains significant for women in developing countries. Women in India remain to be victims of discrimination, be it nutritional, educational, and social or economical [4]. The bias against woman is mainly due to illiteracy. Malnutrition is the most important factors affecting women's health in India [5]. While working in the postnatal wards, the investigator has observed that postpartum women suffer with various types of infection due to lack of

knowledge, ignorance, social customs, and practices. This inspired the investigator to assess the knowledge and practices of postnatal mothers and help them to help themselves in reducing infection.

Objectives

1. To assess the knowledge and practices of postnatal mothers regarding prevention of infection in early puerperium.
2. To correlate the knowledge and practices of postnatal mothers regarding prevention of infection in early puerperium with each other.

Materials and Methods

A quantitative, non-experimental, descriptive survey approach was used to assess the knowledge and practices of postnatal mothers regarding prevention of infections in early puerperium. A total of 80 postnatal mothers were selected by purposive sampling technique from Govt. Civil hospital and Kamboj hospital, Gidherbaha, Muktsar, Punjab.

A set of semi-structured questionnaire was used in this study to collect the information. The questionnaire was divided into three categories: socio demographic characteristics i.e. age, income, residence, religion, education and occupation of the study participants. Another part composed of a knowledge regarding prevention of puerperal infection related questions and the last part of it contained the checklist for assessing practices of postnatal mothers regarding prevention of infection

in early puerperium with two point scale ; yes and no (1,0) respectively along with observation criteria. Data were analyzed using one way ANOVA, independent t- test. The anonymity and the confidentiality of the subjects were maintained throughout the study.

Results

The analysis of data was done according to objective of the study.

Table 1: Socio-demographic characteristics of the respondents.

[N = 80]

Characteristics	Frequency (n)	Percentage (%)	
Age (in years)	18- 20 years	3	3.75
	21 – 25 years	39	48.75
	26 -30 years	26	32.5
	31 – 35 years	10	12.5
	>35 years	2	2.5
Religion	Hindu	49	61.25
	Sikh	26	32.5
	Christian	5	6.2
Occupation	Service	5	6.25
	Housewife	75	93.75
Education	Secondary	20	25
	Senior secondary	28	35
	Graduate	32	40
Residence	Rural	20	25
	Urban	60	75
Type of family	Nuclear	62	77.5
	Joint	18	22.5
Monthly family income	<Rs.10,000	59	73.75
	Rs.10,001-Rs.15,000	14	17.5
	>Rs.15,000	7	8.75
Type of delivery	Normal	4	5
	Normal with episiotomy	55	68.75
Parity	Caesarian	21	26.25
	Primipara	46	57.5
	Multipara	34	42.5
Dietary Habits	Vegetarian	60	75
	Non-vegetarian	20	25

Table 1, shows that maximum number of subjects, i.e. 48.75%, was in the age group of 21-25 years. About 40% of mothers were graduate and majority of the mothers i.e., 93.75%, were housewife. 75% of the study participants were living in urban areas, followed by about 25% living in rural area. Most of the study participant i.e., 48.75% had their family monthly income <Rs. 10,000 per month

followed by 8.75% those that were earning >Rs. 15,000. About 77.5% of the respondents were from nuclear family and the rest were from joint family (22.5%). Above half i.e., 57.5% of the respondents were primipara and 42.5% were multipara. Most of the study participants i.e., 75% were vegetarian, followed by about 25% were non-vegetarian.

Table 2: Mean score and mean percentage of knowledge of postnatal mothers prevention of infection in early Puerperium according to different area of knowledge. N=80

Knowledge Area	Knowledge score		
	Maximum score	Mean score	Mean%
1.Perineal care	11	7.4	67.5
2.Personal hygiene	8	5.98	74.7
3. Rest and exercise	5	2.38	47.6
4. Nutrition	2	1.35	67.5
Total	26	17.13	65.8

Table 2, reveals the mean and mean percentage of knowledge score according different areas towards prevention of infection in early Puerperium. The mean percentage of knowledge score was highest i.e., 74.7% in ‘personal hygiene’ area, followed by 67.5% in ‘perineal care and nutrition’ and least knowledge mean score i.e., 47.6%, was obtained in the area of rest exercise and overall knowledge score was 65.8% among mothers. Thus it can be concluded that mothers had maximum knowledge about personal hygiene and least knowledge towards rest and exercise.

Table 3: Percentage of practices score of postnatal mothers regarding prevention of infection in early Puerperium.

N=80

Practice level (score)	Practices score	
	Frequency (n)	%
Satisfactory >80% (>24)	5	6
Unsatisfactory <60-79% (<23)	75	94

Table 3 reveal that difference in the practices score of postnatal mothers regarding prevention of infection in early Puerperium. Majority of them i.e., 94% had unsatisfactory practices where as only 6% mothers had satisfactory practices.

Table 4: Correlation between knowledge and practice of postnatal mothers regarding prevention of infection in early puerperium. N=80

Relationship between	Max. score	Mean	r
Knowledge	26	17.13	
Practice	30	18.99	0.88

The above table depicts that there was a strong positive correlation ($r = +0.88$) between score of knowledge and practice regarding prevention of infection in early Puerperium. Hence, it was concluded that knowledge and practice affect each other positively regarding prevention of infection in early puerperium. As knowledge increased, safe practice also increases.

Discussion

This study was conducted “to assess the knowledge and practice of postnatal mothers regarding prevention of infection in early puerperium in selected maternity hospital of Gidherbaha, Punjab.” In this study maximum mothers i.e., 48.75% were in

the age group of 21-25 years. About 40% of mothers were graduate and majority of the mothers i.e., 93.75% were housewife. Most of the study participants i.e., 75% were living in urban areas, followed by about 25% living in rural area. 48.75% of the participants had their family monthly income <Rs.10, 000 per month followed by 8.75% those that were earning >Rs.15, 000. About 77.5% of the respondents were from nuclear family and the rest were from joint family (22.5%).

The analysis of data regarding the first objective of the study depicts that half of the mothers (50%) were having good knowledge followed by average knowledge (25%), excellent knowledge (22.5%) only 2.5% were having below average knowledge. These findings are also consistent with the study conducted by Anurag (2001) who indicated that approximately half of the mothers had good knowledge regarding prevention of infection in early puerperium [13].

This present study revealed that big difference in the practices score regarding prevention of infection in early puerperium. Majority of them (94%) were had unsatisfactory practice where as only 6% mothers had satisfactory practices. This finding is in accordance with the Susan Matton(1998) who reported that nearly 90% of the postnatal women had poor postnatal practices regarding cleanliness and others.

The present study depicts that there is a strong positive correlation($r=+0.88$) between scores of knowledge and practice regarding prevention of infection in early Puerperium. The present study is supported by Sharma (1994) indicated that mass education plays key role in reducing mortality.

Conclusion

The findings reported that majority of the study participants had good knowledge towards prevention of infection in early Puerperium. However, the study participants had unsatisfactory practice level about prevention of infection in early Puerperium. A strong positive correlation ($r=+0.88$) was found between knowledge and practice scores regarding prevention of infection in early Puerperium. Hence, it was concluded that knowledge and practices affects each other positively regarding prevention of infection in early Puerperium.

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