

# To Assess the Knowledge and Practices Regarding Postnatal Assessment of Women Among Nurses Working in Gynaecology Units of Selected Hospitals of District Ludhiana, Punjab: A Descriptive Study

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## Abstract

*This study was done to evaluate nurses' postnatal assessment of women's knowledge and practices. Postnatal assessment is a vital part of postnatal care in the fourth stage of labor for the women as it confirms the mother's recovery from the effects of pregnancy, labor, and delivery. It provides an opportunity for the nurses to prevent many life-threatening complications and promote health status during this period. A descriptive research design was used with a convenience sampling technique on 60 nurses working in gynecology units of selected hospitals of district Ludhiana, Punjab. A systematic questionnaire and checklist for postnatal evaluation practice were used to gather data. Both descriptive and inferential statistics were used in the analysis. It was found that a maximum of nurses belonged to age-group of 20-29 years (mean age 29.31±7.768 years), were married, less than half of them were GNM, had experience of 1-2 years, worked in private hospitals regularly and most of them had never attended in-service education regarding postnatal assessment. Nearly half of the nurses (48.3%) had an average level of knowledge and most of the nurses (71.7%) had an average level of practice regarding the postnatal assessment of women. The association of the knowledge with practices regarding postnatal assessment of women among nurses was found to be highly significant ( $p < 0.001$ ) with a weak positive correlation ( $r = 0.318$ ,  $p = 0.013$ ). There was also a statistically significant association between experience, working institution, and type of employment with knowledge ( $p < 0.05$ ), and also found a significant association between working institution and practices ( $p < 0.0$ ). The study concluded that there was an average level of knowledge and practices regarding postnatal assessment and there was a positive effect of knowledge on practices regarding postnatal assessment of women among nurses.*

**Keywords:** Postnatal assessment, knowledge, practices, nurses

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## INTRODUCTION

Each newborn is a miracle and represents the ideal work of God. Pregnancy is frequently accompanied by feelings of high optimism [1]. A woman's experience through pregnancy and childbirth is personal. Every woman appreciates the beauty of conception and childbirth. It is a time of a woman's physiological recovery, her psychological well-being, and her ability to care for herself and her new baby [2]. This period is called as "postnatal period". The postnatal period is the time after childbirth when the body tissues, particularly the

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pelvic organs, roughly return to their pre-pregnancy anatomical and physiological states [3].

The postnatal period or puerperium lasts from delivery of the placenta to approximately six weeks afterward. It's also referred to as the fourth trimester. The hours and days immediately following delivery are the most critical phase in the postnatal period. Lack of care in this time period may result in disability or death as well as missed opportunities to promote healthy behaviors, which affects the health status of women [4].

Maternal morbidities refer to complications that have arisen during pregnancy, delivery, or the postpartum period. Postpartum morbidities continue to be the major health issues that need to be looked into critically not only for curative but also for preventive and promotive care.<sup>5</sup> More than 585,000 women worldwide pass away from problems associated with pregnancy and childbirth each year.<sup>6</sup> A study reported that a total of 4,975 women representing 87.1% of all expected deliveries in a population of 58,000, were examined in their first postpartum week during January 2007-December 2010 and the most common morbidity found was postpartum anemia (7.4% of women suffered from severe anemia and 46% from moderate anemia), fever (4%), breast conditions (4.9%) and perineal conditions (4.5%) [5].

Modern advances in health care have decreased the terrible morbidity and mortality of earlier decades, but recovery from childbirth is ever routine. An eventful puerperium cannot be taken for granted as each woman's response to awesome changes that have occurred in her body during pregnancy and birth is unique. The woman's body is vulnerable at this time and prompt diagnosis and treatment are essential for her welfare [6,7].

The Safe Motherhood Initiative (which includes antenatal, intra-natal, and postnatal components of care) has been given priority in recent years; maternal morbidity and mortality remain major public health issues in most developing countries. A large proportion of these deaths are preventable by appropriate measures through the periods of antenatal, intra-natal, and postnatal care by regular assessment.<sup>8</sup> But, there is a need to give more emphasis on the postpartum period due to increased postnatal complications. The importance of the postpartum period for acute short-term, long-term, and chronic morbidity has been noted in several research conducted in both high-income and low-income nations. Moreover, following birth, up to two-thirds of maternal deaths occur. To ensure women's physical and mental well-being, the World Health Organization recommends that health care be delivered at hours six days, six weeks, and six months after delivery [8].

Even if the postnatal period becomes complicated for the majority of women, care during this time must address any deviation from anticipated postpartum recovery. Postnatal care is the care and supports that every woman and her baby should receive during the postnatal period to meet their needs [9]. It starts as soon as the baby is born and mostly consists of routine clinical examinations and observations of the mother, baby screening, assistance with infant feeding, and ongoing information and support providing [10].

Early postpartum assessment is essential to diagnose and treat complications. It is crucial to establish that the mother is recovering from the impacts of pregnancy, labor, and delivery so that any issues can be addressed. Due to the presumption that mothers would have recovered from the consequences of pregnancy and childbirth, it was also thought to be the final component of perinatal care, which signifies the end of puerperium. It strives to achieve the mother's, the infant's, and the family's overall physical, psychological, and emotional welfare.

This procedure includes assessment of vital signs, breasts, uterus, bladder, bowels, lochial features, episiotomy or cesarean wound, Homan's sign, etc. According to Nunnerley (1990), midwives are required to offer postpartum care for the woman from the time the baby is born until the conclusion of

the puerperium. Health professionals may have special abilities and expertise to give women during this turbulent and transitional time [11].

Generally, more emphasis is being put on care during the antepartum and intrapartum periods rather than the postpartum period. However, as a consequence of complications during the antepartum and intrapartum period, there is an increased risk of occurrence of various complications during the postnatal period. Moreover, lack of knowledge and practice among health care professionals also leads to a fatal condition.

The most common complications during the postnatal period are postpartum hemorrhage, urinary tract infection, endometritis, urinary problems, uterine atony, mastitis, thrombophlebitis, retained placenta, uterine inversion, trauma to the genital tract, postpartum anemia, postpartum blues, postpartum depression, postpartum psychosis, puerperal sepsis, and coagulation disorders.

The postpartum care given by midwives is a crucial component of the delivery of maternity services. According to the evidence, postpartum morbidity and its effects on women's postpartum health are a real problem. Hence, skilled assistance during the postnatal period is the most important and key service to the reduction of maternal morbidity and mortality. Only with the nurses' correct training and practical expertise will this be possible. Every nurse should be aware of the factor that put new women at risk for postnatal complications. This knowledge alerts the nurse to be vigilant in monitoring these women so that maternal complications can be anticipated and minimized [12-13].

So, the nurses should have proper knowledge regarding postnatal assessment, care, and complications. Moreover, postnatal assessment should be done by the nurses to observe and record postnatal events to reduce maternal complications that further reduce maternal morbidity during puerperium.

### **Objectives**

1. To evaluate nurses' postnatal assessment of women's knowledge and practices.
2. To ascertain the relationship between nurses' knowledge and practices regarding postnatal assessment of women.
3. To determine the relationship between nurses' knowledge and practices related to postnatal assessment of women and specific socio-demographic traits.
4. To organize and carry out in-service training for nurses on postnatal evaluation of women.

### **Method and Material**

The research methodology describes the overall structure of the technique for assembling reliable and valid data for analysis. It provides a concise explanation of the many steps performed to carry out the study. This chapter deals with the methodology adopted for the descriptive study to assess the knowledge and practices regarding postnatal assessment of women among nurses working in gynaecology units of selected hospitals of district Ludhiana, Punjab.

### **Target Population**

The target population of the present study comprised of nurses working in gynaecology units of Dayanand Medical College & Hospital (DMCH), Guru Teg Bahadur Hospital, Deep Hospital, Pal Hospital, Shah Hospital, Pahwa Hospital and Civil Hospital of District Ludhiana, Punjab.

### **Inclusion criteria**

- Nurses employed in gynaecology departments in a few hospitals in the Ludhiana district.
- Nurses who agreed to take part in the study.

### **Exclusion criteria**

- Nurses who were absent when the data were being collected.

### **Description of tool(s)**

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**Part I: Socio-demographic profile**

This section included Socio-demographic profile and professional profile. Socio-demographic profile included age, marital status of nurses. Professional profile included professional qualification, experience, working institution, type of employment and in-service education attended.

**Part II: Structured questionnaire to assess the knowledge regarding postnatal assessment of women among nurses**

This section consisted of total 32 self structured items (Multiple choice Questions) to assess the knowledge regarding postnatal assessment of women among nurses.

**Table 1.** Distribution of nurses as per socio-demographic characteristics.

N=60

Socio-demographic Characteristics	F (%)
<b>Age (in years) #</b>	
20-29	39 (65.0)
30-39	13 (21.7)
≥40	08 (13.3)
<b>Marital status</b>	
Married	26 (43.3)
Unmarried	33 (55.0)
Widow/Widower	01 (01.7)
<b>Professional qualification</b>	
GNM	29 (48.3)
B.Sc (N)	16 (26.7)
Post-Basic B.sc (N)	05 (08.3)
Any other*	10 (16.7)
<b>Experience (in years)</b>	
< 1	13 (21.7)
1-2	18 (30.0)
3-4	11 (18.3)
≥ 5	18 (30.0)
<b>Working institution</b>	
Government	07 (11.7)
Private	44 (73.3)
Charitable	09 (15.0)
<b>Type of employment</b>	
Under training	04 (06.7)
Regular	48 (80.3)
Contract basis	08 (13.3)
<b>In-service education</b>	
Never	44 (73.3)
Once	11 (18.4)
≥ 2 times	05 (08.3)

#Mean age (in years)  $\pm$  SD = 29.31  $\pm$  7.768, \*Any other- M.Sc (N), ANM

Table 1 depicts the distribution of subjects as per socio-demographic characteristics, shows that maximum nurses (65%) belonged to age group of 20-29 years, followed by (21.7%) in age group 30-39 years and few (13.3%) in age-group of ≥40 years. More than half of the nurses (55%) were unmarried, followed by (43.3%) married people, and only one (1.7%) was a widow. Only 8.3% of nurses had post-basic B.Sc degrees, compared to 48.3% of GNMs, 26.7% of B.Sc.s, 16.7% of ANMs, and 48.3% of GNMs who were also nurses (N).

Nearly one third of the nurses (31.7%) had experience of 1-2 years, followed by (30%) had experience of 3-4 years, one fifth of the nurses (20%) had experience of <1 year and less than one fifth (18.3%) had experience of 3-4 years. Maximum of the nurses (66.7%) were working in private hospital, one fifth of the nurses (20.0%) were working in Government hospital whereas few (13.3%) were working in charitable hospital. Most of the nurses (70%) were employed as regular, one fifth of the nurses (20%) were on contract basis and few nurses (10%) were under training.

Majority of the nurses (78.3%) had never attended an In-service education regarding postnatal assessment, less than one fifth of the nurses (18.3%) had attended once and very few (8.3%) had attended more than equal to two times.

Thus, it can be concluded that maximum number of nurses were in the age group of 20 to 29 years, being unmarried, had qualification as GNM, with experience of 1-2 years and were working in private hospital. Most of the nurses were employed as regular and had never attended an In-service education regarding postnatal assessment.

## Objective 2

To determine the association of the knowledge with practices regarding postnatal assessment of women among nurses.

**Table 2.** Association of knowledge with practices regarding postnatal assessment among nurses. N=60

Variables	Mean±SD	Mean%	t- value p value	r value p value
Knowledge	17.75±4.512	55.46	18.379	0.318
Practices	7.60±1.475	42.22	0.000**	0.013*

Maximum knowledge score- 32

Maximum practice score-18

\*significant at the level of  $p < 0.05$

df=59

Table 2 reveals the association between knowledge and practices regarding postnatal assessment of women among nurses. The association of the knowledge with practices regarding postnatal assessment of women among nurses was statistically tested and found to be highly significant ( $p < 0.001$ ). There was weak positive correlation ( $r = 0.318$ ) between knowledge and practices, which found to be statistically significant ( $p = 0.013$ ) as both mean knowledge score and mean practice score were average. Hence, it can be concluded that knowledge was affecting the practices regarding postnatal assessment of women among nurses.

Table 3 shows the association of knowledge and practices regarding postnatal assessment of women among nurses with selected socio-demographic characteristics. It was found that mean knowledge score regarding postnatal assessment was highest (20.50) among nurses belonged to the age group 40-50 years whereas least (16.15) among nurses belonged to age group 30-40 years. Similarly, the mean practices score regarding postnatal assessment was highest (7.62) among nurses in two age groups i.e 30-40 and 40-50 years and lowest (7.59) among nurses belonged to the age group 20-30 years. The difference in mean knowledge score and mean practices score of various age groups was tested and was found to be statistically non-significant as  $p > 0.05$ .

It was found that mean knowledge score of nurses regarding postnatal assessment was highest (22.00) among those who were widowed or separated while least score (17.58) among those who were unmarried. Similarly, the practices score of nurses regarding postnatal assessment was highest (9.00) among nurses who were widowed and least (7.27) among nurses who were married. The difference in mean knowledge score and mean practices score of marital status of nurses was tested and was found to be statistically non-significant as  $p > 0.05$ .

Mean knowledge score of nurses regarding postnatal assessment was highest 20.00 in nurses who had been qualified with B.Sc (N) while least (16.52) among GNM nurses. The mean practices score of nurses regarding postnatal assessment was highest (8.70) among ANM nurses while least (7.00) among Post basic B.Sc (N) nurses. The difference in mean knowledge score and mean practices score of nurses according to professional qualification was tested and was found to be statistically non-significant as  $p > 0.05$ . It was observed that mean knowledge score regarding postnatal assessment was highest (20.17) among nurses who had experience of less than one year while least score (15.89) was found among nurses who had experience of 1-2 years.

Similarly, the mean practices score was highest (8.00) among nurses who had experience of 3-4 years while least score (7.32) among nurses who had experience of 1-2 years. According to experience, the mean knowledge score was tested and found to be statistically significant with experience as  $p < 0.05$  and the mean practices score was found to be statistically non-significant as  $p > 0.05$ .

### Objective 3

To ascertain the association of the knowledge and practices regarding postnatal assessment of women among nurses with selected socio-demographic characteristics.

**Table 3.** Shows the association of knowledge and practices with selected socio-demographic characteristics. N=60

Variables	N	Knowledge score		Practice score	
		Mean $\pm$ SD	F	Mean $\pm$ SD	F
			p value		p value
<b>Age*</b>					
20-29	39	17.71 $\pm$ 4.634	2.410	7.59 $\pm$ 1.517	0.003
30-39	13	16.15 $\pm$ 3.602	0.099 <sup>NS</sup>	7.62 $\pm$ 1.193	0.997 <sup>NS</sup>
$\geq$ 40	08	20.50 $\pm$ 4.408		7.62 $\pm$ 1.847	
<b>Marital Status</b>					
Married	26	17.81 $\pm$ 4.891	0.462	7.27 $\pm$ 1.373	1.489
Unmarried	33	17.58 $\pm$ 4.272	0.633 <sup>NS</sup>	7.82 $\pm$ 1.530	0.234 <sup>NS</sup>
Widow/Widower	01	22.00 $\pm$ 0.000		9.00 $\pm$ 0.000	
<b>Professional Qualification</b>					
GNM	29	16.52 $\pm$ 4.189	2.172	7.51 $\pm$ 1.502	2.668
B.Sc (N)	16	20.00 $\pm$ 4.397	0.101 <sup>NS</sup>	7.25 $\pm$ 1.341	0.056 <sup>NS</sup>
Post Basic B.Sc (N)	05	17.60 $\pm$ 3.912		7.00 $\pm$ 1.000	
Any other <sup>□</sup>	10	17.80 $\pm$ 5.095		8.70 $\pm$ 1.418	
<b>Experience</b>					
<1 year	13	20.53 $\pm$ 5.157	3.829	7.76 $\pm$ 1.235	0.606
1-2 year	18	15.38 $\pm$ 3.274	0.014*	7.27 $\pm$ 1.319	0.614 <sup>NS</sup>
3-4 years	11	18.27 $\pm$ 4.197		8.00 $\pm$ 1.897	
$\geq$ 5 years	18	17.77 $\pm$ 4.332		7.55 $\pm$ 1.542	
<b>Working Institution</b>					
Government	07	23.00 $\pm$ 3.316	6.478	7.42 $\pm$ 0.786	5.730
Private	44	17.18 $\pm$ 4.400	0.003*	7.90 $\pm$ 1.522	0.005*
Charitable	09	16.44 $\pm$ 3.166		6.22 $\pm$ 0.866	
<b>Type of Employment</b>					
Under training	04	22.00 $\pm$ 2.449	6.123	8.25 $\pm$ 2.362	0.476
Regular	48	16.81 $\pm$ 4.235	0.004*	7.58 $\pm$ 1.513	0.624 <sup>NS</sup>
Contract basis	08	21.25 $\pm$ 4.267		7.37 $\pm$ 0.517	
<b>In-service Education</b>					
Never	44	17.34 $\pm$ 4.477	2.730	7.73 $\pm$ 1.453	0.989
Once	11	19.09 $\pm$ 4.143	0.052 <sup>NS</sup>	7.36 $\pm$ 1.567	0.405 <sup>NS</sup>
Twice	03	14.33 $\pm$ 1.155		6.33 $\pm$ 1.528	
>2 times	02	24.50 $\pm$ 3.536		8.00 $\pm$ 1.414	

Maxi. Scores: 32 (Knowledge)

Mini scores: 0

Maxi. Scores: 18 (practices)

Mini. Score: 0

□ Any other-M.Sc, ANM

\*Significant ( $p < 0.05$ )

NS: Non-Significant ( $p > 0.05$ )

df (ANOVA)=59

Mean knowledge score regarding postnatal assessment was highest (24.50) among nurses who had attended In-service education regarding postnatal assessment more than two times while least score (14.33) among nurses who had attended two times. Similarly, the mean practices score regarding postnatal assessment was highest (8.00) among nurses who had attended In-service education regarding postnatal assessment more than two times while least score (6.33) among nurses who had attended two times. The difference in mean knowledge score and mean practices score of nurses according to In-service education regarding postnatal assessment attended was tested and was found to be statistically non-significant as  $p > 0.05$ .

## DISCUSSION & CONCLUSION

The present study showed that maximum nurses (65%) belonged to age group of 20- 29 years, followed by (21.7%) in age group 30-39 years and few (13.3%) in age- group of  $\geq 40$  years. More than half of the nurses (55%) were unmarried, followed by (43.3%) married people, and only one (1.7%) was a widow. Slightly less than half of the nurses (48.3%) were GNM, more than one fifth (26.7%) were B.Sc, followed by (16.7%) were ANM and least number of nurses (8.3%) were Post basic B.Sc (N). Nearly one third of the nurses (31.7%) had experience of 1-2 years, followed by (30%) had experience of 3-4 years, one fifth of the nurses (20%) had experience of  $< 1$  year and less than one fifth (18.3%) had experience of 3-4 years.

Maximum of the nurses (66.7%) were working in private hospital, one fifth of the nurses (20.0%) were working in Government hospital whereas few (13.3%) were working in charitable hospital. Most of the nurses (70%) were employed as regular, one fifth of the nurses (20%) were on contract basis and few nurses (10%) were under training. Majority of the nurses (78.3%) had never attended an in-service education regarding postnatal assessment, less than one fifth of the nurses (18.3%) had attended once and very few (8.3%) had attended more than equal to two times. In present study, socio-demographic characteristics like experience, working institution and type of employment were found to be statistically significant ( $p < 0.05$ ) with knowledge score and non-significant with practice score except working institution which was found to be statistically significant ( $p < 0.05$ ). The association of qualification with knowledge and practice score were found to be non-significant ( $p > 0.05$ ).

Findings of the study were supported by a study conducted by Tapiwa Mavis Kebalepile (2001) on evaluation of the quality of care midwives provided during the postpartum period in Northern Botswana, revealed that the association of length of service was found to be significant with knowledge score as  $p = 0.05$  while non- significant with practice score. However the association of qualification with knowledge and practice score were found to be non-significant ( $p > 0.05$ ).

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