

# Detection of women's experiences about post-natal care in Rural Sohag; Sohag governorate - Upper Egypt



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## Article Information

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**Abstract:** Postnatal care is a care provided to women and their babies within 42 days after delivery. A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery, and these first two days following delivery are critical for monitoring complications arising from the delivery. A cross-sectional study was carried out among targeted population. Total coverage of women in lactating period attending F.H.U in Elbaliana city, Elhegz, Banyhemeel, Abosteet and Al eslah valleges of El baliana district in the period starting 1<sup>st</sup> of April till end of September 2018. The results showed that the mean percentage level of knowledge of postnatal mothers on selected aspects of postnatal care was 59.9% and the mean level was 11.98 with standard deviation of 4.38. Fifty-seven point seven of the studied women had a good knowledge regarding postnatal services and 42.3% had poor knowledge. In the final regression model, it is found that women younger than 20 years are nearly five times more liable to have poor knowledge regarding postnatal care than those older than 35 years.

**Keywords:** Women's experiences, Post-natal, Rural Egypt.

## Introduction

Postnatal care is regarded as one of the most important maternal health care services for the prevention of impairments and disabilities resulting from childbirth. Lack of care during puerperium may result in death or disability as well as missed opportunities to promote healthy behaviors, affecting women, newborns, and children (Regassa, 2011).

World Health Organization (WHO) recommends that after an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hrs after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hrs of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48-72 hrs), between days 7-14 after birth, and six weeks after birth (WHO, 2013).

Some of the long-term maternal complications in the postnatal period include chronic pain, impaired mobility, damage to the reproductive system and infertility. Some women suffer genital prolapses after bearing several children. This condition is extremely uncomfortable and can lead to other complications in future pregnancies if not properly addressed in the postnatal period (Desalegn & Daniel, 2013).

## Aim of the work

This study aims to determine women's experience (K, A and P) about post-natal care services in the family health units of the city and some rural areas in El baliana district; Sohag governorate.

## Methodology

A cross-sectional study was carried out among targeted population. Total coverage of women in lactating period attending F.H.U in Elbaliana city, Elhegz, Banyhemeel, Abosteet and Al eslah valleges of El baliana district in the period starting 1<sup>st</sup> of April till end of September 2018.

Data were collected through personal interview with the lactating women's using a specially designed multi-item questionnaire (Current online surveys, 2018; Journal of Health, Medicine and Nursing 2016; Sjetne et al., 2015). It consisted of four sections: section 1 for the socio-demographic characteristics, section 2 for detection of reproductive information, section 3 for last pregnancy information and section 4 for knowledge, attitude and practice after delivery. Ninety two questions including the following were asked to the participants: ten questions related to name, age, occupation, working to the lactating women and their husbands, resident and monthly income; four questions

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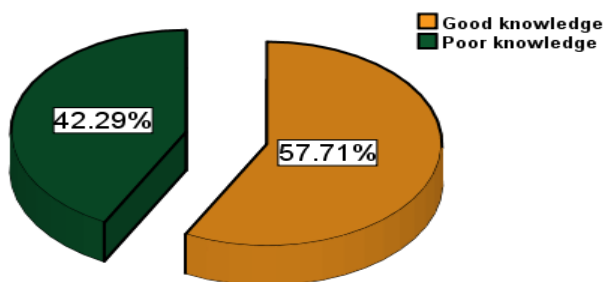
related to reproductive information; fourteen questions related to last pregnancy information; four ended question; and sixty questions related to knowledge, attitude and practices classified in to three categories which are: lactating women’s information, mother care and child care around post natal period. The level of knowledge, attitude and practice of lactating women about postnatal care was evaluated with correct responses to total twenty questions given to each of them. The median knowledge, attitude and practice score was used for discrimination of each of them respectively. Scores over the median score were defined to be good and the scores below the median score were defined to be poor.

**Data analysis**

Data entry and analysis were done using SPSS version 16.0. The calculation of frequency and percentages for the classified data, mean, and standard deviations were obtained. While statistical differences between the classes were done with chi-square test and fisher exact test and final binary logistic regression model was done to show the final factors affecting poor knowledge. P-value at or below 0.05 was considered significant.

**Results**

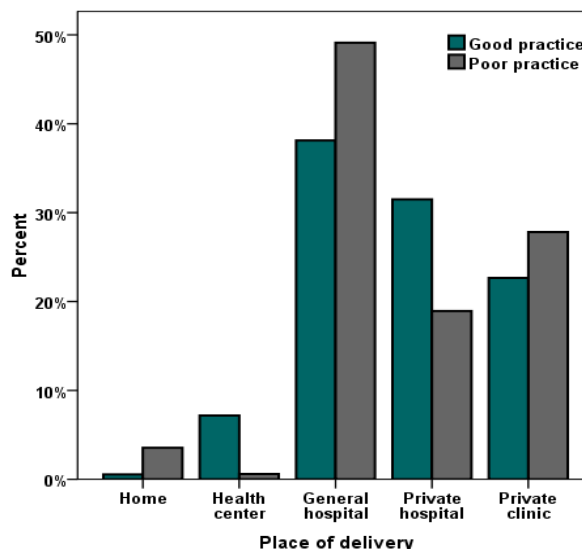
350 lactating women were participated in our study, as shown in table (1) Our results revealed that more than half of them get married before age of 20 years and more than one quarter of them hadn’t received any kind of formal education. The majority of lactating women had antenatal care visits more than five times, nearly half of them delivered at general hospitals and about half of them delivered at private places, and few percentages (0.9%) delivered at home. Figurer (1) shows percentage of good and poor knowledge among the studied women. Good knowledge represent 57.71% while poor knowledge represent 42.29%.



**Fig. 1:** Percentage of good and poor knowledge among the studied women, El-Baliana district, 2019.

Figurer (2) show bar chart showing relation between practice about post-partum care and place of delivery. Health centers have high percentage of good practice about 92.9% following by private hospitals about 64% then private clinic about 46.6% . general hospitals about

45.4% and home deliveries 14.3%



**Fig. 2:** Bar chart showing relation between practice about post-partum care and place of delivery, El-Baliana district, 2019.

**Table 1.** Distribution of the studied women according to their socio-demographic characteristics, El-Baliana district, 2019.

Demographic data	Number (%)
Age (Mean ± SD)	29.2 ± 6.44
<20 y	34 (9.7%)
20-	230 (65.7%)
>35 y	86 (24.6%)
Age at 1 <sup>st</sup> marriage (Mean ± SD)	21.18 ± 3.46
<20 y	185 (52.9%)
20 y-	131 (37.4%)
25y-	29 (8.3%)
>30 y	5 (1.4%)
Education	
Non formal	89 (25.4%)
Primary	11 (3.1)
Preparatory	30 (8.6%)
Secondary	167 (47.7%)
College or higher	53 (15.2%)
Residence	
El-Baliana city	83 (23.7%)
El-Hegz village	57 (16.3%)
Banyhemeel village	36 (10.3%)
Abosteet village	86 (24.6%)
Al-Eslah village	88 (25.1%)
Special habits	
No	323 (92.3%)
Smoking	27 (7.7%)
Income (Mean ± SD)	2517 ± 1.47
> 3000 LE	275 (78.6%)
3000-6000 LE	70 (20%)
> 6000 LE	5 (1.4%)
Occupation	
Housewife	289 (82.6%)
Working	61 (17.4%)

Table (2) is showing distribution of the studied women according to their experiences about post-partum care

revealed that most of the studied women answered positively about they stay at hospital post-partum, their attitude and practice corresponds with their knowledge (94.6%, 99.4% and 98% respectively). But more than half of them don't know about postnatal care visits, numbers, who is responsible, where or when done. Also, more than half of them not to be applicable.

Table (3) is showing association of knowledge about post-partum care of the studied women with their socio-demographic data revealed that the older the age of the women, the older her age at 1st marriage, the higher her education level, the more liability to have good knowledge about post-partum care. Also working women have good knowledge more than house wifing.

Table (4) is showing descriptive statistics of the total experiences of the studied women who asked 60 questions to detect experience of the studied women about post-partum care, the mean of correct answers of

the total knowledge, attitude and practice questions is  $11.98 \pm 4.38$ ,  $14.04 \pm 3.36$  and  $11.41 \pm 2.82$  respectively.

Table (5) is showing association of the attitude toward post-partum care of the studied population with socio-demographic data revealed that the older women have more positive attitude toward post-partum care than younger women. Also, those with higher education level and working lactating women have more positive attitude toward post-partum care than those with lower education level.

Table (6) is showing association of practice about post-partum care of the studied women with their husband socio-demographic data revealed that wives of working husbands have more good practice about post-partum care compared to wives of non-working husbands (52.5% and 30.8% respectively).

**Table 2.** Association of knowledge about post-partum care of the studied women with their socio-demographic data, El-Baliana district, 2019.

Demographic data	Good knowledge	Poor knowledge	P- value
<b>Age</b>			
<20 y	10 (29.4%)	24 (70.6%)	0.00*
20-35 y	127 (55.2%)	103 (44.8%)	
>35 y	65 (75.6%)	21 (24.4%)	
<b>Age at 1<sup>st</sup> marriage</b>			
<20 y	98 (53%)	87 (47%)	0.05*
20 y-	75 (57.3%)	56 (42.7%)	
25y-	24 (82.8%)	5 (17.2%)	
>30 y	5 (100%)	0 (0%)	
<b>Education</b>			
Non formal	38 (42.7%)	51 (57.3%)	0.00*
Primary	8 (72.7%)	3 (27.3%)	
Preparatory	16 (53.3%)	14 (46.7%)	
Secondary	98 (58.7%)	69 (41.3%)	
College or higher	42 (79.2%)	11 (20.8%)	
<b>Residence</b>			
El-Baliana city	57 (68.7%)	26 (31.3%)	0.00*
El-Hegz village	28 (49.1%)	29 (50.9%)	
Banyhemeel village	21 (58.3%)	15 (41.7%)	
Abosteet village	34 (39.5%)	52 (60.5%)	
Al-Eslah village	62 (70.5%)	26 (29.5%)	
<b>Special habits</b>			
No	186 (57.6%)	137 (42.4%)	0.87
Smoking	16 (59.3%)	11 (40.7%)	
<b>Income</b>			
>3000 LE	146 (53.1%)	129 (46.9%)	0.00*
3000-6000 LE	51 (72.9%)	19 (27.1%)	
>6000 LE	5 (100%)	0 (0%)	
<b>Occupation</b>			
Housewife	152 (52.6%)	137 (47.4%)	0.00*
Working	50 (82%)	11 (18%)	

**Table 3.** Odds ratio of association between poor knowledge about post-partum care of the studied women and selected factors, El-Baliana district, 2019.

Item	AOR	95% CI	P- value
<b>Age</b>			
<20 y	5.27	1.39-20.03	0.02
20- >35 y	2.77	1.23-6.23	0.02
<b>Education</b>			
Non formal	20.99	5.64-78.14	0.00
Primary	8.07	1.13-57.65	0.00
Preparatory	5.16	1.14-23.33	0.04
Secondary	6.88	2.19-21.67	0.03
College or higher			0.00
<b>Residence</b>			
El-Baliana city	4.17	1.62-10.77	0.00
El-Hegz village	3.7	1.56-8.82	0.00
Banyhemeel village	4.66	1.61-13.5	0.00
Abosteet village	9.83	4.14-23.33	0.01
Al-Eslah village			0.00
<b>Women occupation</b>			
Housewife	3.17	1.06-9.54	0.04
Working			
<b>History of abortion</b>			
	3.16	1.38-7.23	0.01
<b>Parity</b>			
Para 1	4.02	0.52-30.85	0.00
Para 2	0.2	0.03-1.38	0.18
Para 3	0.85	0.33-2.17	0.1
Para 4 or more			0.73
<b>Number of living children</b>			
1-2 kids	2.57	0.37-17.66	0.04
3-4 kids	0.46	0.17-1.23	0.34
5 or more			0.11

**Table 4.** Descriptive statistics of the total experiences of the studied women, El-Baliana district, 2019.

Score	Mean $\pm$ SD	Median (range)
<b>Total knowledge</b>	11.98 $\pm$ 4.38	12 (18)
<b>Total attitude</b>	14.04 $\pm$ 3.36	14 (16)
<b>Total practice</b>	11.41 $\pm$ 2.82	12 (14)

## Discussion

In this study, we found that the mean percentage level of knowledge of postnatal mothers on selected aspects of postnatal care was 59.9% and the mean level was 11.98 with standard deviation of 4.38. Fifty-seven point seven of the studied women had a good knowledge regarding postnatal services and 42.3% had poor knowledge. The mean levels of knowledge and practice is higher than that found in Nepal in 2017. The research was conducted on 60 postnatal mothers by non-probability purposive sampling technique. The researchers used structured questionnaire whose validity and reliability was established by eight experts in the field of Obstetric and Gynecological nursing. The findings were as follow; the mean percentage level of knowledge of postnatal mothers was 50.23% and the mean level was 17.58 with standard deviation of 2.6.

The mean percentage level of practices of postnatal mothers was 52%, the mean was 10.40 with standard deviation of 2.1 (Pradan & Rani, 2017). Despite the above-mentioned information, only 46.3% of the women in our study know that they have the rights of home visits postpartum and only 37.1% of the studied ladies had had a home visit postpartum. Based on demographic and health surveys (DHS) reports studied postpartum care from 1999-2004, the reports declared that less than 10% of mothers in 17 countries out of the 30 studied ones had postpartum home visits. More than 30% of postpartum visits were received at home in only six countries and more than 50% of postpartum visits were received at home in only three countries. A large majority of postpartum care is provided at health facilities. These findings indicate that, most countries depended on institution-based systems of postpartum care instead of home-based systems (Fort *et al.*, 2006).

**Table 5.** Association of the attitude toward post-partum care of the studied population with socio-demographic data, El-Baliana district, 2019.

Demographic data	Positive attitude	Negative attitude	P- value
<b>Age</b>			
<20 y	17 (50%)	17 (50%)	0.16
20-35 y	125 (54.3%)	105 (45.7%)	
>35 y	56 (65.1%)	30 (34.9%)	
<b>Age at 1<sup>st</sup> marriage</b>			
<20 y	100 (54.1%)	85 (45.9%)	0.11
20 y-	72 (55%)	59 (45%)	
25y-	22 (75.9%)	7 (24.1%)	
>30 y	4 (80%)	1 (20%)	
<b>Education</b>			
Non formal	31 (34.8%)	58 (65.2%)	0.00*
Primary	7 (63.6%)	4 (36.4%)	
Preparatory	12 (40%)	18 (60%)	
Secondary	104 (62.3%)	63 (37.7%)	
College or higher	44 (83%)	9 (17%)	
<b>Residence</b>			
El-Baliana city	54 (65.1%)	29 (34.9%)	0.00*
El-Hegz village	22 (38.6%)	35 (61.4%)	
Banyhemeel village	25 (69.4%)	11 (30.6%)	
Abosteet village	22 (25.6%)	64 (74.4%)	
Al-Eslah village	75 (85.2%)	13 (14.8%)	
<b>Special habits</b>			
No Smoking	187 (57.9%)	136 (42.1%)	0.08
Smoking	11 (40.7%)	16 (59.3%)	
<b>Income</b>			
>3000 LE	139 (50.5%)	136 (49.5%)	0.00*
3000-6000 LE	54 (77.1%)	16 (22.9%)	
>6000 LE	5 (100%)	0 (0%)	
<b>Occupation</b>			
Housewife	149 (61.6%)	140 (48.4%)	0.00*
Working	49 (80.3%)	12 (19.7%)	

**Table 6.** Association of practice about post-partum care of the studied women with their husband socio-demographic data, El-Baliana district, 2019.

Demographic data	Good practice	Poor practice	P- value
<b>Husband age</b>			
<31y	58 (50.9%)	56 (49.1%)	0.97
-40 y	75 (51.7%)	70 (48.3%)	
>40 y	48 (52.7%)	43 (47.3%)	
<b>Husband education</b>			
Non formal	34 (46.6%)	39 (53.4%)	0.42
Primary	5 (71.4%)	2 (28.6%)	
Preparatory	10 (50%)	10 (50%)	
Secondary	94 (50.3%)	93 (49.7%)	
College or higher	38 (60.3%)	25 (39.7%)	
<b>Husband occupation</b>			
Not working	4 (30.8%)	9 (69.2%)	0.12
Working	177 (52.5%)	160 (47.5%)	

In this study, 28.3% of studied mothers didn't know any danger signs while 62.3% informed that bleeding, severe headache, fever and severe calf pain are danger signs which should be checked carefully in postpartum

period. This differs with a community-based cross-sectional study was conducted from May 1 to 30, 2016 in Halaba kulito town in Ethiopia. Systematic random sampling was used to select households where eligible



women were living. Sample size was 422 women. The Ethiopian study revealed that only 7.48% of the studied women don't know any danger sign (Abebo & Tesfaye, 2018).

Our studied population showed low level of good usage of postnatal care services; only 51.7% of them had a good practicing of postnatal care services. On the other hand, Paudel, et al. carried out a community based cross-sectional study from August 2012 to January 2013 in the rural area of Belgaum district, Karnataka, India. They found that among 630 postpartum mothers participated in the study, 79.0% had used the postnatal services properly (Paudel *et al.*, 2014).

In the current study we found that 84.3% of the studied women had a good knowledge on essential needs of the newborn baby. This is different from another study conducted in Addis Ababa among 512 postnatal mothers. It was a cross sectional study, and it was conducted in ten health centers from December 5 to January 30, 2017. It concluded that 60.2% of post natal mothers had poor knowledge towards essential newborn care (Berhan & Gulema, 2018).

It is found that with no formal education are nearly twenty times more liable to have poor knowledge regarding postnatal care than those of collage or higher. Housewife women have triple the risk of having poor knowledge compared to those who working and women who have one child are nearly four times more liable to have poor knowledge compared to who have four or more. So, more child the more knowledge.

The mean percentage level of practices of postnatal mothers on selected aspects of postnatal care was 57.05%, the mean was 11.41 with standard deviation of 2.82. Our studied population showed low level of good usage of postnatal care services; only 51.7% of them had a good practicing of postnatal care services. On the other hand, Paudel *et al.*, (2014) carried out a community based cross-sectional study from August 2012 to January 2013 in the rural area of Belgaum district, Karnataka, India. They found that among 630 postpartum mothers participated in the study, 79.0% had used the postnatal services properly. This may be because of our society depends more on private health sector.

## Conclusion

The main conclusion of this study is that the mean percentage level of knowledge of postnatal mothers on selected aspects of postnatal care was 59.9%. Fifty-seven point seven of the studied women had a good knowledge regarding postnatal services and 42.3% had poor knowledge. and 28.3% of studied mothers didn't know any danger signs while 62.3% informed that

bleeding, severe headache, fever and severe calf pain are danger signs which should be checked carefully in postpartum period.

A significant association between women age, their age at 1st marriage and having knowledge about postnatal care. The higher the age and the higher the age of 1st marriage, the higher the knowledge about postnatal care. Seventy-five-point six percent of mothers above 35 years had good knowledge compared to 55.2% of those having 20-35 years compared to 29.4% of those below 20 years. All the studied women who get married after 30 years had good knowledge, while only 53% of those who get married before 20 years had good knowledge.

Maternal education has a positive impact on the utilization of health care services. This may be due to maternal education increases women's perceived seriousness about maternal health issues. Or may be because The higher educated mothers are more conscious than illiterate mothers in utilizing the services.

Regarding number of children and its association with practicing of postnatal services, the current study documented that 61.7% of mothers with 5 or more children had a good practice to postnatal services versus 49.4% of those with 1-2 child. This can be explained by the fact that women with more kids seek family planning methods more than those with fewer kids.

## Recommendations

Training/retraining health workers. Adapting programmatic protocols and key messages for use in PNC. Improving and standardise monitoring indicators for PNC. Establishing or revitalise a national working group to develop and operationalise a national PNC package.

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