

Effect of young rural women's general characteristics on their knowledge and compliance with healthy practices during postpartum period

Hanan Amin Ali Gaafar¹, Ahlam Elahmady Mohamed Sarhan², Huda Abdalla Moursi³

(1) lecturer of Obstetrics and Woman Health Nursing, Faculty of Nursing, Benha University, Benha, Egypt

(2) Assistant Professor of Community Health Nursing, Faculty of Nursing, Benha University, Benha, Egypt

(3) Lecturer of Community Health Nursing, Faculty of Nursing, Benha University, Benha, Egypt

Abstract

The aim of this study was to explore effect of young rural women's general characteristics on their knowledge and compliance with healthy practices during postpartum period **Research design:** A descriptive study design was utilized. **Setting:** This study was conducted in Obstetrics & Gynecological outpatient clinic at Benha University Hospital. **Sample:** Apurposive included 183 postpartum women **Tools of data collection 1) a structured interviewing sheet to collect data about** general characteristics and knowledge of women regarding healthy practices during postpartum period **2) self-reported measures** to assess women's compliance with healthy practices during postpartum period .**Results:** 43.17% of studied women aged from 23 to 25 years with the mean age 22.248 ± 1.794 . Also 89.86% of studied women had incorrect total knowledge score about postpartum care, 99.28% of them not compliance with health practices about postpartum care. **Conclusion:** it can be concluded that around the most of studied women had poor knowledge about postpartum care and the majority of them not compliance with health practices about postpartum care. Reveals that, statistically significant relation between general characteristics of young rural women, total knowledge and total practices score toward postpartum care. Also there was a positive highly significant relation between total knowledge score and total practices score. **Recommendation:** Designing and implementing guidelines, brochure among pregnant women during third trimester and women during postpartum period to raising awareness about the care during postpartum period. Implementing counseling session to enhance women to seek antenatal, labour and postpartum health services.

Keywords: Young rural women, general characteristics, postpartum care.

Introduction:

Postpartum period is the period during which the woman adjusts, physically and psychologically after child birth. This period is usually considered to be 6 weeks in duration. The postpartum period is a very special time where women undergo the transition into motherhood. An arbitrary time frame divides the period into the immediate postpartum (first 24 hours), early postpartum (first week) and late postpartum (second to sixth weeks) (Lalitha, 2016).

Lack of appropriate postpartum care sometimes may result in death or disability of the mother and/or newborn. Worldwide, nearly 600,000 mothers between the ages of 15–49 years die every year due to complications arising from pregnancy and childbirth. Hence,

maternal death occurs almost every minute of every year, out of which 99% are in the developing countries (Timilsina & Dhakal, 2015). Around two thirds of maternal and newborn deaths occur in the early postpartum period in developing countries and most of them in sub-Saharan Africa. Almost half of postpartum maternal deaths occur within the first 24 h and 66% occur during the first week. In 2013, 2.8 million newborns died in their first month of life, from which 1 million died on the first day (WHO, 2014).

Studies have indicated that postpartum is a critical period in women's life due to the occurrence of various physiological and psychological changes and the development of severe complications that require emergent management. WHO, (2018) documented that every day, approximately 830 women die from

preventable causes related to pregnancy and childbirth and 99% of all maternal deaths occur in developing countries due to causes of postpartum complications as severe postpartum hemorrhage or postpartum infections (Say et al., 2014).

The major purposes of postpartum and postnatal care are maintain and promote the health of the woman and her baby. The new parents need support for parenting and its responsibilities. Thus, the conceptual framework for guidance on postpartum and postnatal care should place the woman and the baby at the center of care provision (WHO, 2015). The self-care component includes behaviors first related primarily to the mind and then behavior related primarily to the body. Those related to mind include relationships, psychological health, relaxations, spiritually and play. The body related behaviors as exercise, sleep, dreams, nutrition, sexuality, environmental health, and physical health self-care elements during postpartum period include personal hygiene, perineal care, checking the funds, breast care, nutrition, post natal care (Rew, 2015).

The nurse plays a multi-disciplinary role as educator and counselor to correct misconception and believe among young rural mothers to improve their knowledge and promote compliance with health practices as well as to avoid unhealthy behaviors which lead to reduce maternal morbidity and mortality rate. The nurse instruct woman about baby care and importance of vaccination during first year. They should be encouraged to take gentle exercise and time to rest during the postpartum period, also nurse educate woman about schedule of follow up visiting (James et al, 2014).

Nurses should emphasize women's education and counselling for the successful implementation of such guidelines and the active participation of the women in the recovery process with its positive impact on recovery outcomes. Also, providing home educational guideline materials is allowing women to be acquainted with the intervention guideline to enhance the postpartum recovery period (Poland, et al., 2017).

Significance of the Study:

Postpartum complications are responsible for maternal mortality rate during post-partum period. Maternal mortality rate during puerperium is the annual number of female deaths per 100,000 live births from any cause aggravated by postpartum complications. Most postpartum complications is considered preventable if postpartum self-care is followed effectively, 216 women died worldwide from 100,000 women due to postpartum complications (WHO, 2015).

Maternal mortality rate in Egypt are 33 deaths/100,000 live births according to World Health Organization (2018). The main causes of maternal mortality related to bleeding and sepsis. There is still wide disparity in maternal health across the country, with the areas such as Upper Egypt and other rural areas facing challenges of lack of access to services, and lack of access to hygiene and sanitation. The current period of political transition in Egypt also poses a risk to further reducing maternal mortality in the future. Postpartum care is essential period for promoting healthy mother and neonate through early screening of high risk problems that may be occurred during this period, so this study was carried out. Furthermore no previous studies about effect of young rural women's general characteristics on their knowledge and compliance with healthy practices during postpartum period (Michael et al., 2015).

Aim of the study:

This study aimed to explore effect of young rural women's general characteristics on their knowledge and compliance with healthy practices during postpartum period.

Research questions:

- What is level of knowledge about postpartum care among studied women?
- What is level of compliance with healthy practices about postpartum care?
- Are there relations between women's general characteristics and their knowledge and compliance with healthy practices about postpartum care?
-

Subjects and Methods

Study Design : A descriptive study design was utilized in this study.

Study setting:

This study was conducted at Obstetrics & Gynecological outpatient clinic at Benha University hospital, Egypt.

Sampling

• Sample Type

A purposive sample was used in this study.

• Sample Size

The sample size was included 25% (183) women from the total number (735) attending to Obstetrics & Gynecological outpatient clinic in the last six months. It was calculated based on admission census report of in Obstetrics & Gynecological outpatient clinic from **Benha University Hospital census, 2017**. The women had been selected according to the following criteria:

- Young rural woman, age 18 - 25 years.
- Normal vaginal delivery.
- Single a life intra uterine fetus, without any congenital anomaly and without any complication to mother / neonate.
- Able to communicate and accept to participate in the study.

Tools of Data Collection:

Two main tools were used for collecting data:

I. A structured interview questionnaire sheet: It was developed by the researchers in Arabic language after reviewing related literature. It involved two parts:

First part: Demographic characteristics of the studied women such as age, educational level, marital status, occupation status, family income and family size.

Second part: Concerned with young rural women knowledge regarding postpartum care, This part included (40) items related importance and types of postpartum care (5 questions), Postpartum visits time schedule (4 questions) .Nutritional healthy during postpartum period (5 questions) , Perineal hygiene (5 questions) Warning signs during

postpartum period, (4 questions). Neonatal care (5 questions). Stump care (3 questions) Breast care (4 questions). Methods of family planning (5 questions).

Scoring system for knowledge:

2 for correct & complete answer, 1 for correct & incomplete answer and 0 for incorrect answer, the total score was categorized into three levels as follows: Good knowledge score, $\geq 75\%$; average knowledge score, 50–75%; and poor knowledge score, ≤ 50 .

II. Self reported measures: It was used to assess women practices during postpartum period; it included 49 items as perineal hygiene (12 items), breast care (7 items), baby care (10 items), umbilical cord care (5 items), and breast feeding (15 items).

Scoring system for practices:

Each correct practice was assigned a score of '1' and a score of '0' was assigned for incorrect practice. The total score was categorized into three levels as follows: Highly compliance score $\geq 75\%$; fair compliance score 50–75% and poor compliance score ≤ 50 .

Tools Validity:

The content validity was done through five experts of Faculties Nursing Staff from the (Obstetrics & Gynecology Nursing) and (Community Health Nursing) specialties who reviewed the tool for comprehensiveness, appropriateness, and applicability.

Ethical consideration:

Verbal consent was obtained from each woman before conducting the interview and after explaining the purpose of the study and its importance to gain their confidence. Anonymity and confidentiality were assured through coding the data. The women were informed about their right to withdraw at any time from the study without giving any reasons.

Pilot study:

A pilot study was carried out on 10 % of total sample (18) woman to test the feasibility, clarity, applicability of the tools and, determine the time needed to fill the study tools as well as to find out any problem that may interfere with the process of data

collection. No modifications were done. The women involved in the pilot study were included in the main study.

Field work:

The actual field work was carried out over a period of four months from January 2018 to the end of June 2018. The researchers were available in the previously mentioned study setting 3 days/week from 10 am: 2 pm. The researchers started by introducing themselves to each woman who participated in the study, greet the woman, making them feel comfortable, the researchers were explained the aim of the study to each woman to gain her confidence to participate in the study and obtained oral consent. The researchers used interviewing questionnaires sheet and reported practices for collecting data form women, the women were interviewed individually, each day about four women were interviewed, duration of each interview was around 20- 30 minutes using previous mentioned tools.

Administrative design

Official permission obtained from the Dean of the Faculty of Nursing directed to an ethical committee at Benha University hospital, Egypt where the study was conducted. After obtaining the approvals from director of Benha University Hospital, the researchers started to communicate with the study subjects, and explained the aim of study.

Statistical analysis:

The data were coded for entry and analyzed using SPSS Statistical Package for Social Science, USA (version 20). Data were presented using descriptive statistics in the form of frequencies and percentages, mean and standard deviation. Chi square tests and Pearson correlation coefficient were used to estimate the statistical significant differences. A significant P-value was considered when P-value was less than 0.05 and it was considered highly significant when P value was less than or equal to 0.001.

Results:

Table (1) represents general characteristics of studied women. It was clear that, 43.17% of

women aged from > 23 to 25 years with the mean age 22.248 ± 1.794 , 43.72% of them read and write, while 86.34 of them were married and 63.93% of women were not working. 61.20% of them had not enough income and 52.46% of them had $1 < 3$ member as the family size.

Table (2): reveals that, 45.36% of women had complete correct answer about neonatal vaccination during first year of life. While 67.76%, 67.21%, 66.67%, 64.48%, of studied women had incorrect knowledge about correct time of starting postpartum sexuality, types of postpartum care, postpartum visits time schedule and importance of raised feet to prevent swelling in legs respectively. Also the table clear that 56.83%, 55.74%, 55.74%, 55.19%, 55.19% of studied women had incorrect knowledge about minor discomfort related to after pains, healthy nutrition during postpartum period, newborn baby care, important technique of breast feeding and perineal hygiene.

Figure(1): demonstrates that, 18.84% of the women had good total knowledge, while 23.91% of them had average total knowledge and 89.86% of them had poor total knowledge

Table (3): Indicates that , 64.48%, 67.76%, 67.21%,73.77%, 78.69% of studied women practiced incorrectly breast care, breast feeding technique, postpartum exercise, follow up visits and monitor the newborn's growth respectively.

Figure (2): Shows the women compliance with healthy practices regarding postpartum care. It was clear that 13.04% of the women highly compliance, while 20.29% of them fair compliance and 99.28% of them poor compliance.

Table (4): Shows that there were highly statistically significant relation in all items related to women' knowledge about postpartum care and their general characteristics.

Table (5): Shows that there were highly statistically significant relation in all items related to women' practices about postpartum care and their general characteristics.

Table (6): Shows that there was a highly statistically significant positive correlation between women' total knowledge and total practices regarding postpartum care, ($P < 0.001$).

Table (1): Frequency distribution of the studied women according to their general characteristics (n=183).

Socio-characteristics	N0	%
Age (years)		
18-21	45	24.59
> 21-23	59	32.24
> 23-25	79	43.17
Mean ± SD	22.248 ±1.794	
Educational Level		
Read & write	80	43.72
Primary school	39	21.31
Secondary school	55	30.05
University	9	4.92
Marital Status		
Married	158	86.34
Widow	25	13.66
Divorced	0	0
Occupation Status		
Working	66	36.07
Not work	117	63.93
Family income		
Enough	61	33.33
Enough and saved	11	6.00
Not Enough	111	61.20
Family size		
1 < 3 members	96	52.46
3 > 4 members	87	47.54

Table (2): Frequency distribution of the studied women according to their knowledge about postpartum care (n=183).

Women's knowledge	Complete correct answer		Incomplete correct answer		Don't know or incorrect answer	
	No	%	No	%	No	%
Recognize postpartum care	73	39.89	25	13.66	85	46.45
Importance of postpartum care	58	31.69	30	16.39	95	51.91
Types of postpartum care	45	24.59	15	8.20	123	67.21
Postpartum visits time schedule	49	26.78	12	6.56	122	66.67
Nutritional healthy during postpartum period	68	37.16	13	7.10	102	55.74
Perineal hygiene.	60	32.79	22	12.02	101	55.19
Importance postpartum exercise.	60	32.79	23	12.57	100	54.64
Minor discomfort related to after pains.	54	29.51	25	13.66	104	56.83
Importance of raised feet to prevent swelling in legs.	35	19.13	30	16.39	118	64.48
Importance of activity and rest	54	29.51	35	19.13	94	51.37
Importance of drinking water and eating fiber to prevent constipation.	70	38.25	37	20.22	76	41.53
Warning signs during postpartum period	68	37.16	50	27.32	65	35.52
Correct time of starting postpartum sexuality	34	18.58	25	13.66	124	67.76
Newborn baby care	58	31.69	23	12.57	102	55.74
Stump care	75	40.98	40	21.86	68	37.16
Neonatal Vaccination during first year of life	83	45.36	22	12.02	78	42.62
Breast care	78	42.62	29	15.85	76	41.53
Important technique of Breast feeding	39	21.31	43	23.50	101	55.19
Methods of family planning	68	37.16	26	14.21	89	48.63

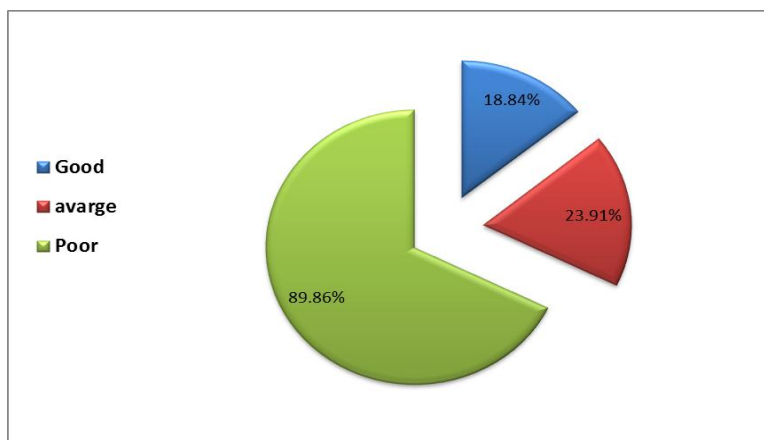


Figure (1): Frequency distribution of the studied women according to their total knowledge score about postpartum care (n=183).

Table (3): Frequency distribution of studied women according to their reported practices of postpartum period (n=183).

Women health practices	Correct		Incorrect	
	No	%	No	%
Perineal care	134	73.22	49	26.78
Breast care	65	35.52	118	64.48
Breast feeding technique	59	32.24	124	67.76
Postpartum exercise	60	32.79	123	67.21
Follow up schedule visiting	48	26.23	135	73.77
Monitor the newborn's growth	39	21.31	144	78.69

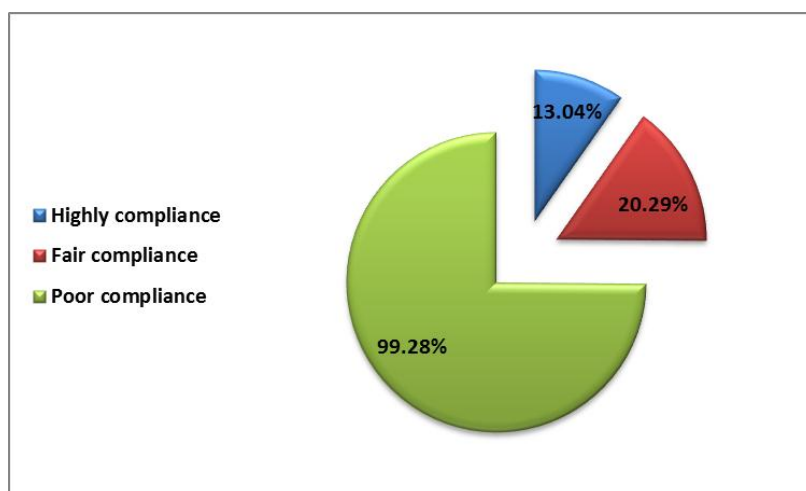


Figure (2): Frequency distribution of the studied women according to their total reported practices score about postpartum care (n=183).

Table (4): Relation between the studied women knowledge and their general characteristics (n=183).

general characteristics		N	Knowledge			F or T	ANOVA or T-test	
			Mean	±	SD		test value	P-value
Age	18-21.	45	3.810	±	1.634	F	422.546	<0.001*
	21-23.	59	7.542	±	1.072			
	23-25	79	11.733	±	1.615			
Educational Level	Read &write	80	1.450	±	0.521	F	239.978	<0.001*
	Primary school	39	3.673	±	1.090			
	Secondary school	55	6.308	±	0.468			
	University	9	10.213	±	2.162			
Marital Status	Married	158	6.171	±	2.982	T	9.357	<0.001*
	Widow	25	11.960	±	2.031			
Occupation Status	Working	66	8.915	±	2.651	T	15.103	<0.001*
	Not work	117	3.500	±	1.600			
Family income	Enough	71	9.054	±	2.623	T	15.468	<0.001*
	Not Enough	112	3.662	±	1.656			
Family size	3 members	96	4.011	±	1.681	T	18.358	<0.001*
	4 members	87	9.635	±	2.367			

*Highly statistically significant relation $P < 0.001$

Table (5): Relation between the studied sample practice and their general characteristics (n=183).

general characteristics		N	Practices			F or T	ANOVA or T-test	
			Mean	±	SD		test value	P-value
Age	18-21.	45	2.152	±	0.893	F	173.897	<0.001*
	21-23.	59	3.610	±	0.492			
	23-25	79	4.467	±	0.505			
Educational Level	Read &write	80	1.111	±	0.601	F	204.477	<0.001*
	Primary school	39	2.091	±	0.845			
	Secondary school	55	3.026	±	0.160			
	University	9	4.263	±	0.443			
Marital Status	Married	158	4.600	±	0.500	T	7.232	<0.001*
	Widow	25	2.968	±	1.108			
Occupation Status	Working	66	3.812	±	0.850	T	13.125	<0.001*
	Not work	117	2.091	±	0.854			
Family income	Enough	71	2.113	±	0.887	T	-14.188	<0.001*
	Not Enough	112	3.875	±	0.773			
Family size	3 members	96	2.230	±	0.885	T	16.410	<0.001*
	4 members	87	4.063	±	0.612			

*Highly statistically significant relation $P < 0.001$

Table (6): Correlation between the studied women total knowledge and reported practice scores (n=183).

Variables	Total knowledge score	
	r	P value
Total practice score	0.884	<0.001*

*Highly statistically significant relation $P < 0.001$

Discussion

The aim of the present study was to explore the effect of young rural woman's general characteristics on their knowledge and compliance with health practices during postpartum period, research questions was answered.

Regarding general characteristics of young rural women, the present study showed that, more than two fifths of the studied women aged from > 23 to 25 years with the mean age 22.248 ± 1.794 ; this is may be due to considered this age less experience regarding postnatal care. More than two fifths of women read and write and the most of them were married. Less than two thirds of women were not working and had not enough income and about the half of them have $1 < 3$ member as the family size. This result is in the same line with **Beraki et al., (2020)**, who studied "Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara, Eritrea" and reported that the majority of studied mothers were married and around two fifths aged between 17-25 years, about three quadrants of them were from rural areas and more than three quadrants of the mothers were house wife. Also these results are consistent with **Mohamed et al., (2018)**, who studied "Mother's personal care during postpartum period in Ain Shams University in Egypt" and reported that, more than half of studied mothers their aged between 20 – 24 years old, the majority of them were married and housewives. Also in congruent with **Altuntuğ et al., (2018)**, who studied "Traditional practices of mothers in the postpartum period: evidence from Turkey" and reported that, about the most of mothers were unemployed and about three quadrants of them lived in a nuclear family.

Concerning knowledge of young rural women regarding postpartum care, the present study revealed that, more than two fifths of them had complete correct answer about neonatal vaccination during first year of life. This result agreement with **Beraki et al., (2020)**, who illustrated that the majority of mothers had correct knowledge regarding neonatal vaccination.

Also the results of current study revealed that, around two thirds of studied women had incorrect knowledge about correct time of starting postpartum sexuality, types of postpartum care, postpartum visits time schedule and importance of raised feet to prevent swelling in legs. Also more than half of them had incorrect knowledge about minor discomfort related to after pains, healthy nutrition during postpartum period, newborn baby care, important technique of breast feeding and perineal hygiene. This finding similar to **Mohamed et al., (2018)**, who revealed that around two thirds of mothers had incorrect knowledge about components of postpartum self-care and post-partum visits. Also consistent with **Adam (2015)**, who studied "Assessment of mother's knowledge regarding postpartum self-Care in National Ribat University Hospital" and reported that the majority of study mothers had incorrect knowledge about perennial care and pattern of breast feeding.

Regarding total knowledge score of the studied young rural women the present study illustrated that, around the most of them had poor knowledge about postpartum care. This result agreement with **Lalitha, (2016)**, who "studied knowledge of primipara mothers in postpartum unit" and reported that three fourth of mothers had incorrect knowledge about postpartum care. Also consistent with **Missiriya, (2016)**, who studied "Knowledge and practice of postnatal mothers regarding personal hygiene and newborn care" and reported that more than two thirds of postpartum women were having inadequate knowledge regarding personal hygiene and newborn care. Moreover these findings similar to **Memchoubi et al., (2017)**, who studied "A study to assess the knowledge of postnatal mothers regarding self-care after childbirth in Bharati hospital and research centre, Pune India" and reported that postpartum care is still limited and it requires greater attention commitment from health professional and most postpartum women want self-care information. This might be due to our moral Egyptian community to discuss issue related to production reproductive health among young women due to cultural or traditional issue.

Concerning young rural women reported practices towards postpartum care the present study revealed that around two thirds of them practiced breast care, breast feeding technique, postpartum exercise and follow up visits incorrectly. Also around three quadrants of young rural women monitor the newborn's growth incorrectly. This result agrees with **Adam (2015)**, who studied "Assessment of mother's knowledge regarding postpartum self-Care in National Ribat University Hospital" and reported that nearly three fourth of mothers practiced breast care incorrectly. These result similar with **Yadav et al., (2016)**, who studied "Knowledge, attitude and practices on the care of the newborn in postnatal mothers delivering at a tertiary care center in Nepal" and reported that practice of mothers in newborn are still lagging in some aspects like feeding practices and hygiene care. Also result agrees with **Shah & Pariyar (2016)**, who studied "Knowledge and practice regarding postnatal care among mothers residing in selected slum area of Dharan, Nepal" and reported that women had lack of practices regarding intake of iron, vitamin A, and postpartum exercise. Moreover similar with **Mohamed et al., (2018)**, who reported that more than two thirds of women incorrectly done post-partum follow up visits.

Regarding total young rural women reported practices towards postpartum care the present study revealed that the majority of them had poor compliance with health practices about postpartum care. This may be due to the insufficient knowledge and lack of awareness about postpartum care that negatively affects their practice. The result agrees with **Missiriya (2016)**, who reported that around two thirds of postpartum women were having poor practice regarding personal hygiene and newborn care. Also the result agree with **Shah & Pariyar (2016)**, who studied "Knowledge and practice regarding postnatal care among mothers residing in selected slum area of Dharan, Nepal" and reported that two thirds of women had lack practices regarding postnatal care. Moreover similar with **Thaiba & Rani (2017)**, who studied "Knowledge and practice on selected aspects of postnatal care among postnatal mothers" and reported that around half of mothers were having inadequate practices regarding aspects of postpartum care.

Regarding relation between young rural women total knowledge score, and their general characteristics, the present study revealed that, highly statistically significant relation between general characteristics of young rural women and total knowledge score toward postpartum care. These findings are consistent with **Mohamed, (2016)**. Who studied "Self care practices among primipara mothers during postpartum period in Egypt" and founded that a highly significant difference between women aged, educational level, occupation status and their knowledge. Also in the same line with **Mohamed et al., (2018)**, who reported that, there was a highly statistical significant association between women's educational level and their knowledge regarding postpartum self-care. Also agreement with **Kalaivani (2019)**, who studied "Knowledge attitude and practice regarding postnatal care among primi mothers in India" and reported that there is a significant association between educational status, area of living, and type of diet with knowledge regarding postpartum care among mothers. Moreover agreement with **Beraki et al., (2020)** who reported that there is a significant association between the women's knowledge and their age group, residence and educational background.

Regarding relation between young rural women total practices score, and their general characteristics, the present study revealed that, highly statistically significant relation between general characteristics of young rural women and total practices score toward postpartum care. This result agreement with **Abdul Ghani & Salehudin (2018)**, who studied "Traditional belief and practice on postpartum recovery among mothers in east coast of Peninsular Malaysia" and found that there is a statistical significant associations between socio-demographic data and women's postpartum physical and dietary practice. Also in the same line **Kalaivani (2019)**, who studied "Knowledge attitude and practice regarding postnatal care among primi mothers in India" and reported that there is a significant association between women's practice regarding post partum care and their educational status and area of living.

Regarding correlation between young rural women total knowledge and total practices scores, the present study revealed that, there was a positive highly statistically significant correlation. These findings are consistent with **Shah& Pariyar (2016)**, reported that knowledge regarding postpartum care had significant positive correlation with practice. Also agreement with **Thaiba & Rani (2017)**, and reported that there is a positive correlation between level of knowledge and practice of postpartum women regarding selected aspects of postpartum care. Moreover agreement with **Kalaivani (2019)** who studied " Knowledge attitude and practice regarding postnatal care among primi mothers in India" and reported that there is a positive correlation between knowledge and practice regarding postpartum care among mothers.

Finally the previous findings of the present study are attributed to the importance of educational program in improving young rural women' knowledge and practices which raise awareness, improved outcome towards postpartum care.

Conclusion

In the light of the study finding, it can be concluded that around the most of studied women had poor knowledge about postpartum care and the majority of them not compliance with health practices about postpartum care. Reveals that, statistically significant relation between general characteristics of young rural women, total knowledge and total reported practices score toward postpartum care. Also there was a positive highly significant relation between total knowledge score and total reported practices score. Hence the aim of the study was achieved and research questions was answered.

Recommendation:

- Designing and implementing guidelines, brochure among pregnant women during third trimester and women during postpartum period to raising the awareness about the care during postpartum period .
- Implementing counseling session to enhance women to seek antenatal, labour and postpartum health services.

- Further study should be Investigate barriers that preventing women to seek care during antenatal and postpartum period.
- Awareness should be created in the community to motivate pregnant women to attend antenatal care. This will in turn encourage them to seek postpartum care.

References:

- Abdul Ghani, R., & Salehudin, S (2018):** Traditional belief and practice on postpartum recovery among mothers in east coast of Peninsular Malaysia, MATEC Web of Conferences **150**, 05067 (2018) [https:// doi. org/ 10. 1051/ mateconf/201815005067](https://doi.org/10.1051/mateconf/201815005067).
- Adam, L.A. (2015):** Assessment of Mother's Knowledge Regarding Postpartum Self-Care in National Ribat University Hospital, P 61-63.
- Altuntuğ, K., Amk, Y.,& Ege, E. (2018):** Traditional Practices of Mothers in the Postpartum Period: Evidence from Turkey, African Journal of Reproductive Health March 2018; 22 (1): 95.
- Beraki,G., Tesfamariam, E., Gebremichael, A., Yohannes, B., Haile, K., Tewelde, S., & Goitom, S. (2020):** Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara, Eritrea: a crosssectional study, BMC Pregnancy and Childbirth (2020) 20:17 available at <https://doi.org/10.1186/s12884-019-2694-8>, Published online:06 January 2020.
- James D, Brian A, Philip O, and Andrew T, (2015):** Clinical Obstetrics& Gynaecology, 3rd ed., England, Elsevier, P 420 .
- Kalaivani, L. (2019):** A Study to assess the knowledge attitude and practice regarding postnatal care among primi mothers in India, International Journal of Science and Research (IJSR)Volume 8 Issue 5: 1137-1140.
- Lalitha, H. (2016):** A study to assess the knowledge on self care during post natal period among primipara mothers in a selected maternity hospital, International Journal of Applied Research, 2(4): 711-712.

- Memchoubi, K., Kudale, A., Lilileima, L., Koshy, L., & Londhe, S. (2017):** A study to assess the knowledge of postnatal mothers regarding self-care after childbirth in Bharati hospital and research centre, Pune India, *International Journal of Applied Research* 2017; 3(6): 1115-1117.
- Michael R., Thomas H., and Thomas J., (2015):** *Obstetric Intensive Care Manual*, 4 th ed., Mc Graw Hill Education, USA, Pp. 320 -322
- Missiriya, S. (2016):** Knowledge and practice of postnatal Mothers regarding postnatal care, *International Journal of Pharmaceutical Sciences Review and Research*, 40(1), September – October 2016; Article No. 18, Pages: 89-93.
- Mohamed, D., Ragab, K., Ramy, A., & Mohamed, R. (2018):** Mother's personal care during post partum period, *Egyptian Journal of Health Care, 2018 EJHC Vol.9 No.2:* 48-60.
- Mohamed, M.H.,(2016):** self care practices among primipara mothers during postpartum period, Master thesis, Maternal and Gynecological Nursing, Ain Shams, E
- Poland, F., Spalding, N., & Gregory S. (2017):** Developing patient education to enhance recovery after colorectal surgery through action research: a qualitative study. *BMJ Open* 7(6): e013498.
- Rew, L. (2015):** *Adolescent health: A multidisciplinary approach to Theory, research and intervention*, 5th ed., Sage publication, USA, P128-129.
- Say, L., Chou, D., Gemmill, A., Tunçalp, Ö., Moller, A. B., & Daniels, J. D. (2014):** Global Causes of Maternal Death, *Lancet Global Health*; 2(6): e323-e333.
- Shah, S., & Pariyar, S. (2016):** Knowledge and practice regarding postnatal care among mothers residing in selected slum area of Dharan, Nepal, *International Journal of Health and Medicine* Vol 1(1): 15-18.
- Thaiba, P., & Rani, U. (2017):** "Knowledge and practice on selected aspects of postnatal care among postnatal mothers, *Journal of Universal College of Medical Sciences*, Vol.05 No.01 Issue 15: 37-41.
- Timilsina, S., & Dhakal, R. (2015):** Knowledge on postnatal care among postnatal mothers. *Saudi J. Med. Pharm. Sci.* 1, 88.
- W H O, (2015):** *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice*. 3rd edition. **Available at:** [https:// www.ncbi.nlm.nih.gov/books/NBK326674/](https://www.ncbi.nlm.nih.gov/books/NBK326674/)
- WHO Department of Maternal, Newborn, Child and Adolescent Health and WHO Department of Reproductive Health and Research, (2015):** postnatal care for mother and new born. . Available at: www.mcsprogram.org.
- World Health Organization (WHO), (2014):** WHO recommendations on postnatal care of the mother and newborn October 2013, © World Health Organization 2014, 20 Avenue Appia, 1211 Geneva 27. Switzerland,
- World Health Organization, (2018):** Maternal mortality, Geneva available at [https://www.who.int/news-room/fact-sheets/detail/maternal-mortality:](https://www.who.int/news-room/fact-sheets/detail/maternal-mortality) A WHO Systematic Analysis.
- World Health Organization ,(2018):** Trends in maternal mortality rate, Egypt , P 4.
- Yadav, S., Saund, M., Thakur, J., Yadav, P., Yadav, S.K., & Shah, G. (2016):** Knowledge, attitude and practices on the care of the newborn in postnatal mothers delivering at a tertiary care center in Nepal, *Sri Lanka Journal of Child Health*, 2016; 45(3):189-192.