Effectiveness of Educational Guidelines on Women's Knowledge and Self Care Practices regarding Menorrhagia

Amina Saad Mohamed [1], Samia Abdelhakeem Hasneen [2], Eman Mohammed Abdelhakam [3] and Zeinab Rabea Abdelmordy[4]

(1) Nursing Specialist at Tukh Central Hospital, Egypt, (2) Professor of Obstetrics and gynecology Health Nursing Faculty of Nursing -Benha University, (3) Assistant Professor of Obstetrics and gynecology Health Nursing Faculty of Nursing –Benha University and (4) Lecturer of obstetrics and Woman's Health Nursing –Benha University

Abstract

Background: Menorrhagia is a condition characterized by heavy menstrual bleeding during menstrual cycle and occurs when the women must change the pad within less than two hours or when the menstrual bleeding lasts up to 7days or more. **Aim:** To evaluate the effectiveness of educational guidelines on women's knowledge and self-care practices regarding menorrhagia. **Design:** A quasi-experimental study design was followed. **Setting:** The study was conducted at obstetrics and gynecology out-patient clinic affiliated to Benha University Hospital. **Sampling:** A convenient sample included. **Tools of data collection:** Two tools were used, tool (I): A Structured interviewing questionnaire to assess demographic data, menstrual, contraceptive and family history, clinical data about menorrhagia and women's knowledge regarding menorrhagia. tool (II) women's self-care practices regarding menorrhagia to assess self-care practice of women with heavy menstrual period. **Results:** The study illustrated that less than one quarter of the studied women had good knowledge pre-educational guidelines while, nearly three quarter of them had good knowledge post-educational guidelines. More than one third of the studied women had satisfactory self-care practice regarding menorrhagia pre-educational guidelines while, more than three quarters of them had satisfactory self-care practices post-educational guidelines. **Conclusion:** The educational guideline had significant improvement on women's knowledge and self-care practices regarding menorrhagia post-intervention and follow-up phase. There was a positive statistical significant correlation between total knowledge and total self-care practices pre, post and follow-up phase. **Recommendations:** Design screening program for early detection of women with menorrhagia.

Key words: Educational guidelines, Menorrhagia, Self-care practices, women's knowledge.

Introduction:

Menorrhagia is a common disorder of menstrual cycle affecting women and refers to bleeding that lasting longer than seven days and involves more blood flow than normal during menstruation. Menorrhagia is heavy or prolonged menstrual bleeding that many women can suffer from it and can be related to a number of conditions including problems in the uterus, hormonal disturbance, or other conditions **(Mukuria et al., 2022).**

Menorrhagia can occur due to uterine-related problems as tumors of the uterus that called uterine fibroids or polyps, Cancer of the uterus or cervix, certain types of birth control as intrauterine device. Problems related to pregnancy, such as a miscarriage or ectopic pregnancy, can cause abnormal bleeding. Hormone-related problems and bleeding-related disorders, such as von wille brand disease or platelet function disorder can lead to heavy menstrual bleeding. Non

bleeding-related disorders such as liver, kidney, thyroid disease, pelvic inflammatory disease and cancer may be other risk factors. In addition, certain drugs, such as aspirin, can cause increased bleeding (**Majeed et al., 2022**).

Self-care measures of menorrhagia include following a healthy lifestyle, that involve eating lots of fruits and vegetables, reducing fat, sugar and salt intake and exercise. Women should eat fiber and iron-rich diet also, drink aplenty of water during the heavy menstrual period to compensate the depletion, consumption of vitamin C with iron-rich foods can help body to best absorb sources of iron, avoid beverages that decrease the amount of absorption such as coffee and caffeinated teas, as green and black tea. Vitamins and minerals in the diet are vital to boost immunity and healthy development and can protect the body against certain types of diseases, in particular anemic diseases (**Henderson, 2021**).

Nurses play vital and important role in the management of menorrhagia include give health education to women about the characteristics of the normal menstrual cycle, teach women with menorrhagia about types of treatment, self-care measures and follow healthy life style. Nurse should give women instruction about the measure to follow during menorrhagia, importance of frequent pad change, using of additional protection, record and report the number and size of pads or tampons used and the degree of saturation (**Sourav et al., 2021**).

Menorrhagia is a major cause of gynecological diseases that affect 1–5 women living in Europe and North America in a period of their reproductive age also, about 9–14% of women in their reproductive age lose 80 mL blood in each cycle. This proportion shows similar frequency in developing countries as well. It was indicated that 12% of the adolescents in Nigeria complained about menorrhagia with blood loss over 80 ml. In Egypt 16% of women aged 15 to 44years were diagnosed with menorrhagia, and 25% of the women complained about long-frequent periods of bleeding or staining (**Trillo et al., 2022**).

In Egypt study done at Zagazig University, 24 % of women were diagnosed with menorrhagia. The study done at Menoufia Governorate, Egypt revealed that the age of menarche of the studied adolescent females was between 9 and 16 years and the prevalence of menstrual disorders was 87% (**Alshaikh et al., 2020**).

The study aimed to evaluate the effectiveness of educational guidelines on women's knowledge and self-care practices regarding menorrhagia.

Subjects and Method

Study Design:

A quasi-experimental study design (time series study, one group) was followed to fulfill the aim of the study.

Study Setting:

The study was conducted at obstetrics and gynecology Out Patient Clinic affiliated to Benha University Hospital.

Sampling:

 Sample type: A convenient sample.

Sample size: The sample size included all admitted women who suffered from menorrhagia and attended to the previous setting for a period of six months and included 100 women.

Tools of data collection:

Two tools were used and included:

Tool (I): Structured interviewing questionnaire Sheet was designed by the researcher after reviewing related national and

international literature **(Gokyildiz et al., 2013, Su et al., 2020 and Sourav et al., 2021)** and consisted of six parts:

Part (1): Demographic data of studied women and included (7items).

Part (2): Women's menstrual history (7 items).

Part (3): Women's history of contraceptive method (5items).

Part (4): Women's family history (4items).

Part (5): Women's clinical data about menorrhagia (10items).

Part (6): Women's knowledge regarding menorrhagia which included the following sections that divided into **3 sections** as follow:

Section (A) women's knowledge about the menstrual cycle (9 questions).**Section (B)** women's knowledge about menorrhagia (7 questions).**Section (c)** women's knowledge about the treatment of menorrhagia (4 questions).

Scoring system:

Each question was given a score(3)when the answer was complete correct, a score (2)when the answer was incomplete correct and a score (1)when the answer was incorrect or don't know. The total score of each section was calculated by summation of the score of it's questions. The total score of women's knowledge regarding menorrhagia was calculated by the addition of the total score of each section and classified as the following :

-Good knowledge ≥75% correct answer

-Average knowledge 50%<75% correct answer

 -Poor knowledge <50% correct answer

Tool II: Women's self-care practices regarding menorrhagia it was adapted from **Fisher & Psych, (2016)** for assessing self-care practice of women with heavy menstrual period and included 47 items that divided into 5 parts as following: Part(A): Pharmacological regimen involved 13 items.

Part (B): Diet regimen involved 15 items. Part(C): Personal hygiene involved 8 items. Part (D): Sports included7 items. Part(E): Psychological pressure included 4 items.

Scoring System:

Each item of the self- care practices questionnaire was given a score based on three points likert scale as follow: a score(3)was given for always, a score(2) for sometimes and a score (1)for never. The total score was calculated by the addition of the total score of each part and classified as following:

 - Satisfactory practice   ≥60%

 -Unsatisfactory practice <60%

Supporting tool: Educational guidelines: It was designed by the researcher after reviewing related national and international literatures. It was written in simple Arabic language to suit the level of women's understanding and supported with colored illustrated pictures. The educational guidelines included the following items (introduction about menorrhagia, definition, nature of disease, causes, manifestations, complications, treatment, self-care practices and measures to relieve the manifestations).

Limitation of the study

- Sometimes noise and the presence of many people around the women required more time to fill in questionnaire. But the researcher overcome that limitation by providing a quiet place for interview, and permitted one of the relatives to help women to fill in the questionnaire if women were tired.

Tools validity& reliability

The tools of data collection were tested and reviewed for it's content validity by panels of tree experts in the field of obstetrics and gynecological nursing at faculty of Benha University to test content validity. Their opinions were elicited regarding the tools format layout, consistency and scoring

system. The experts reviewed the tools for clarity of sentences, consistency and appropriateness of content, the sequence of items, accuracy, relevance and applicability of tools. The necessary modification for tool 1 as part(3)women's history of contraceptive method, part (4) women's family history and part (5) women's clinical data about menorrhagia .

The reliability was done by Cronbach's alpha coefficient test which revealed that each of the two tools consisted of relatively homogenous items as indicated by the moderate to high reliability of tools, the internal consistency of the tools was as the following: structured interviewing questionnaire was(0.93) and women's self-care practices was (0.87).

Ethical considerations:

The study approval was obtained from Scientific Research Ethical Committee of the Faculty of Nursing at Banha University before starting the study. The aim of the study was explained to each woman before applying the tools to gain their confidence and cooperation. An oral consent was obtained from each woman who participated in the study. Each women had freedom to withdraw from study at any time without obligation. The study had no physical, social or psychological risks on the women. Confidentiality and privacy were ensured throughout the study process and the women were assured that all data was used only for research purpose. The study tools ensured that the study didn't touch women's dignity, culture, traditional and religious aspects and didn't cause any harm for any woman during data collection. Also, didn't include any immoral statements and respect human rights. Each woman was informed about time throughout the study.

Pilot study

The pilot study was conducted on 10% of the total period of data collection (3 weeks) to evaluate clarity and applicability of tools used for data collection as well as estimate the time needed to fill in the questionnaire. Minor modifications were done in the form of clarification of sentences. Women included in the pilot study was involved in the main sample size.

Preparatory phase: During this phase, the researcher reviewed, the advanced national and international literature related to the present study topic, then prepared tools of data collection which was reviewed by a panel expertise of 3 obstetrics and gynecological nursing specialists.

Field work: The study was carried out at the beginning of October 2021 to the end of June, 2022 covering 9 months. The researcher visited the study settings three days weekly (Sunday, Tuesday & Thursday) from 9Am to 12 pm to collect the data according to admitted cases. To fulfill the aim of the current study, the following phases were adopted (interviewing and assessment phase, planning phase, implementation phase &evaluation phase).

Interviewing and assessment phase: At the beginning of the interview the researcher greeted the women, introduced herself, explained the purpose of the study and provided the women with all information about the study (purpose, duration, and activities) and took oral consent to participate in the study. Data was collected by the researcher through structured interviewing questionnaire sheet (tool I) (pre test) to collect women's demographic data, menstrual history, history of contraceptive method, family history, women's clinical data about menorrhagia and Women's knowledge

regarding menorrhagia. Then, the researcher used women's self care practice regarding menorrhagia (tool II) (pre test) to assess self care practices of women with heavy menstrual bleeding. The average time required for completing the questionnaire was around (20-30 minutes).

Planning phase: Based on the results obtained from pretest assessment of women's knowledge and self care practices regarding menorrhagia and review of relevant literature, the researcher designed the educational guidelines in an Arabic language supported by figures and included two parts theoretical & practical. The sessions' number and its content were determined. The researcher used different teaching methods such as lecture, group discussion, demonstration with the assistance of instructional media as videos presented on laptop.

Implementation phase: Implementation of the educational guidelines was carried out at the pre mentioned setting. Women were divided into10 groups according to women's physical and mental readiness. Each group included 10 women. The overall sessions were four sessions for each group; divided into one theoretical session and the duration of each session was ranged from 30-45 minutes followed by and three practical sessions and the duration of each session was ranged from 45-60 minutes included periods of discussion according to women's achievement, progress and feedback.

The theoretical sessions:

   First session: At the beginning of the first session the researcher gave the nurses the educational guidelines and introduced an orientation of the educational guidelines including the general and specific objectives by using Arabic languish to suit all level of women's education. Then, the researcher started by the introduction of the theoretical part of the educational guidelines and provided women with general knowledge about menorrhagia, definition of menorrhagia, factors affecting menorrhagia and causes of menorrhagia.

The practical sessions:-

   Second session: started by a feedback about the previous session and introduction of the objectives of the new session then, the researcher provided women with knowledge about investigations of menorrhagia, treatment of menorrhagia, pain relieving measures and nursing role during menorrhagia.

   Third session: implied the implementation of the practical part of the educational guidelines and included assessment of the impact of menorrhagia on quality of life and social functioning. Then the researcher discussed the pharmacological regimen and diet with women. Physical examination include abdominal palpation and pelvic examination were done when required.

   Fourth session: started by feedback and re demonstration of the previous session and introduction of the objectives of the new session. Then the researcher demonstrated information about personal hygiene, sports and psychological pressure to women, so that woman had time to consider the various options available both in primary and secondary care. Finally, the researcher gave 5 minutes to all women to ask question then clarify the question.

Evaluation phase: This phase was utilized to evaluate the effect of educational guidelines on improving women's knowledge and self-care practice regarding menorrhagia. It was done by using the same format of tool that was used for pre-test. All tools of data collection were used pre-, and 4 weeks post-intervention (posttest) and follow up was

done 8 weeks after intervention. Then the mean was obtained for statically analysis.

Statistical analysis:

The collected data was coded, organized, categorized, tabulated and analyzed by using appropriate statistical methods. Data were verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 22) was used followed by data tabulation and analysis. Descriptive statistics were applied (e.g., mean, standard deviations, frequencies and percentages). Independent t-test, Chi-square test, Fisher Exact Test and Pearson correlation coefficients were used. For all of the statistical tests done, p-value > 0.05 indicated no statistical significant difference, p-value <0.05 indicated a statistical significant difference, and p-value ≤ 0.001 indicated a highly statistically significant difference.

Results:

Table (1) reveals that 60.0% of studied women aged ≥ 35 years old with mean age 33.03±10.91 and 56.0% of them were from rural areas. Regarding their education about 52.0% of women had secondary education and 67.0% of them were housewives also, 75.0% of studied women were married. Regarding women's income about 60.0% of women had insufficient income and 78.0% of them had nuclear family.

Figure (1): revealed that there was highly statistical significant improvement in women's knowledge post-intervention and at follow up phase compared to pre-intervention(p≤0.001). This could be due to the positive effect educational guidelines and using of various teaching methods that help women to ask questions, acquire and retain correct knowledge.

Table (2) reveals that there was highly statistically significant difference between mean scores of total self-care practices sections regarding menorrhagia at pre-intervention, post-intervention and at follow up phases (p<0.001).

Figure (2): revealed that there was a highly significant improvement in women's self-care practice score regarding menorrhagia at post and at follow-up phase, slightly more than one third of women had satisfactory practices pre-intervention that improved to more than two third at post -intervention and two third at follow-up phase, this could be due to the effect of educational guideline in motivating women to improve their self-care practices in order to maintain health, minimize manifestations and avoid the complications.

Table (3) illustrated that there was a positive statistically significant correlation between total knowledge and total self-care practice scores regarding menorrhagia at pre intervention, post intervention and follow-up phase (p <0.001)

Table (1): Distribution of the studied women according to their demographic characteristics (n=100).

Demographic characteristics	No.	%
Age (years)		
20-<25	18	18.0
25-<35	22	22.0
≥ 35	60	60.0
Mean ±SD	33.03±10.91	
Residence		
Rural	56	56.0
Urban	44	44.0
Educational level		
Read and write	3	3.0
Primary education	30	30.0
Secondary education	52	52.0
University education	15	15.0
Occupation		
House wife	67	67.0
Working	33	33.0
Marital status		
Married	75	75.0
Single	20	20.0
Divorced	3	3.0
Widow	2	2.0
Monthly income		
Sufficient	40	40.0
In sufficient	60	60.0
Type of family		
Nuclear	78	78.0
Extended	22	22.0

Effectiveness of Educational Guidelines on Women's Knowledge and Self Care Practices regarding Menorrhagia
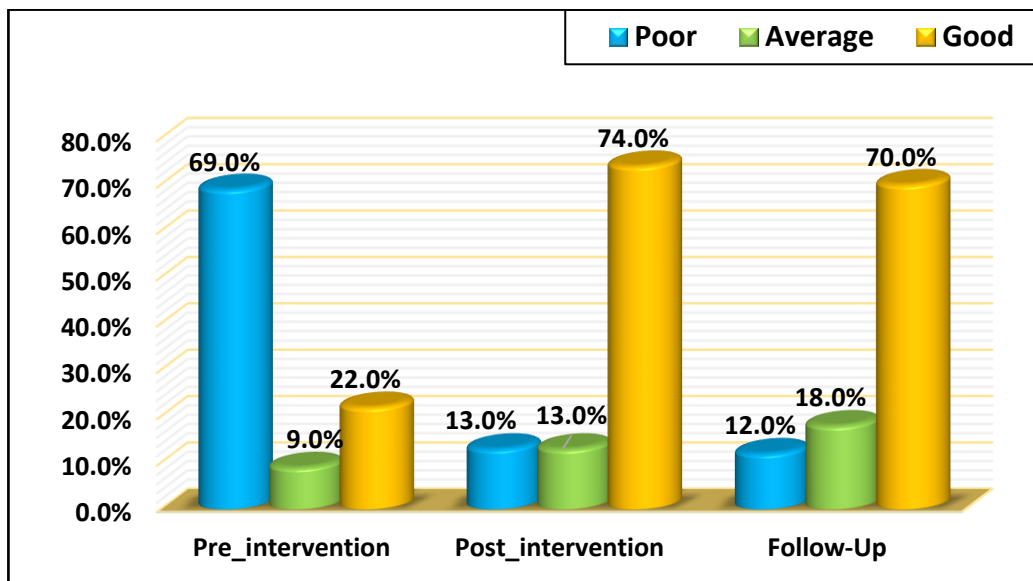

Figure (1): Distribution of studied women's total knowledge score regarding menorrhagia at pre- intervention, post- intervention and at follow-up phases (n=100).

Table (2): Mean scores of total self-care practices sections regarding menorrhagia at Pre-intervention, Post- intervention and follow up phases (n=100).

Total self-care Practice	Pre-Intervention Mean ±SD	Post-Intervention Mean ±SD	Follow-Up Mean ±SD	Paired t test (1)	p-value	Paired t test (2)	p-value
Pharmacological regimen	21.99±9.92	31.81±9.54	30.07±10.14	12.48	0.000**	11.55	0.000**
Diet	25.44±11.54	38.08±10.08	34.86±11.74	13.27	0.000**	11.98	0.000**
Personal hygiene	13.76±6.02	20.44±5.15	18.89±6.20	13.47	0.000**	11.92	0.000**
Exercise	11.94±5.35	17.84±4.94	16.53±5.72	12.66	0.000**	10.52	0.000**
Psychological pressure	7.03±2.97	10.03±2.72	9.40±3.00	12.20	0.000**	10.88	0.000**

** Highly statistical Significant (P<0.001)

Paired (t1)   before intervention versus immediately after

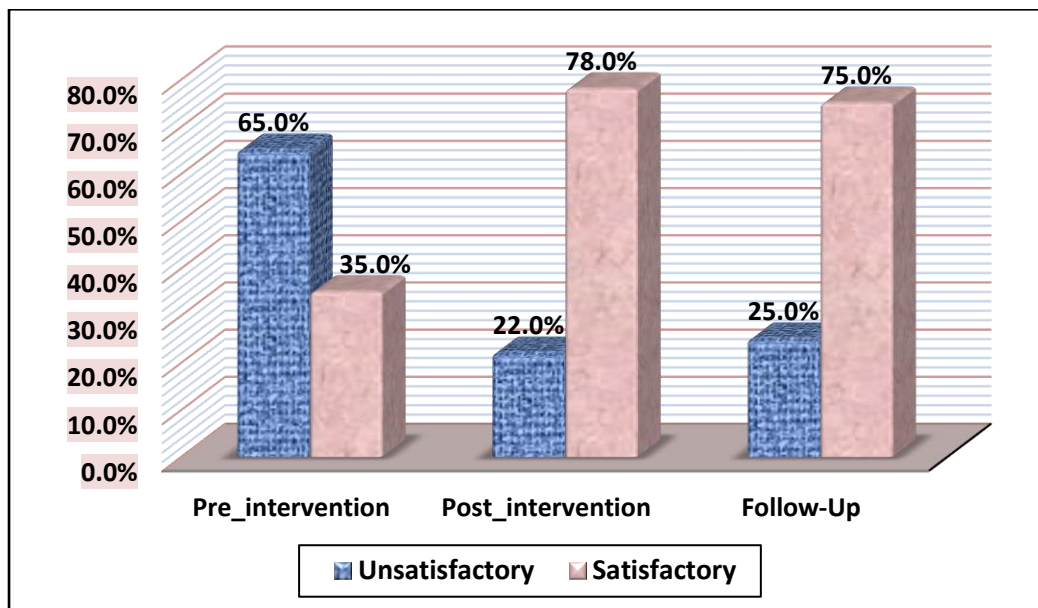Paired (t2)   before intervention versus after 8 weeks follow up

Figure (2): Distribution of studied women's total self-care practices score regarding menorrhagia at Pre- intervention, Post- intervention and at follow up phases (n=100).

Table (3): Correlation between total knowledge, and total self-care practices scores of the studied women regarding menorrhagia at Pre- intervention, Post- intervention and at follow up phases (n=100).

Variables	Total Knowledge score					
	Pre-intervention		Post-intervention		Follow-up	
	r	P value	r	P value	R	P value
Total self-care practice score	0.870	0.000**	0.904	0.000**	0.861	0.000**

**A Highly Statistical significant ($p \leq 0.001$)

Discussion:

Menorrhagia negatively affects women's quality of life and has negative effects on physiological health, psychological state, energy, work productivity, social relationships, family life and sexual functions of women as the excessive blood loss during the menstrual period can cause physical health problems such as iron deficiency anemia (IDA) and fatigue (**Kamaludin et al., 2019)**.

Regarding demographic characteristics of the studied women, the result of the current study revealed that three fifth of studied women aged ≥ 35 years old with mean age 33.03±10.91 and more than half of them were from rural areas.

This result is supported by **Da Silva Filhoet al., (2021)** who studied "The difficult journey to treatment for women suffering from heavy menstrual bleeding: a multi-national survey" and revealed that the mean age of women was 34.3 year and nearly half of them were from rural areas.

The current study also illustrated that more than half of studied women were from

rural areas that preferred early graduation and marriage and caring of children and their family.

This result is supported by **Nwagha et al., (2021)** who studied "Clinical screening for menorrhagia and other bleeding symptoms in Nigerian women" and revealed that nearly half of participants had secondary education and most of them weren't working. In contrast these results disagree with **Alsalman, et al., (2021)** who studied "Heavy menstrual bleeding awareness among Saudi female population and clinical implications" and revealed that nearly three quarter of the studied sample had higher educational level.

Also, the results of the current study showed that three quarters of studied women were married and three fifth of them had insufficient income, from the researcher point of view, this could be due to the Egyptian tradition of marriage at young age also having insufficient income as more than two thirds of them were house wines.

The study is in the same line with **Sourav et al., (2021)** who studied "The effect of community-based health education intervention on management of menstrual hygiene and menstrual disorders among rural Indian women" and revealed that more than two thirds of women were married and more than half of them had insufficient income.

Concerning studied women's total knowledge score regarding menorrhagia, the current study revealed that there was highly statistical significant improvement in women's knowledge post-intervention and at follow up phase compared to pre-intervention. This could be due to the positive effect educational guidelines and using of various teaching methods that help women to ask questions, acquire and retain correct knowledge.

This result is in the same line with **Kanagasabai, et al., (2022)** who studied "Interventions to improve access to care for abnormal uterine bleeding: A systematic scoping review" and revealed that there was significant increase in women's knowledge post intervention compared to pre-intervention. Also, **Zandstra et al., (2017)** showed obvious improvement in women's knowledge regarding menorrhagia manifestations, treatment and self-care knowledge. Conversely, the study was incongruent with **Vuorma et al., (2003)** who studied "Impact of patient information booklet on treatment decision–a randomized trial among women with heavy menstruation" and revealed that there was no significant improvement in women total knowledge regarding heavy menstrual bleeding post program application in intervention group compared with control group.

Regarding studied women's total self-care practices score regarding menorrhagia, the current study revealed that there was a highly significant improvement in women's self-care practice score regarding menorrhagia at post and at follow-up phase, slightly more than one third of women had satisfactory practices pre-intervention that improved to more than two third at post - intervention and two third at follow-up phase, this could be due to the effect of educational guideline in motivating women to improve their self-care practices in order to maintain health, minimize manifestations and avoid the complications.

This result is congruent with **Sourav et al., (2021**) who revealed that there was highly statistically significant improvement in women practice regarding menorrhagia at post and at follow-up phase of program implementation. On the other hand, the study

was in disharmony with **Maniwa& Sugiura, (2021)** who studied "Self-care Strategies for Menstruation-related Symptoms in Women Raising Young Children" and revealed that more than half of studied women had inadequate knowledge regarding menstrual abnormalities and heavy menstrual bleeding post self-care strategies conduction with no significant improvement.

Concerning the correlation between studied women total knowledge and total self-care practices, the current study showed that there was a positive statistically significant correlation between total knowledge and total practice scores regarding menorrhagia at pre, post and at follow-up phases of intervention, from the researcher point of view, this could be interpreted that adequate knowledge level increased women awareness regarding the best practices that used to control and manage the manifestations of heavy menstrual bleeding and subsequently increase women adherence to self-care practices.

This result is in the same line with **Armour, et al., (2019)** who studied "Self-care strategies and sources of knowledge on menstruation in 12,526 young women" and revealed that there was highly statistically significant correlation between studied women total knowledge and self-care practice strategies pre and post program application. In addition, the study result is agreed with **Armour, (2021)** who studied "Using an online intervention to improve menstrual health literacy and self-management in young women: a pilot study" and illustrated that there was significant correlation between studied participants total knowledge and self-management practices post-intervention.

Conclusion

There was statistically significant improvement in all items of women' knowledge regarding menorrhagia at post

intervention and at follow up phase of program implementation compared with pre-intervention. Also, there was highly statistically significant difference between mean scores of total self-care practices sections regarding menorrhagia at pre, post and at follow up phases. Furthermore, there was a positive statistically significant correlation between total knowledge and total self-care practices scores regarding menorrhagia at pre, post and at follow-up phases.

The above mentioned findings have mainly supported the study hypothesis(Women's knowledge and self-care practices regarding menorrhagia will be improved after the application of the educational guidelines than before).

Recommendations:

- An educational guideline regarding menorrhagia should be distributed to all obstetrics and gynecological departments and out-patient clinics at Benha City to enhance women's knowledge and self-care practices.

Recommendations for further studies:

- Design screening program for early detection of women with menorrhagia.
- Raising women's awareness about menorrhagia related risk factors should be a priority to ensure early diagnosis of the disease.
- Designing an educational program to improve women's knowledge and attitudes regarding menorrhagia.
- Replication of the study on large sample size in different settings for generalization of results.

References

Adebimpe, O., Farinloye, O., & Adeleke, A., (2016). Menstrual pattern and disorders and impact on quality of life among university students in South-Western Nigeria. Journal of

Basic and Clinical Reproductive Sciences, 5(1), 27-32.

Alsalman, M., Albarak, A., Busaleh, F., Alshaikh, S., Alluwaim, M., Busaleh, M., & Albarrak, A., (2021). Heavy menstrual bleeding awareness among Saudi female population and clinical implications. Health Science Reports, 4(1), e244.

Alshaikh, A., El-esrigy, A., & Al-Kelany, O., (2020). Menstrual Disorders among Adolescent Females in Tala District, Menoufia Governorate, Egypt. The Egyptian Family Medicine Journal, 4(2), 125-136.

Armour, M., Parry, K., Al-Dabbas, M. A., Curry, C., Holmes, K., MacMillan, F., ... & Smith, C. A., (2019). Self-care strategies and sources of knowledge on menstruation in 12,526 young women with dysmenorrhea: A systematic review and meta-analysis. PLoS One, 14(7), e0220103.

Armour, M., Hyman, M. S., Al-Dabbas, M., Parry, K., Ferfolja, T., Curry, C.,& Holmes, K., (2021). Menstrual health literacy and management strategies in young women in Australia: a National Online Survey of young women aged 13-25 Years. Journal of Pediatric and Adolescent Gynecology, 34(2), 135-143.

Da Silva Filho, A. L., Caetano, C., Lahav, A., Grandi, G., & Lamaita, M., (2021). The difficult journey to treatment for women suffering from heavy menstrual bleeding: a multi-national survey. The European Journal of Contraception & Reproductive Health Care, 26(5), 390-398.

Fisher, P&Psych, R.,(2016). Self-care in Your Personal Life Questionnaire, Supporting

our lives and our work in high stress, trauma-exposed workplaces,23(1):112.

Gokyildiz, S., Aslan, E., Beji, N. K., & Mecdi, M., (2013). The effects of menorrhagia on women's quality of life: a case-control study. International Scholarly Research Notices,13(4):7.

Henderson, A., (2021). A Review of the Accessibility and Affordability of Contraception for Women's Self-care and Reproductive Health,12(6):23.

Kamaludin, N., Zhang, R., & Shorey, S., (2019). Perspectives of women experiencing Menorrhagia: A descriptive qualitative study. Journal of clinical nursing, 28(13-14), 2659-2668.

Kanagasabai, P. S., Filoche, S., Grainger, R., Henry, C., & Hay-Smith, J., (2022). Interventions to improve access to care for abnormal uterine bleeding: A systematic scoping review. International Journal of Gynecology & Obstetrics, available at https://doi.org/10.1002/ijgo.14224.

Majeed, J., Sharma, P., Ajmera, P., & Dalal, K., (2022). Menstrual hygiene practices and associated factors among Indian adolescent girls: a meta-analysis. Reproductive Health, 19(1), 1-13.

Maniwa, M., & Sugiura, K., (2021). Self-care Strategies for Menstruation-related Symptoms in Women Raising Young Children. Kawasaki journal of medical welfare, 27(1), 93-101.

Mukuria, C., Connell, J., Carlton, J., Peasgood, T., Scope, A., Clowes, M., …& Brazier, J., (2022). Qualitative review on

domains of quality of life important for patients, social care users, and informal carers to inform the development of the EQ health and wellbeing. Value in Health,25(4):492-511.

Nwagha, U., Okoye, C., Ugwu, O., Ugwu, E., (2021). Clinical screening for menorrhagia and other bleeding symptoms in Nigerian women. Ann Afr Med;20(2):111-115.

Sourav, U., Singh, R., Gupta, B., & Singh, A., (2021). The effect of community-based health education intervention on management of menstrual hygiene and menstrual disorders among rural Indian women. Indian Journal of Preventive & Social Medicine, 52(4), 191-196

Su, S., Yang, X., Su, Q., & Zhao, Y., (2020). Prevalence and knowledge of heavy menstrual bleeding among gynecology outpatients by scanning a WeChat QR Code. PloS one, 15(4), e0229123.

Trillo, A., Kronenfeld, R., Simms-Cendan, J., Davis, J. A., & Corrales-Medina, F., (2022). High Prevalence of Congenital Factor VII (FVII) Deficiency in Adolescent Females with Heavy Menstrual Bleeding and Iron Deficiency Anemia. Journal of Pediatric and Adolescent Gynecology,35(5):7-13.

Vuorma, S., Rissanen, P., Aalto, A. M., Hurskainen, R., Kujansuu, E., & Teperi, J. (2003). Impact of patient information booklet on treatment decision–a randomized trial among women with heavy menstruation. Health Expectations, 6(4), 290-297.

Zandstra, D., Busser, S., Aarts, M., & Nieboer, E., (2017). Interventions to support shared decision-making for women with heavy menstrual bleeding: a systematic review. European Journal of Obstetrics & Gynecology and Reproductive Biology, 211, 156-163.

تاثير الدليل الإرشادي التعليمي علي معلومات وممارسات الرعاية الذاتية للسيدات فيما يتعلق بغزارة الحيض

أمينه سعد محمد ـ ساميه عبد الحكيم حسانين ـ ايمان محمد عبدالحكم ـ زينب ربيع عبدالمرضي

يعرف غزارة الطمث بأنه نزيف الحيض الغزير الذي تعاني منه بعض النساء خلال فترة الدورة الشهرية ويحدث عندما تضطر النساء إلى تغيير الفوطة الصحية في غضون أقل من ساعتين أو عندما يستمر نزيف الحيض لمدة تصل إلى 7 أيام أو أكثر. لذا هدفت الدراسة الي تقييم فعالية تأثير الدليل الإرشادي التعليمي علي معلومات وممارسات الرعاية الذاتية للسيدات فيما يتعلق بغزارة الحيض. تم اتباع تصميم دراسة شبه تجريبية (دراسة متسلسلة زمنية ، مجموعة واحدة) لتحقيق هدف الدراسة. و أشتملت العينة على 100 امرأة. وأوضحت الدراسة أن أقل من ربع النساء الخاضعات للدراسة كان لديهن إرشادات جيدة للمعرفة قبل البرنامج ، في حين أن ما يقرب من ثلاثة أرباعهن كان لديهن معرفة جيدة بإرشادات ما بعد البرنامج. كان لدى أكثر من ثلث النساء تحت الدراسة ممارسة رعاية ذاتية جيده فيما يتعلق بإرشادات ما قبل البرنامج لغزارة الطمث ، بينما كان لدى أكثر من ثلاثة أرباعهن ممارسات رعاية ذاتية جيده بعد البرنامج , كما كان هناك تحسنًا إحصائيًا ملحوظا في معلومات النساء فيما يتعلق بغزارة الطمث في مرحلة ما بعد تنفيذ البرنامج وفي مرحلة متابعة تنفيذ البرنامج مقارنة بما قبل تنفيذ البرنامج. كما توجد فروق ذات دلالة إحصائية عالية بين متوسط الدرجات الكلي لممارسات الرعاية الذاتيه فيما يتعلق بغزارة الطمث في مراحل ما قبل وبعد وأثناء تنفيذ البرنامج. كما اوصت الدراسة بتصميم برنامج للكشف المبكر عن النساء المصابات بغزارة الطمث.