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Original Research Article

Effectiveness of Psycho- Educational Nursing Intervention on Adolescents' Premenstrual Syndrome and Self-Efficacy

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Severe premenstrual symptoms are very common with a prevalence of 3 to 8% among women of reproductive age. Symptoms range from emotional and cognitive to physical changes that can have a strong impact on everyday functioning and quality of life. The aim of the study: the aim was to evaluate the effectiveness of psycho- educational nursing intervention program on adolescents' premenstrual syndrome and self-efficacy. Design: A quasi experimental design (two group one group was controlled and the other was experimental group). Setting: The study was conducted at the faculty of the nursing magnify governorate. Subject: A convenience sample of 60 students divided into two groups, one experimental and the other control group from the previous mentioned setting Tools: I-A constructive interviewing questionnaire was developed and validated by the researcher consists of two parts part one to assess socio-demographic data and part two was to assess self-efficacy with regard to managing premenstrual syndrome. II-Penn premenstrual syndromes scale to measure premenstrual symptoms. Results: The main finding of this study illustrated that, there was a highly statistically significant difference in redactions of premenstrual syndromes and improvement of self-efficacy on experimental group than control group post intervention program, no significant correlation between self-efficacy and premenstrual syndromes and no significant relation between sociodemographic data and both self-efficacy or premenstrual syndromes. Conclusion: psych educational nursing intervention program was effective in reduction of premenstrual syndromes and raising adolescences self-efficacy regarding managing premenstrual symptoms. Recommendation: Specific self-management programs should be developed, tested and replicated. , psych educational program can provide the women's with accurate information and education to build the skill needed to achieve optimal self-management.

Keywords: psycho- educational nursing intervention, adolescent, premenstrual syndrome and self-efficacy

INTRODUCTION

Premenstrual syndrome (PMS) refers to a collection of somatic, psychological, emotional and behavioral signs and symptoms which begin one to two weeks prior to menstruation and diminish with the onset of menstruation. Symptoms can be significant enough to cause disruption in family, personal, or occupational function [1, 2]. Diagnosis of Premenstrual syndrome is based on the presence of at least five symptoms, including one of four core psychological symptoms , from a list of physical and psychological symptoms ,the symptoms are depression, feeling hopeless or guilty, anxiety/tension, mood swings, irritability/persistent anger, decreased interest, poor concentration, fatigue, food craving or increased appetite, sleep disturbance, feeling out of control or overwhelmed, poor coordination, headache, abdominal cramps, bloating, swelling, acne, increased appetite, headache, backache, sleep problems, weight gain, and breast tenderness [3].

Adolescents are prone to moderate or severe symptoms of PMS which they may be reluctant to report. Although there is a wide range of symptoms, the primary cause is unknown, probably the result of several factors There are several potential hormonal scenarios involved in the etiology of Premenstrual syndrome, estrogen dominance, progesterone dominance, too much prolactin, vitamin/mineral deficiencies, reduce endorphins, disorder prostaglandin metabolism, low levels of serotonin, and psychological factors. Also, there are factors like hormonal imbalance, reduced progesterone-to-estrogen ratio, sodium retention, lack of nutrients such as Vitamins,B6, Mg, Ca, inappropriate response to neurotransmitters, abnormal function axis hypothalamus -

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pituitary - adrenal defect that leads to adrenal hormone secretion and environmental factors such as stress [1].

Self-efficacy is the extent or strength of one's belief in one's own ability to complete tasks and reach goals. Self-efficacy pertains to a sense of control over one's environment and behavior. Self-efficacy beliefs are cognitions that determine whether a health behavior change will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. Self-efficacy affects every area of human endeavor by determining the beliefs a person holds regarding his or her power to affect situations, it strongly influences both the power a person actually has to face challenges competently and the choices a person is most likely to make.

These effects are particularly apparent, and compelling, with regard to behaviors affecting health [4, 5]. Self-efficacy influences the effort one puts forth to change risk behavior and the persistence to continue striving despite the barriers and setbacks that may undermine motivation. Self-efficacy is directly related to health behavior, but it also affects health behaviors indirectly through its impact on goals. Self-efficacy influences the challenges that people take on as well as how high they set their goals. Individuals with strong self-efficacy select more challenging goals and focus on opportunities, not on the obstacles [6].

Management of PMS has been often frustrating for both patients and physicians. Initially, all patients with PMS should be offered non-pharmacological therapy. These non-pharmacological interventions for PMS include patient education, supportive therapy and behavioral change [7] Treatment of PMS or PMDD women is confined to reduce symptoms and improve social and occupational function in order to increase individual quality of life. There are three therapeutic approaches for PMS and PMDD: nutrition and lifestyle, pharmacological treatment and cognitive behavioral therapy. No scientific studies have been carried out to determine which approach is most effective, lifestyle changes may be useful in women with mild symptoms, aerobic exercise and a healthy diet may improve premenstrual symptoms [8].

Cognitive-behavioral therapy can enhance self-esteem and social integration as well as reduce the symptoms [9]. All kinds of psychotherapy can be relevant even though relaxation technique training may be particularly suitable [10]. A person-centered approach allows the nurse to deal with individuals' symptoms. Nurses can support women emotionally by demonstrating that their worries about PMS are taken seriously. The guidance gives nurses the opportunity to take a fresh look at their practice and update their knowledge of PMS. They have a valuable part to play in the multidisciplinary care offered to women. The nurse should always inform their female patients that lifestyle modification rather than drug therapy may be the most appropriate treatment approach for women with PMS symptoms; lifestyle changes such as regular aerobic exercise, dietary and nutritional modifications and self-care activities. Regular aerobic exercise can ease premenstrual symptoms because regular aerobic exercise, leads to the release of endorphins in the central nervous system that normally decline in the late luteal phase of the menstrual cycle [11, 12].

The nurse should ask the adolescents to eat foods with low glycemic index along with proteins in moderate amounts through the day to prevent unstable blood sugar and mood swings during PMS. Eating salads and vegetables only increase the risk of low protein levels and increase PMS symptoms. Other helpful dietary changes include: limiting caffeine, chocolate, and alcohol, especially during the two weeks before the start of the menstrual cycle. Also, eating a diet high in fiber will help reduce symptoms. Also the nurse should consider factors such as an imbalance in calcium may be one cause of PMS, lower magnesium levels in the body's cells, decrease vitamin E and B6, high stress, smoking and obesity in the management of premenstrual symptoms, appropriate exercise and a hypo caloric diet should be recommended in women with elevated body weight [13].

SIGNIFICANCE OF THE STUDY

The prevalence of premenstrual symptoms was found to be (89.6 %) among medical students of Ain Shams University, Egypt and 80.2% among El-Minia University students, Egypt. [14,15] showed that Premenstrual syndrome symptoms may have serious negative consequences for adolescents, their families and their social relationships, including low self-esteem, low tolerance levels to stress and feelings of inadequacy. [16, 17] showed that even negative expectations and predictions about PMS lead to a high rate of absenteeism from school and loss of academic activities. [18] Concluded that the symptoms of premenstrual syndrome have a negative impact on quality of life, especially after sexual function in women and approximately 67.5% of women are under the pressure of sexual history.

There are more and more researches focused on women's symptoms during the premenstrual period, however, very little are known focused on how women cope with these symptoms during this period. So, efforts to decrease somatic and psychological complications using different methods are necessary. There is a limited research that implements education programs about premenstrual syndrome of Menoufyia Governorate students following implementation of the menstrual education program. Therefore; the aim of the present study is to evaluate the effectiveness of psycho educational nursing intervention program on adolescents' premenstrual syndrome and self-efficacy.

SUBJECTS AND METHODS

Aim of the Study

The aim of the study is to evaluate the effectiveness of psycho- educational nursing intervention program on adolescents' premenstrual syndrome and self efficacy

Research Hypothesis

Psycho educational nursing intervention program will reduce premenstrual syndrome and raise self-efficacy of the adolescents.

Research Design

Quasi-experimental design (two groups, one experimental and the other control group) was used to achieve the aim of the study

Research Setting

The study was conducted at the faculty of Nursing, Menoufyia University, Egypt.

Subjects

A convenience sample of (60) out of (81) forth year psychiatric

nursing students during academic year 2014-2015 was selected from the faculty of Nursing, Menoufyia University who fulfilling the following inclusion and exclusion criteria.

The Inclusion Criteria

The sample was selected according to the following inclusion criteria; age ranged from 18 to 22 years old, voluntary accepted to participate in the study and reports at least five of the following symptoms during the 5 days before menses in each of her three prior menstrual cycles

1. Depression
2. Outbursts of anger
3. Irritability
4. Anxiety
5. Confusion
6. Social withdrawal
7. Breast tenderness
8. Abdominal bloating
9. Headache
10. Swelling of extremities
11. All the subjects had regular menstrual cycles and were not on any medication.

Exclusion Criteria

1. A history of chronic physical illness,
2. A history of psychiatric illness or posttraumatic stress disorders.
3. A history of substance abuse

TOOLS OF THE STUDY

Two Tools Were Used in this Study

Tool (1): Structured interview questionnaire developed and validated by the researcher consists of two parts:
Part one: questionnaire includes socio-demographic data of the students such as age, and family number, menarche age, past knowledge about menstruation, past knowledge about self-care during menstruation.
Part two: questionnaire to measure Self efficacy in the form of rating scale. The tool was designed by the researcher in simple Arabic language, after reviewing related literature. It consists of 5 items measuring student's self-efficacy related to her ability to deal with fatigue and lack of energy, activities of daily living and hobbies, cramp, backache and headache without the use of analgesic, emotional symptoms, and physical symptoms. The list of statements rated on five - point Likert scale. The total score ranged from 5-25, less than 8 point refers to low self-efficacy 8- to less than 13 refers to mild 13- to less than 18 refers to moderate and 18-25refers to high self-efficacy

Tool (2): Premenstrual Syndrome Scale: This scale was originally developed and validated by (19) It was modified and validated by (20) to measure premenstrual syndrome. It was translated into Arabic and validated by the researchers. It consists of 17 items. Within each symptom is rated from 0 (absent) to 3 (severe). zero = none, 1= mild, 2=moderate, 3=sever. The total score ranged from 0-51. Less than 9 point refers to no premenstrual syndrome, 9 – less than16 refers to mild, 16- less than 27 refers to moderate, and 27-51refers to severe premenstrual syndrome

Reliabilty: The reliability of the tools for the study was done using test retest reliability and the two tools proved to be strongly reliable at. 80 for tool one and at .95 for tool two.

Validity: The tools of data collection were tested for its content validity by a panel of experts in psychiatric nursing and obstetric nursing staff to ascertain relevance and completeness and the required modification was carried out accordingly.

PROCEDURE

Administrative approval: An official approval was obtained from the dean of the college of nursing, Menoufyia governorate Egypt after explanation of the aim of the study, as well as oral consent from students. Ethical consideration: Consent was obtained from students to participate in the study. The researchers initially introduced themselves to all potential subjects and they were assured that the collected data were absolutely confidential, protection of the human rights was maintained to all -subjects that the participation in the research is voluntary. All subjects have a freedom to refuse participation and withdrawing at any time.

Pilot study: A pilot study was conducted on 5 students to test feasibility, clarity and applicability of the tools then necessary modifications were done accordingly. Data collection: Data were collected from January 2015 to the end of May 2015. The researchers initiated data collection by firstly collecting sociodemographic and pretest data by using tool 1 and 2. The data were collected through 4 months, the subjects were divided into two equal groups, one experimental group and the other is the control group. The experimental group is divided into two equal subgroups, each subgroup attend to eight sessions, one session per week for one hour, the implementation of the study passed into three phases (pre assessment phase, implementation phase and evaluation phase).
Preassessment Phase: A comfortable, private place was chosen for the interview. Orientation was carried out on the purpose, content and counselling subject were interviewed individually, where pre assessment was done using the tools for data collection.
Implementation Phase: the study, hypnotized that application of psycho- educational nursing intervention program will reduce premenstrual syndromes and raise adolescence self-efficacy regarding managing premenstrual symptoms. This intervention program was developed and given through sessions, each session has a general objective and a set of specific objectives. This was achieved through several teaching methods as brainstorming, lecture, discussion, booklet and role playing using illustration media as video, pictures and computer. At the end of each session (summary, conclusion, feedback and a homework assignment for next session were done).
The general objectives of the intervention programs were:

- Define premenstrual syndromes and self-efficacy.
- Identify causes, precipitating factors and signs and symptoms of premenstrual syndromes
- State the different treatment regimens for premenstrual syndrome.
- Design plan of care and set measure to protect the adolescences from dangers during the premenstrual syndromes.
- Practice the plan of care for the adolescences regarding (drugs, diet, daily life activities, self-care measure, change of stress environment and lifestyle).
- Apply stress management strategies as coping skills to overcome the symptoms and increase self-efficacy.

- Apply self-care measures to overcome the symptoms and increase self-efficacy
- Apply nutritional and lifestyle measures to control the symptoms

The sessions of intervention were:

Session I: Concerned with open discussion for identification, integration of group, clarification of the aim, time table allowed for intervention.

Session II: concerned with knowledge about menstruation and hygienic measure during it.

Session III: concerned with knowledge about the concept of premenstrual syndromes, causes, signs and symptoms and effective method of treatments.

Session IV: Concerned with role of (diet, drugs, daily life activities and lifestyle modification on premenstrual syndromes and self-efficacy).

Session V: concerned with the effect of environmental stress on premenstrual syndromes and self-efficacy.

Session VI: concerned with stress management strategies as breathing exercise, progressive relaxation, and meditation

Session VII: concerned with demonstration of stress management strategies.

Session VIII: concerned with self-care and nutrition measures to control premenstrual syndromes

Post Assessment Phase: The researcher encourages the participant to ask any question about the information and practices needed related to her problems and any clarification needed regarding the previous session, then the evaluation of the program was done using the pre-mentioned tools of data collection.

Data Processing And Analysis: Data was analyzed using SPSS (Statistical Package for Social Sciences) version 16. In categorical data Chi-squared test was used for comparison between groups. The odds ratio and 95% confidence interval were calculated. $P<0.05$ was considered statistically significant.

LIMITATION OF THE STUDY

The use of convenience samples in this study limits the ability to generalize the findings. An additional limitation in this study is that the student's knowledge before and after the psycho-educational program was not measured.

RESULTS

Table (1): Socio demographic characteristics of the study groups (N=60): This table shows that: the minimum age of the sample is 21 and the maximum age is 23, the mean age of menarche is 13.2(SD =1.24). The majority of the students is single (91.7%). The majority of the sample has enough income, and more than half are from rural areas.

Table (2): Comparison between experimental and control group pretest regarding levels of PMS: This table shows no statistical significant difference between experimental and control group on pretest regarding level of premenstrual syndrome. Table (3): Comparison between experimental and control group posttest regarding levels of PMS: This table shows a highly statistically significant difference between experimental and control group posttest regarding level of premenstrual syndrome. That indicates decrease in PMS symptom severity after the intervention among the experimental group. Table (4): Comparison between experimental and control group pretest regarding levels of self-efficacy: This table shows no significant difference between experimental and control group on pretest regarding levels of self-efficacy.

Table (5): Comparison between experimental and control group posttest regarding levels of self-efficacy: This table shows a highly statistically significant difference between experimental and control group on posttest regarding levels of self-efficacy. This, indicates the effectiveness of the intervention program on increasing self-efficacy levels, post intervention among the experimental group.

Figure (1): Comparison between pre and post PMS levels in the control group: This figure shows that 76.7% of the control group has severed level of premenstrual syndrome on pre – test and 70% post-test.

Figure (2): Comparison between pre and post PMS levels in experimental group: This figure shows that the majority of the experimental group has a severe level of premenstrual syndrome before the intervention (90%) this level decreased to 23.3% after the intervention programs. Table (6): Comparison between levels of self-efficacy in the control group (N=30) pre post intervention program: This table shows no statistical significant difference in the level of self-efficacy on pre posttest in the control group. Table (7): Comparison between self-efficacy levels in cases group (N=30) pre post intervention program: This table shows a highly statistically significant difference in the level of self-efficacy in the experimental group posttest than pretest Where 86.7 of the experimental group have high level of self-efficacy post intervention program and only 6.7 of them have high level of self-efficacy before the intervention program .That indicates effectiveness of the intervention program on increasing self-efficacy levels among the experimental group post intervention.

Table (8): Spearman's correlation between Premenstrual syndrome and self-efficacy: This table shows that negative significant correlation between self-efficacy and premenstrual syndromes. This means that when the adolescents have a high level of self-efficacy they will be able to control the premenstrual syndrome symptoms. Table (9): Relationship between Self efficacy and Sociodemographic characteristics of experimental group: This table shows that there is no statistical significant relation between sociodemographic characteristics of experimental group and levels of self-efficacy except income. Table (10): Relationship between premenstrual syndrome and Sociodemographic characteristics of experimental group: This table shows that there is no statistical significant difference between sociodemographic characteristics of experimental group and levels of premenstrual syndromes.

Table (1): Socio demographic characteristics of studied groups (N=60)

Socio demographic characteristics	No.	%
Age/years: ($\bar{X}$ ±SD)	21.33±0.54	
Range	21-23	
Age of menarche: ($\bar{X}$ ±SD)	13.2±1.24	
Range	11-16	
Marital state:		
- Single	55	91.7
- Married	5	8.3
Residence :		
- Urban	28	46.7
- Rural	32	53.3
Income		
- Enough	50	83.3
- Not enough	7	11.7
- More than enough	3	5

Table (2): Comparison between experimental and control group pretest regarding levels of PMS:

Pre	Premenstrual syndrome								χ^2	P value
	No		Mild		Moderate		Sever			
	No.	%	No.	%	No.	%	No.	%		
- Case	0	0	1	3.33	2	6.67	27	90		
- Control	0	0	0	0	7	23.3	23	76.7	4.1	>0.05

Table (3): Comparison between experimental and control group posttest regarding levels of PMS:

Post	Premenstrual syndrome								χ^2	P value
	No		Mild		Moderate		Sever			
	No.	%	No.	%	No.	%	No.	%		
- Case	0	0	2	6.7	21	70	7	23.3		
- Control	0	0	0	0	9	30	21	70	13.8	**<0.001**

Table (4): Comparison between experimental and control group pretest regarding levels of self-efficacy:

Pre	Self-efficacy								χ^2	P value
	Low		Mild		Moderate		High			
	No.	%	No.	%	No.	%	No.	%		
- Cases	5	16.7	6	20	17	56.7	2	6.7		
- Control	2	6.7	7	23.3	15	50	6	20	3.49	>0.05

Table (5): Comparison between experimental and control group post test regarding levels of self-efficacy:

Post	Self-efficacy								χ^2	P value
	Low		Mild		Moderate		High			
	No.	%	No.	%	No.	%	No.	%		
- Cases	0	0	1	3.3	3	10	26	86.7		
- Control	1	3.3	10	33.3	11	36.7	8	26.7	22.4	**<0.001**

Figure (1): Comparison between pre and post PMS levels in control group

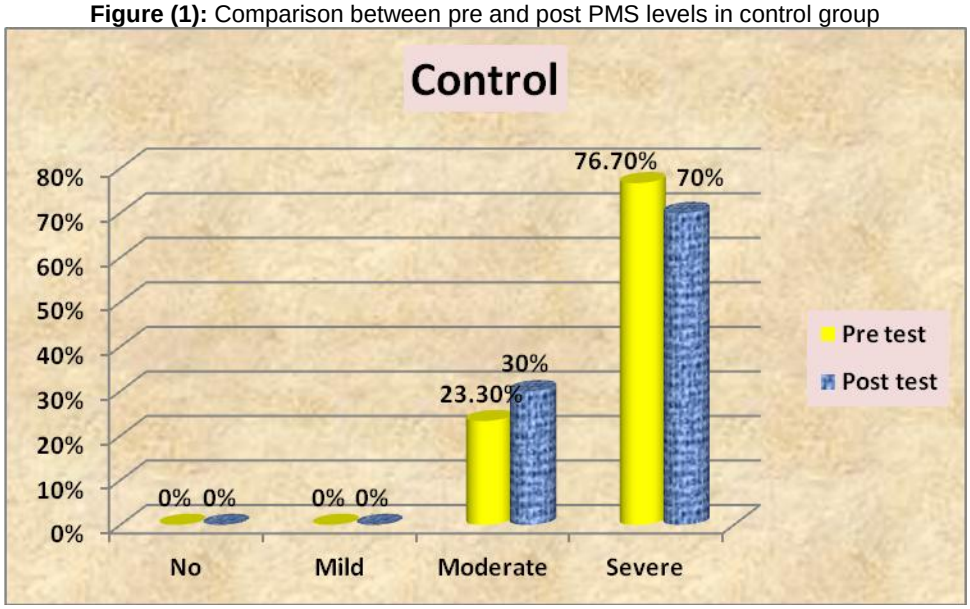

Figure (2): Comparison between pre and post PMS levels in experimental group

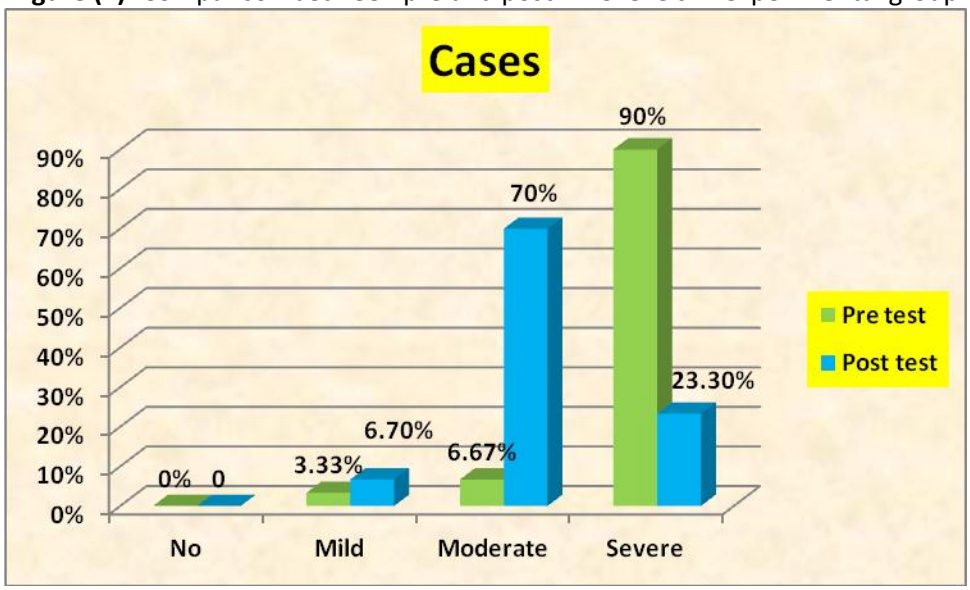

Table (6): Comparison between levels of self-efficacy in control group (N=30) pre post intervention program:

Control	Self-efficacy								χ^2	P value
	Low		Mild		Moderate		High			
	No.	%	No.	%	No.	%	No.	%		
- Pre test	2	6.7	7	23.3	15	50	6	20		
- Post test	1	3.3	10	33.3	11	36.7	8	26.7	1.76	>0.05

Table (7): Comparison between self-efficacy levels in cases group (N=30) pre post intervention program:

Cases	Self-efficacy								χ^2	P value
	Low		Mild		Moderate		High			
	No.	%	No.	%	No.	%	No.	%		
- Pre test	5	16.7	6	20	17	56.7	2	6.7		
- Post test	0	0	1	3.3	3	10	26	86.7	38.9	**<0.001**

Table (8): Spearman's correlation between Pre menstrual syndrome and self efficacy:

	Pre menstrual syndrome	
	R	P value
Self efficacy	-0.362	0.004

Table (9): Relationship between Self efficacy and Socio demographic characteristics of experimental group:

Socio demographic characteristics	Self-efficacy						χ^2	P value
	Mild (n=1)		Moderate (n=3)		High (n=26)			
	No.	%	No.	%	No.	%		
Marital state:								
- Single	1	100	2	66.7	25	96.2	3.83	>0.05
- Married	0	0	1	33.3	1	3.8		
Residence :								
- Urban	0	0	0	0	15	57.7	4.61	>0.05
- Rural	1	100	3	100	12	42.3		
Income								
- Enough	1	100	2	66.7	23	88.5		
- Not enough	0	0	1	33.3	0	0	9.63	**<0.05**
- More than enough	0	0	0	0	3	11.5		

Table (10): Relationship between premenstrual syndrome and Socio demographic Characteristics of experimental group:

Socio demographic characteristics	Premenstrual syndrome						X^2	P value
	Mild (n=2)		Moderate (n=21)		High (n=7)			
	No.	%	No.	%	No.	%		
Marital state:								
- Single	2	100	19	90.5	7	100	0.91	>0.05
- Married	0	0	2	9.5	0	0		
Residence :								
- Urban	1	50	11	52.4	4	57.1	0.19	>0.05
- Rural	1	50	10	47.6	3	42.9		
Income								
- Enough	2	100	17	81	7	100		
- Not enough	0	0	1	4.8	0	0	1.97	>0.05
- More than enough	0	0	3	14.3	0	0		

DISCUSSION

PMS is a complex disorder that is a periodical repetition of some psychological or physical complaints which begins during the luteal phase of the menstrual cycle and subsides with the onset of menstrual bleeding or shortly after that. These symptoms can interfere with daily functioning, interpersonal relationships, occupational performance and educational performance (impaired attention in the classroom and frequent absences from school) and are economically costly for the involved people and have negative effects on quality of life of millions of women, including adolescents [21, 22] Most women did not know the methods of coping with the symptoms of premenstrual syndrome [23] Thus, inadequate knowledge and skills might cause problems that negatively affect their quality of life.

Therefore; the original purpose of this study was to evaluate the effectiveness of psycho-educational nursing intervention program on adolescents' premenstrual syndrome and self efficacy. Our study revealed that the age of the sample ranged from 21 to 23 with a mean (±SD 21.33±0.54, and the majority of the students were single (91.7%).this result was contradicted to the finding of [24] who reported that the age of the women ranged from 17 to 27 years with a mean (±SD) of 20.3± 1.8 years, and the majority were not married (93.5%).

Regarding the age of menarche the current study showed the mean age of menarche was (13.2), a similar finding (13.02) was reported by [25]. Contradictory with studies done in Damanhour City by [26] which revealed that the mean age of menarche was found to be 12.77±1.34 year. This difference could be attributed to the influence of heredity, environmental influence and nutrition. Age at menarche has largely decreased in most developed countries and seems stabilized at 13 years with 0.5 year variations between countries and the decreased age of menarche is important because of its potential impact on early matured girls' behaviors [27].

Concerning the influence of the intervention program on premenstrual syndrome symptoms, the current study revealed that no statistical significant difference between experimental and control group before the intervention, and revealed a highly statistically significant difference between experimental and control group posttest regarding level of premenstrual syndrome. The results of the post-test confirmed that the program helped in improving PMS symptom severity after the intervention among the experimental group. This result similar to study done b [28] which showed that, most of the students reported premenstrual symptoms, And [29] who reported that a statistically significant improvement after the sessions than before the sessions. Also, results of [30] showed a highly significant decrease in the total score of premenstrual symptoms at (P<0.000) of the study group when compared to the post- scores of the control group.

Moreover, the present study revealed that the majority of the experimental group had severe level of premenstrual syndrome before the intervention (90%) this level decreased to 23.3% after the intervention programs and 70% of the experimental group has a moderate level of premenstrual syndrome before the intervention decreased to 6.67% after the intervention program. That indicated the effectiveness of the program on decreasing PMS symptom among the adolescents. Concerning the influence of the intervention program on self-efficacy, the current study revealed that no statistical significant difference between experimental and control group before the intervention, and revealed a highly statistically significant difference between experimental and control group post test regarding level of self-efficacy.

And the majority of the experimental group (86.7) had a high level of self efficacy post intervention program compared to (6.7) that had a high level of self efficacy before the intervention program. The results of the post-test indicated the effectiveness of the intervention program on increasing self-efficacy levels of post intervention among the experimental group. This result may be due to improving the adolescent knowledge and practice on how to deal with the physical and emotional symptoms through application of stress management strategies and self care measures and nutrition management. So the adolescent became able to control the premenstrual symptoms.

This results in agreement with [27] who mentioned that the menstrual intervention program has played an important role in the adolescent's knowledge, which in turn improves their practices. The results were also reported by [31] in Egypt, it was found that all girls had a poor level of knowledge before implementing health education programs. Such lack of knowledge was attributed to lack of either formal or informal pre-menarche preparation.

The current study showed that there was a significant negative correlation between self-efficacy and premenstrual syndrome. This revealed that when the adolescents had a high level of self-efficacy they will be able to control the premenstrual syndrome symptoms. The present study was in agreement with [26], who stated that women's knowledge seemed to affect their practices during menstruation, after depending on increase students' knowledge and awareness regarding menstrual hygienic practices, and the change in the level of knowledge had a positive effect on behavior and affect adolescent's menstrual practices. Also, [6] stated that self-efficacy influences the challenges that people take on as well as how high they set their goals. Individuals with strong self-efficacy select more challenging goals and focus on opportunities, not on obstacles

CONCLUSION

It can be concluded from this study that psycho- educational nursing intervention program was effective in reduction of premenstrual syndromes and raising adolescences self-efficacy regarding managing premenstrual symptoms.

RECOMMENDATION

Specific self-management programs should be developed, tested and replicated. , psycho- educational program can provide the women's with accurate information and education to build the skill needed to achieve optimal self-management.

REFERENCES

[1]Canning, S., Waterman, M., Orsi, N., Ayres, J., Simpson, N. & Dye, L. (2010). The Efficacy of hypericum perforatum for the Treatment of Premenstrual Syndrome: A Randomized, Double-Blind, Placebo-Controlled Trial. CNS Drugs. Auckland: Mar. 24(3):207-22

[2]Bakhshaai, N., Hasanzaadeh, Z., Raghibi, M. (2011). The prevalence of the PMS and PMDD signs in the teenager students. Zaahedan Journal of medical sciences research. 13 (8):4-6.

[3]Delaram M and Jafari F. (2011).The effect of fennel on the premenstrual syndrome.Knowledge Health; 6:1-6.

[4]Ormrod, J. E. (2006). Educational psychology: Developing learners (5th Ed.). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.

[5]Luszczynska, A., & Schwarzer, R. (2005). Social cognitive theory. In M. Conner & P. Norman (Eds.), Predicting health behaviour (2nd ed. rev., pp. 127–169). Buckingham, England: Open University Press.

[6])DeVellis, M., & DeVellis, F. (2000). Self-efficacy and health. In: Baum, A., Revenson,A & Singer,J, Handbook of health psychology , Mahwah, NJ: Erlbaum; 235-247.

[7] Elena A.,& Ghassan A.(2010) .Does Vitamin D and Calcium Affect the Incidence of Premenstrual Syndrome, world family medicine journal ;7(10)

[8]Stoddard, L., Dent W., Shames L., &Bernstein, L. (2007). Exercise training effects on premenstrual distress and ovarian steroid hormones. Eur J Appl Physiol; 99: 27-37.

[9]Busse, W., Montori, M., Krasnik, C., Patelis-Siotis, I., & Goat, H. (2009). Psychological intervention for premenstrual syndrome: a meta-analysis of randomized controlled trials. Psychother Psychosom. 78: 6-15

[10]Dvivedi J, Dvivedi S, Mahajan KK, Mittal S, &Singhal A. (2008). The 61-points relaxation technique' on stress parameters in premenstrual syndrome.Indian J Physiol Pharmacol; 52: 69-76.

[11]Andrea J., & Rapkin, M (.2005).New Treatment Approaches for Premenstrual Disorders. The American Journal of Managed Care; *11:S480-S491*

[12]Lloyd, B and Hornsby, B. (2009).Complementary and Alternative Medications for Women's Health Issues. Nutr Clin Pract; 24(5):589-609.

[13]Perez-Lopez,F, Chedraui2,P., Perez-Roncero1,G., Lopez-Baena,M and ., Cuadros-Lopez. J. (2009). Premenstrual Syndrome and Premenstrual Dysphoric Disorder: Symptoms and Cluster Influences. *The Open Psychiatry Journal* ; *3:* 39-49

[14]Bakr,I., Ez-Elarab,H.(2010). Prevalence of premenstrual syndrome and the effect of its severity on the quality of life among medical students. The Egyptian Journal of Community Medicine; 28, (2),19:28

[15]Seedhom, A., Mohammed, E., & Mahfouz, E. (2013): Life style factors associated with premenstrual syndrome among El-Minia University students, Egypt. Hindawi Publishing Corporation ISRN Public Health; ID 617123: p. 6.

[16]Bakhshani, N., Mousavi, M., & Khodabandeh, G. (2009). Prevalence and severity of premenstrual symptoms among Iranian female university students. *J Pak Med Assoc, 59*(4), 205-208.

[17] Houston,M., Abraham, A., Huang, Z., & D'Angelo, J. (2006). Knowledge, attitudes, and consequences of menstrual health in urban adolescent females. *J Pediatr Adolesc Gynecol, 19*(4), 271-275.

[18]Yang, M., Gricar, J., Maruish, M., Hagan, M., Kornstein, S., & Wallenstein, G. (2010). Interpreting Premenstrual Symptoms Impact Survey scores using outcomes in health-related quality of life and sexual drive impact. *The Journal of reproductive medicine, 55*(1-2), 41.

[19]Freeman, W., DeRubeis, J., &Rickels,K.(1996).Reliability and validity of a daily diary for premenstrual syndrome.psychiatry Res;65(2) ,97:106

[20]Penn Daily Symptom Report. (2003).Courtesy of PMS Program for Research and treatment. Available at: www.turner-white.com

[21]Bakr, I., & Ez-Elarab, H. S. (2010). Prevalence of premenstrual syndrome and the effect of its severity on the quality of life

among medical students. *Egyptian Journal of Community Medicine, 28*(2).

[22]Choi, D., Lee,Y., Lehert, P., Lee, S., Kim, H., & Dennerstein, L. (2010). The impact of premenstrual symptoms on activities of daily life in Korean women. *J Psychosom Obstet Gynaecol, 31*(1), 10-15.

[23]Oztürk, S., Tanrıverdi, D., & Erci, B. (2011). Premenstrual syndrome and management behaviours in Turkey. *Aust J Adv Nurs, 28*, 54-60.

[24] Rasheed,P & Al-Sowielem,L.(2oo3). Prevalence and Predictors of Premenstrual Syndrome among Collegeðaged Women in Saudi Arabia, *Ann Saudi Med 23 (6): 381-387*

[25]Shirmohammadi,M., Arbabi,M., Taghizadeh,Z.,& Haghanni,H.(2009). Premenstrual Syndrome and Psychiatric Comorbidities. *Iran J Psychiatry; 4:62-66*

[26]El-Lassy,R and Madian,A.(2013). Impact of Health Educational Program on Menstrual Beliefs and Practices of Adolescent Egyptian Girls at Secondary Technical Nursing School. Life Science Journal; 10(2).

[27]Ong, K., Lynn, M., & Dunger, B. (2006). Lessons from large population studies on timing and tempo of puberty (secular trends and relation to body size): the European trend. Mol. Cell. Endocrinol., 254-255: 8-12.

[28]Eswi, A., Helal, H.,&Jealousy, W.(2012). Menstrual attitude and knowledge among Egyptian female adolescents. Journal of American Science; 8(6): 555-565

[29]Habib,F., allayed,A,, Al Humedi,H.,& Al Msalem,I.(2014). Impact of an Educational Session about Premenstrual Syndrome Management Using Complementary and Alternative Medicine on Young Adult females' knowledge and Practice., *IOSR Journal of Nursing and Health Science (IOSR-JNHS);3(2): 63-69*.

[30]Sabbour, A., ElDeeb, A., and Elithy, A.(2012). Effect of Treadmill Training on Premenstrual Symptoms, Hormonal and Haematological Parameters in Young Females. Bull. Fac. Ph. Th. Cairo Univ,. 17, (1):17-23.

[31]Hassanen H, Tosson M, Abd El-Elkareem E. (2004). Effect of health education and training program for secondary school students on menstruation at Assiut Governorate. Bulletin of High Institute of Public Health; 34(3): 575-94.