- *Basic Research*

Attitude and Practice of Self-Medication and Paradigm of Primary Dysmenorrhea Self Care Among Adolescents Female

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Abstract

Dysmenorrhea is one of the most common gynecologic disorders. It is the greatest single cause of lost work and school days among adolescent female. **Aim**; the attitude and practice of self-medication and paradigm of primary dysmenorrhea self-care among adolescents female. **Design**: descriptive design, setting: the study conducted at Ain Shams high school in Fayoum city. **Subjects**: The sample was purposeful sample, it was randomly chosen according to the inclusion criteria, it consisted of two hundred adolescents girl, **Tools**: Four tools were used for data collection: (I)First tool include an interviewing questionnaire sheet designed to collect data related to general characteristics and questions related to current and past history of menstrual among adolescent female. (2) Second tool include verbal multidimensional scoring system. (3) Third tool include Visual Analogue scale. Fourth tool was designed by the researcher to gather the data that included practices and paradigm of self-medication to relieve pain among adolescents female students with primary dysmenorrhea. **Results**: more than two thirds of studied sample was taking analgesics without doctor prescription, while more than half of studied sample was taking hot drinks before and during menstruation, near to two thirds of studied sample declared their knowledge of the negatives resulting of self-medication while near to half of studied sample did not feel any improvement after using self-medication. There were statistical correlations between degree of pain and the outcome of self-medication among the studied sample. While there were negative correlations between age of menarche and dysmenorrheal pain degree. Also, there were marked relation between adolescent female resident and aware of negative impact of self-medication. **Conclusion**: there are strong effect of traditional and cultural factors among adolescents students female use self- medication to relieve pain of primary dysmenorrhea, also Self- medication attitude and practice among adolescents female with primary dysmenorrhea is high despite awareness of adverse effects. **Recommendation**: Developing and dissemination of illustrated guideline included self- medication bad effect on primary dysmenorrheal syndrome among adolescents female.

Keywords: Adolescents female, primary dysmenorrhea, self-medication, degree of pain, paradigm of self-care.

Introduction:

Primary Dysmenorrhea is the most common gynecologic condition affects high prevalence of female about 40% and 90%, occurring in 60% to 93% of adolescents female, while in Egypt prevalence of primary dysmenorrheal varies between 50% and 90%. According to Journal of Female's Health Care in 2017 in upper Egypt was reported a highest prevalence rate of dysmenorrhea (94.4%) between mild to severe pain **(Hanan E.M. and Seham M.S, 2016).**

Primary Dysmenorrhea is a womanhood problem around the world and occurs mainly in female in their teens and early twenties, which defined as as painful menstruation in women with normal pelvic anatomy, usually beginning during adolescence, also it manifested with cramping pain in the lower abdomen occurring just before or during menstruation, in the absence of other diseases such as endometriosis. Increased the endometrial prostaglandin, leading to increase uterine stronger and tone, frequent uterine contractions is more. these syndromes occur before or during the menstrual cycle in women have normal pelvic without any complications. The prevalence is particularly high among adolescents (50-70%) effecting educational and social life, leading to school absenteeism and loss of labor **(Ruchi, et.al .,2022).**

Self-medication (SM) is an important worldwide public health issue affecting female suffered with dysmenorrhea in young age. WHO defined self-medication (SM) as a term the use of medicines, herbs, non-pharmacological methods without medical supervision and approved as safe and effective for such use, without the advice of a physician either for diagnosis, treatment, prescription, surveillance or monitoring , it also called "over the counter" drugs and other formulas are available without doctor's prescription through pharmacies and / or other ways . SM practice varies among females in adolescent age, it facilitated by the easy availability of drugs, and information from textbooks, internet and seniors. Commonly used drugs as SM include nonsteroidal anti-inflammatory drugs (NSAIDs), followed by drugs for gastritis, home remedies and analgesics **(De Sanctis , etal, 2019**).

The Pattern of SM varies in different communities, different factors can influence strategy and practices of SM such as the cost, age, income, sex and self-care orientation. Also, educational level and medical awareness. SM practice for minor health complaints as dysmenorrhea is often cheap, rapid, and convenient solutions, away from health care institutions . Many of expected side effects and risks include incorrect self-diagnosis, improper medication does, inappropriate choice of therapy with lack of awareness of warnings and precautions, the recommended shelf-life and adverse reactions increase the risk of side effects cultural, ethnic, and religious factors are influence the attitudes towards self-treatment among adolescents with dysmenorrhea. There are very important roles of family, school, health care givers and professionals regarding the implementation of measures to approach this health problem in a more effective way (WHO, 2021)**.**

Analgesics, complementary and alternative therapies like exercise, acupuncture, herbal medicines, behavioral interventions, topical heat and dietary supplements are also used for relief of pain in dysmenorrhea. Primary dysmenorrhea affect school and work absenteeism, also affect and interfere with daily living activities, limitation in public and social live, ineffective and increase intake of medications. Self-medication for PD is a common practice with an incidence of 38–80% due to easy accessibility to over-the-counter drugs. This may lead

to inappropriate choice of drugs and inadequate therapeutic dose. A large number of young females studying in medical colleges are under regular pressure of medical studies and examination. There is paucity of data on pattern of SM in PD among nursing students **(Deependra and Basant., 2023).**

Significance of the Study:

Adolescent's period is critical age for female who represent about 10 million adolescent girls in Egypt, but its unmet area, despite its importance for female life. Primary dysmenorrhea is one of the most primogenital puberty age problems within 75% of all Egyptian adolescents female and 95% of adolescents female of Upper Egypt suffering from primary dysmenorrhea, itis negatively influence on female life activities, poor study achievement beside psychological disturbance **(Shaimaa M , etal ,2020).**

A massive problem faced poor and neglecting of the nursing care and studies seeks a new safe; also, this problem faces many methods whose results are not guaranteed, such as self-treatment, affordable non- pharmacological treatment. Most of the studies regarding dysmenorrhea were done only for nutrition and hygienic care. The existing studies does not include any indices to confirm the effect of self-medication in their research. Considering the lack of adequate researches in this area, this study undertaken to find out the effect of self-medication that may control primary dysmenorrheal syndrome and relief pain among adolescent's female **(Shaimaa M , et .al. ,2020).**

Aim of the study:

The aim of the study is: Study the Attitude and practice of self-medication and paradigm of primary dysmenorrhea self-care among adolescent's female.

Research question:

Is the use of self-medication effective in relieving primary dysmenorrhea among adolescents female nursing students?

Materials and Methods:

Research design: Descriptive cross-sectional study.

Setting: The studied was conducted at the (Ain Shams) Female High School – Fayoum governorate

Sample: A purposive sample of 200 adolescents' female students who have primary dysmenorrhea.

Subjects:

A purposive sample of 200 adolescents' girl's students who have primary dysmenorrhea. which was selected according to accepted by adolescents' female students of the Ain Shams high school in Fayoum city among the 1st , 2nd and 3rd educational grades. Total adolescents female of the three academic levels were (720 adolescent female students). The sample size was calculated according to the equation (**Robert P. Mason equation**)

$$n = \frac{M}{\left[\left(S^2 \times (M-1)\right) \div pq\right] + 1}$$

Which: n= required sample size, M= population, P = proportion of the population having the characteristic (0.5), S = 1.96 for 95% confidence and q= accuracy = 1-p, the sample selected according to the following criteria: Inclusion criteria: Being having regular menstrual periods and dysmenorrheal pain. Exclusion criteria*:* Genital tract infection, manifestation of secondary dysmenorrheal pain.

Methods:

Tools: Four tools were used to collect the necessary data for the study as the following:
Tool I: Structured interviewing questionnaire sheet was designed by the researcher to gather the following data after extensive literature review and include two parts:-

Part One: Include questions related to Sociodemographic characteristics for adolescents' female students as Age, residence, educational level.

Part two: Include questions related to menstrual current and past history for adolescents female students as. Age of menarche, duration of menstruation, and interval of menstruation, Time and site of dysmenorrheal pain, method used to relieve dysmenorrheal pain.

Tool II: Verbal multidimensional scoring system (VMDS)

This tool adopted from Porch & Callaghan, (1981) and modified by Anshula Odekar and Brooke Hallowell (2005). It used to examine the associated systemic symptoms of dysmenorrhea as the following (graded from 0 to 3, (0 it means no symptoms); 1 (symptoms exist only mildly and do not interfere with routine activities); 2 (symptoms exist moderately and interfere with routine activities, but are not debilitating); and 3 (symptoms exist severely and are completely debilitating).

Tool III: Visual analog scale:

This tool adopted from Huskisson et al, (1970) and modified by Dones I., et al, (2011), it will be used to examine the degree of pain before and after acupressure application. The tool included ten points, Each point is scored on a scale of 0 indicate (no pain), from 1: 3 (mild pain), 4:6 (moderate pain) and from 7:10 indicate (severe pain).

Tool IV:: assessment of self-medication tool : was designed by the researcher to gather the following data after extensive literature review and include practices and paradigm of self-medication to relieve pain among adolescents female students with primary dysmenorrhea as(take analgesics, type of analgesics, taking hot drinks, taking a rest at home, perform physical activities, taking hot path / hot bags , making massage , aware of negative impact of self-medication, outcome of self-medication, sources of self- medication , factors responsible for self-medication and paradigm of self-care during dysmenorrhea.

Tool Validity and Reliability

The validity of the tool was ascertained by professors of subject area and five experts (juries) in the field of obstetric nursing, who reviewed each tool for content and internal validity. Also, they were asked to judge on items for completeness and clarity. Regarding to the reliability, the researcher used Cronbach's Alpha test to tent the internal reliability. The first tool was tested for reliability analysis, which r = 0.88 with good internal consistency. This 2nd tool was tested for reliability analysis, which r = 0.96 The 3rd tool was tested for reliability analysis, which are = 0.98.

Pilot Study:

A pilot studied was conducted on 10%, which equal (20) female students from the studied sample to evaluate clarity of the studied tools. There were no modifications of the tool.

Ethical Consideration:

An official permit was granted from the dean of secondary school, Fayoum university, then obtained official permission from all head of departments in the faculty. all participants were required to provide informed consent after being given a clear explanation of the study's aim. Anonymity and confidentiality were assures. The researcher assured that, the research posed no risk or hazards to the female students. All female were informed that, participation in the research is voluntary and any one can withdraw from this research any time without giving any reason.

Field Work:

The researcher was attended to each grade of the ((Ain Shams secondery school)) of Fayoum Governorate for both urban and rural students .2 days / week a(Sunday and monday from 10 am: 12pm) for the previous mentioned setting, attendance was, according to time table prepared by researcher to match what's suitable for students, female of the studied sample, all studied samples were selected according to inclusion criteria until the predetermined number of the studied sample is obtained. Data collection was carried out through: Interviewing and assessment meetings. In this meetings the researcher met adolescents' female students to explain the purpose of the study and to fill Sociodemographic and assessment tools (tool number I, II, III, IV).The researcher started by the first grade , then the rest of the levels, respectively. After distributing the tools to studied sample at the suitable setting for female students (classes of the school), they were informed of how the questionnaires were to be filled in. The data collected was self-reported by the students. The duration for completing the questionnaire was between 20 and 35 minutes.

The researcher distributed to 2^{nd} , 3^{rd} and 4^{th} tool was determined and done with female students by a month after the first interview with studied participants . The tools was filled by female students to assess the practices, attitude and paradigm of self-medication regarding primary dysmenorrhea

Statistical Analysis:

The statistical package for social science (IBM SPSS – version (20) was utilized to conduct statistical analyses. (The data collected were categorized, tabulated and analyzed by using appropriate statistical methods. Appropriate statistical technique and testes of significance were used. In analysis and data collection. The chi-square test was used to compare quantitative items between groups. T-test was used to compare qualitative variable. In the analysis, 95% and 99% significance levels were applied.

Results:

The results obtained from the study are presented in the following parts

Part (I): Demographic and Menstrual Characteristics among Adolescents Female Students with primary dysmenorrhea in studied sample

Table (1) Illustrates that, half of the study sample (50%) their age was ranged from 15-16 years. Regarding to the grade of education, half of the study sample (50%) was for students at first level . Also, (55%) of the study sample were from urban areas.
Table (2) elucidates that more than half (54.5%) of the study sample was spending 4≤5 days of menses as duration of menstruation. That table also shows that, more than half (60%)of the study sample was have Interval of menstruation about 21 days while more than third (41%) of the study sample had 21 days. Also (62.5%) of the study sample have moderate amount of menstrual flow.
Figure (1) shows that, 72.5% of the study sample began the menarche at the age 10 ≥ 13 years of. n= 200
Table (3) clarifies that more than 3 thirds (78.5%) of studied sample was starting menstrual pain with menstrual bleeding starts and continues for 24 hours. As well this table show that (69.5%) of the studied sample was suffering of pain at all sites of pain in their body during menstruation
Figure (2) shows that more than half (52%) of the studied sample complain with grade 3 of (VMS)
Figure (3) shows that 55% of the studied sample were suffered from severe pain due to primary dysmenorrhea.
Figure (4) ; explains that more than three thirds of the studied sample didn't try to visit doctors to demand care of dysmenorrheal pain
Table (4) explains the paradigm of self-medication among studded sample that, more than two thirds (68.5 %) of the study sample was taking analgesics without doctor discretion, Diclofenac and Ibuprofen are the most common types of analgesics that were used with percentage (28% and 23.5%), respectively. More than half (61%) of the studied sample was taking hot drinks before and during menstruation, more than half (56.5%) of the study sample was drinking Fenugreek also (75.5%) of the study sample taken rest at home during menstrual period, while the majority (92.5%) of the studied sample refused to Perform physical activities during menstrual period. 59% of studied sample declared their knowledge of the negatives resulting of self-medication while near to half (46%) of the studied sample did not feel any improvement after using self-medication .
Table (5): displays that, there is strongly significant correlation between age of adolescents students and degree of pain, which shown as, the degree of pain increased with age(15 -16) .
Table (6): displays that, the level of awareness of the negative impact of self- medication increased with students lived in urban areas
Table (11): indicates that, there is strong statistical correlation between the degree of pain and Outcome of self-medication, Where there is a percentages of pain cured with all degree of pain put high percentages were for no improvement specially with moderate and sever level of dysmenorrheal pain.

Table 1: Socio-demographic Details of the Sample under Study (n=200)

Items	Adolescents female students with primary dysmenorrheal (No.200)	
	No	**%**
Age: -		
15-16	100	50%
16-17	60	30%
17- 18	40	20%
X+SD	**18.1±0.9**	
Grade level: -		
First level	100	50%
Second level	60	30%
Third level	40	20%
Residence		
Rural	90	45%
Urban	110	55%

Table (2): Distribution of the Adolescents Female Students According to their Menstrual Characteristics.

Items	**Adolescents female students with primary dysmenorrheal N=200**	
	No	**%**
Duration of menstruation: (days)		
1:3 days	35	17.5
4≤5 days	**109**	**54.5**
≥5 days	56	28
Interval of menstruation: (days)		
21 days	**120**	**60%**
22: 35 days	64	32%
≥ 36 days	16	8%
Amount of menstrual flow		
Scanty	18	9
Moderate	**125**	**62.5**
Heavy	57	28.5
Total	**200**	**100%**

Figure (1- I): Distribution of Age of Menarche among Adolescent Female Students with Primary Dysmenorrhea, N= 200

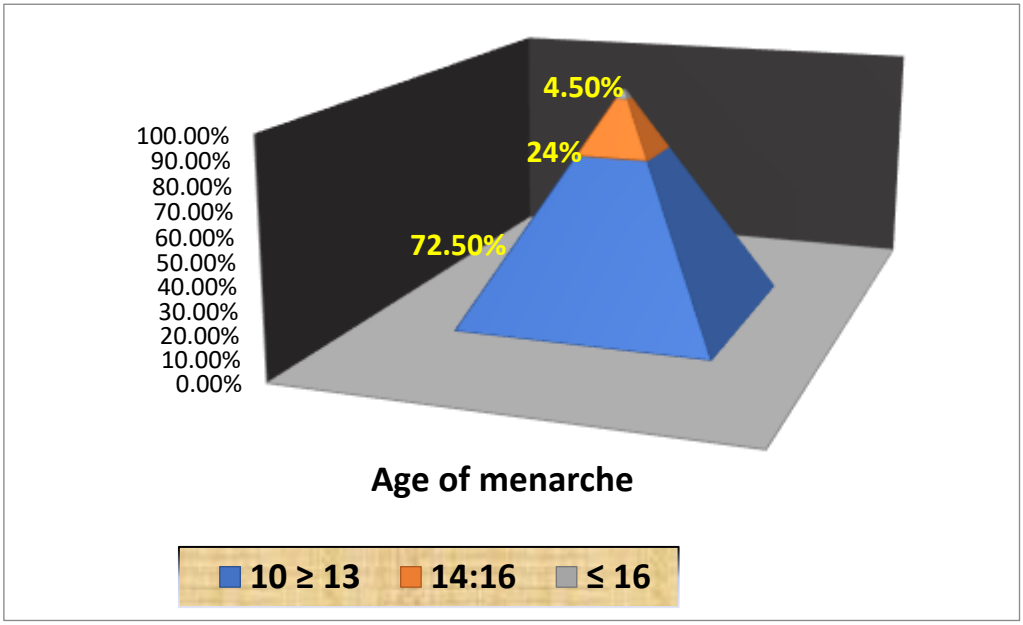


Fig (1) Showed that, 72.5% of study sample began the menarche at the age 10 ≥ 13 years

Table (3): Distribution of sample Regarding to The Pattern of Pain during Menstruation among Adolescents Female Students with Primary Dysmenorrhea.

Items	Adolescents female students with primary dysmenorrheal	
	Total No = 200	%
Time of pain		
Before 1 week of menstruation	**32**	**16**
With menstrual bleeding starts and continues for 24 hours.	**157**	**78.5**
With menstrual bleeding and continues for more than 24 hours.	**11**	**5.5**
Total	200	100%
Site of pain		
Lower back	**11**	**5.5**
Lower extremities	**8**	**4**
Lower back & abdomen	**42**	**21**
All of the above	**139**	**69.5**
Total	**200**	**100%**

Figure (2): Distribution of Verbal Multidimensional Scoring System (VMS) among adolescent Female Students With Primary Dysmenorrhea, N= 200

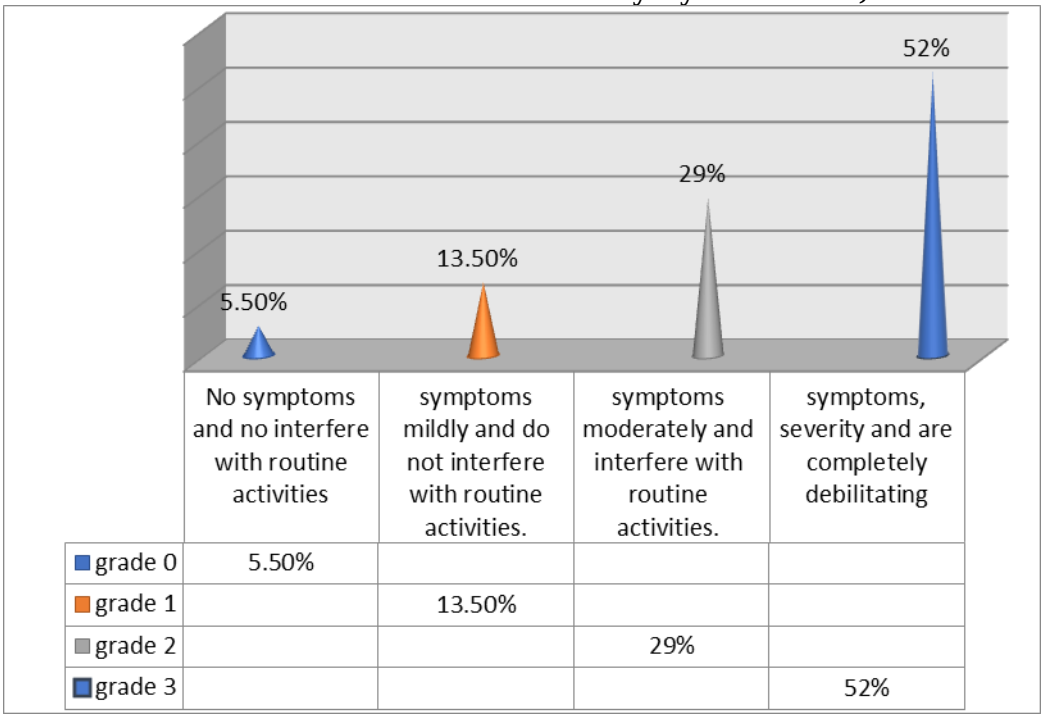


Fig (2) showed that; more than half (52%) of studied sample complain with grade 3 of (VMS)

Figure (3): Visual Analogue Scale for pain Measurement Among Adolescent Female with Primary Dysmenorrhea, N= 200.

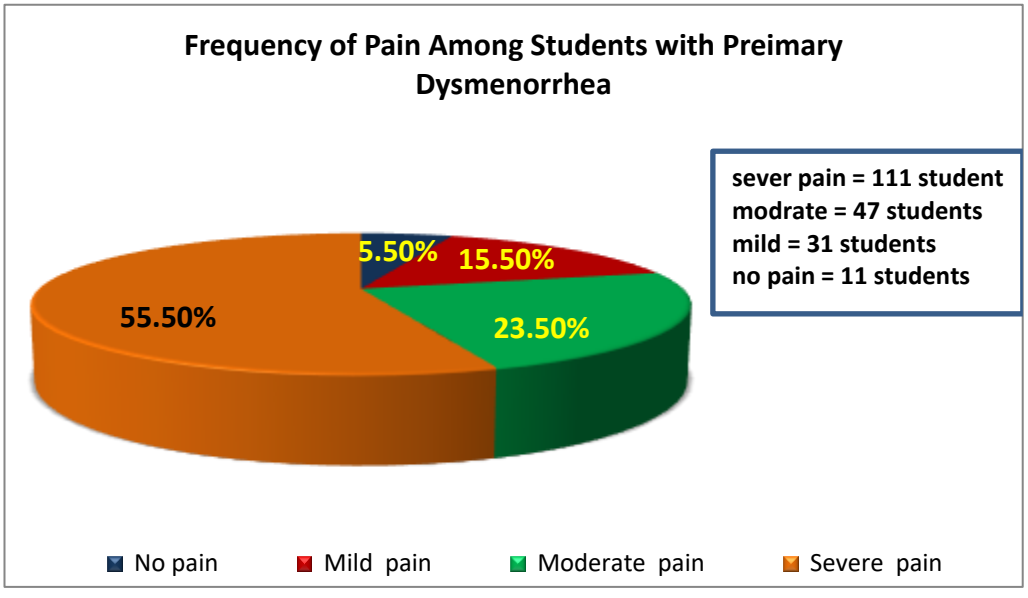


Fig (3) showed that 55% of studied sample were suffered from severe pain due to primary dysmenorrhea. n= 200

Figure (4) *(Part D):* The Distribution of *Evaluation of Self- Medication Practice Questionnaire*

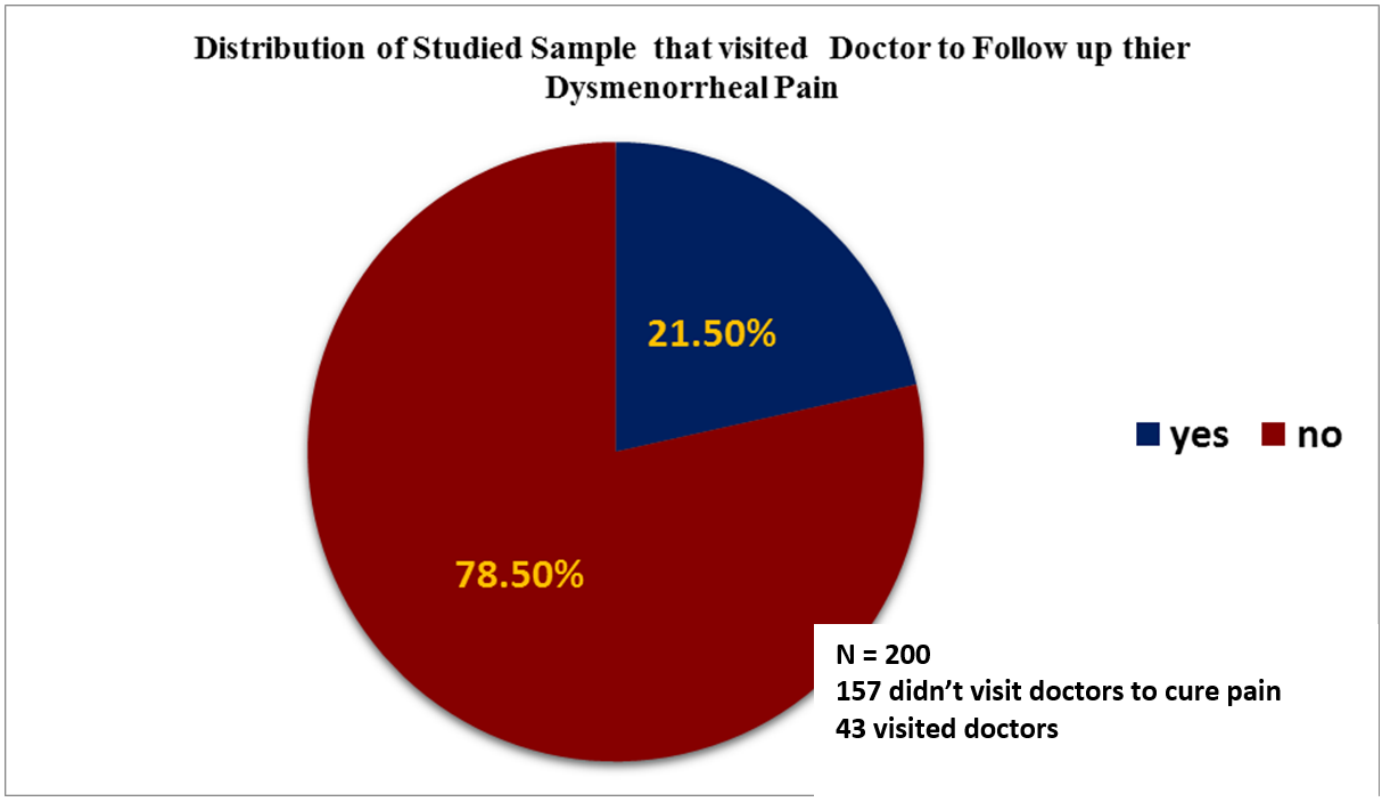
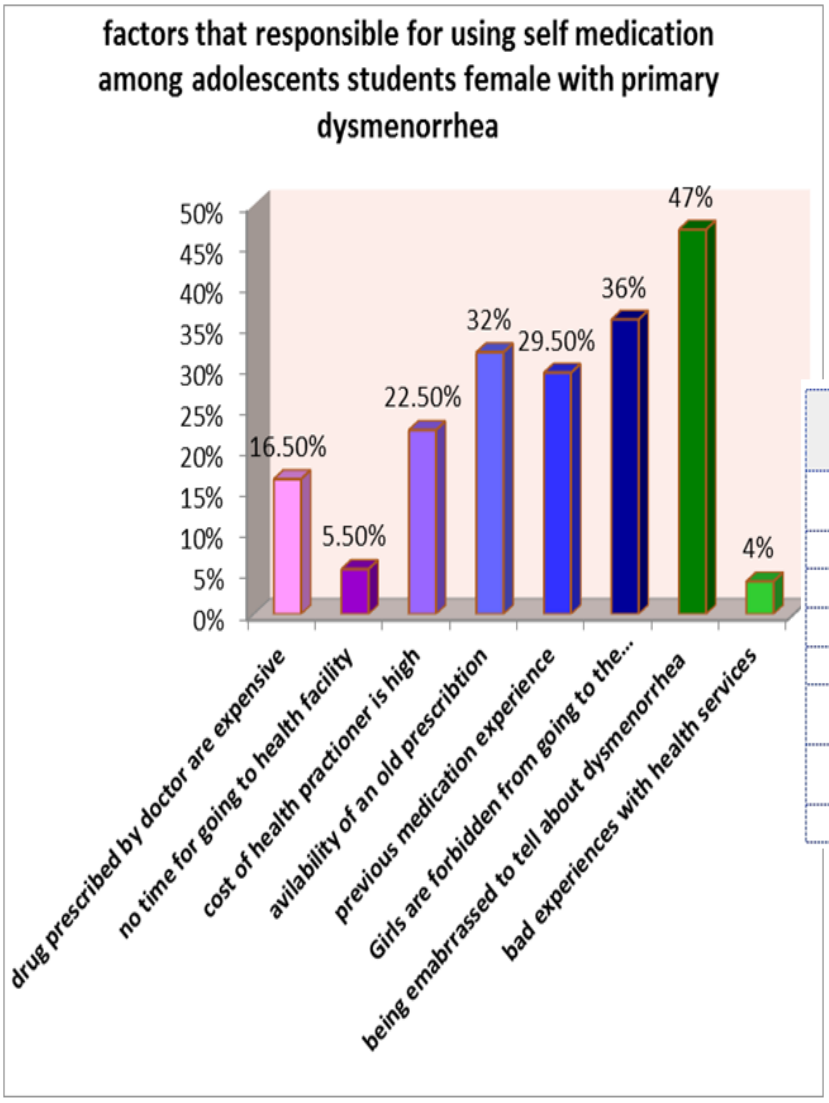


Fig (4): more than three thirds of studied sample didn't try to visit doctors to demand care of dysmenorrheal pain

Table (4): Distribution of Study Sample Regarding Attitude, Practices and Paradigm of Self-medication to relieve Pain among Adolescents Female with Primary Dysmenorrhea

Items	Adolescents female students with primary dysmenorrheal N=200	
	Frequency no.	**%**
- take analgesics:	**No. 200**	
Yes	137	68.5
No.	63	31.5
- if yes name of Self-medication	**No. 200**	
panadol	5	2.5
Ibuprofen	47	23.5
Paracetamol	0	0
Antispasmodic	22	11
Diclofenac	56	28
Others	7	3.5
total	137	68.5
- Taking hot drinks:	**No. 200**	
Yes	122	61
No.	78	39
If yes Types of hot drinks	**No. 122**	
Fenugreek	69	56.5
Green Tea	6	4.9
Chamomile	0	0
Cinnamon	20	16.5
Yanson	27	22.1
Taking a rest at home:	**No. 200**	
Yes	151	75.5
No	49	24.5
***Perform physical activities*:**	**No. 200**	
Yes	15	7.5
No	185	92.5
Taking hot path / hot bags	**No. 200**	
Yes	98	49
No	102	51
Making massage	**No. 200**	
Yes	52	26
No	148	74
Aware of negative impact of self-medication	**No. 200**	
Yes	118	59
No	82	41
Outcome of self-medication	**No. 200**	
Cured	46	23
Improved	62	31
No improvement	92	46
- total	200	100

Fig (5 - II) Factors that responsible for self-medication among adolescents female with primary dysmenorrhea .



No. of studied sample	factors that responsible for using self-medication
33	drug prescribed by doctor are expensive
11	no time for going to health facility
45	cost of health practioner is high
64	availability of an old prescription
59	previous medication experience
72	Girls are forbidden from going to the gynecologist
94	being embarrassed to tell about dysmenorrhea to practioners
8	bad experiences with health services

Fig (5): There are strong effect of traditional and cultural factors among adolescents students girls use self- medication.

Part (III): Demographic and Menstrual Characteristics of Adolescents Female with Primary Dysmenorrhea related to their Degree of Pain in Studied Sample.

Table 5: Correlation between the degree of pain among studied sample and their age.

Items	Degree of pain								Total No 200	r Test	P Value
	No pain N= 11		Mild N = 31		Moderate N = 47		Severe N=111				
Age:	No	%	No	%	No	%	No	%			
15<16 years	2	18.1	17	54.8	11	23.5	70	63	100		
16 <17years	5	45.4	9	29	24	51	22	19.8	60		
17-18 years	4	36.2	5	16.2	12	25.5	19	17.2	40	0.80*	<0.001
Total	11	100 %	31	100 %	47	% 100	111	%100	200		

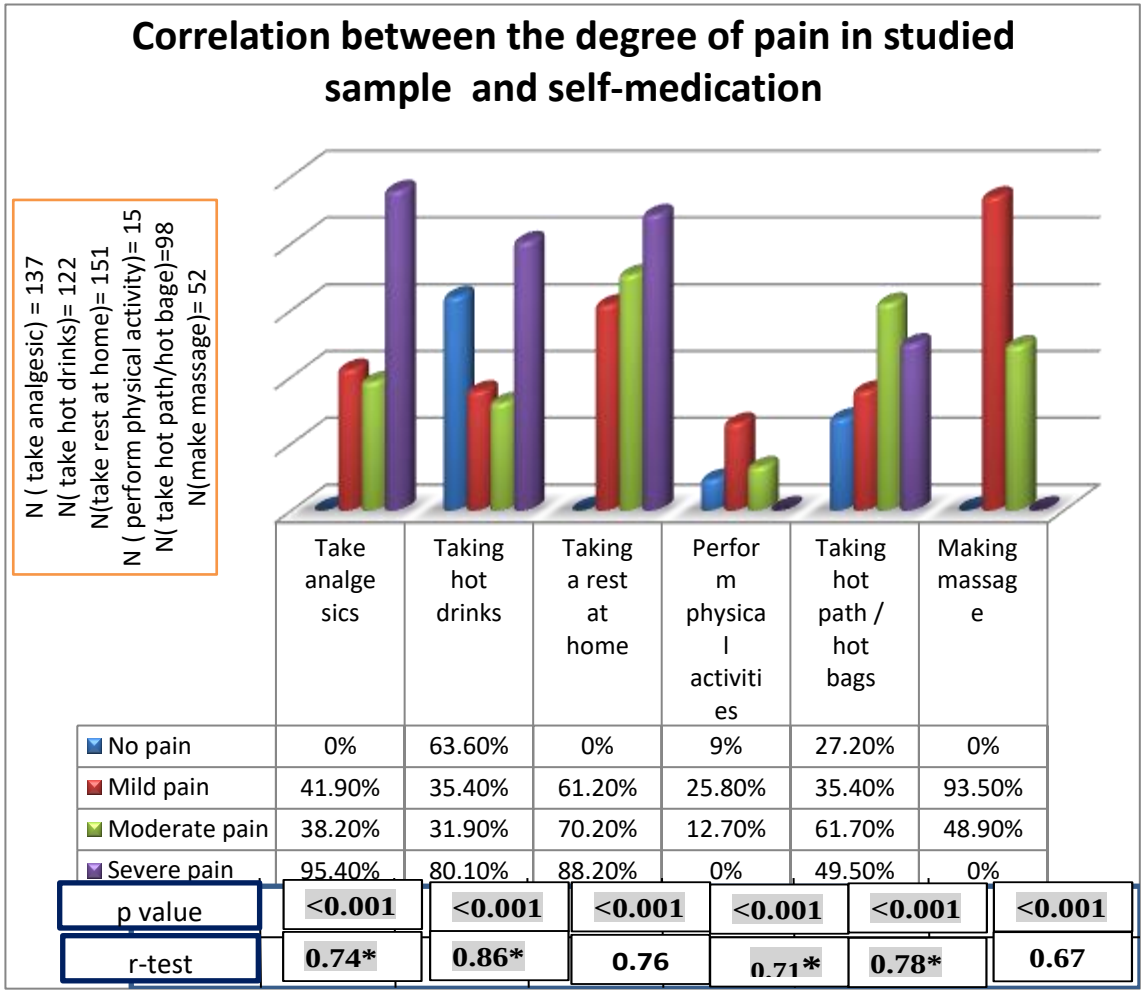
Table (6): Correlation between the residency among studied sample and their Awareness of the negative impact of self-medication n = 200

Aware of negative impact of self-medication	**Residency** of **Adolescent female with primary dysmenorrhea**				Total 200	%	r test	P Value
	Rural N= 90		Urban N = 110					
	No	%	No	%				
Yes	35	38.8	83	75.4	118	100%		
No	55	61.2	27	24.6	82	100%	0.71*	<0.01
Total	**90**	**100%**	**110**	**100%**	**200**	100%		

Table (7): Correlation between the degree of pain in studied sample and their paradigm of care and self-medication intake among adolescent female with primary dysmenorrhea.

Self-medication and Paradigm of Care	Degree of Dysmenorrheal Pain								Total No.	r test	P Value
	No pain N= 11		Mildpain N = 31		Moderate. N = 47		Severe N=111				
	No	%	No	%	No	%	No	%			
Take analgesics	**0**	**0**	**13**	**41.9**	**18**	**38.2**	**106**	**95.4**	137	**0.73***	**<0.001**
Taking hot drinks	7	63.6	11	35.4	15	31.9	89	80.1	122	**0.86***	
Taking a rest at home	0	0	19	61.2	33	70.2	98	88.2	151	**0.76***	
Perform physical activities	1	9	8	25.8	6	12.7	0	0	15	0.71*	
Taking hot path / hot bags	3	27.2	11	35.4	29	61.7	55	49.5	98	**0.78***	
Making massage	0	0	29	93.5	23	48.9	0	0	52	0.67*	

Fig (6): there is strong direct correlation between level of pain and self-medicating among adolescents girls with primary dysmenorrhea.



	Take analgesics	Taking hot drinks	Taking a rest at home	Perform physical activities	Taking hot path / hot bags	Making massage
No pain	0%	63.60%	0%	9%	27.20%	0%
Mild pain	41.90%	35.40%	61.20%	25.80%	35.40%	93.50%
Moderate pain	38.20%	31.90%	70.20%	12.70%	61.70%	48.90%
Severe pain	95.40%	80.10%	88.20%	0%	49.50%	0%
p value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
r-test	0.74*	0.86*	0.76	0.71*	0.78*	0.67

Table (8- IV): Correlation between the Level of Pain in studied sample and their Outcome of self-medication

Outcome of self-medication	Degree of Dysmenorrheal Pain								Total 200	%	r test	P Value
	No pain N= 11		Mild pain N= 31		Moderate N=47		Severe N=111					
	No	%	No	%	No	%	No	%				
Cured	9	81.8	17	54.8	6	12.8	14	12.6	46	100 %	0.84	<0.01
Improved	2	18.2	14	45.2	19	40.4	27	24.4	62	100 %		
No improvement	0	0	0	0	22	46.8	70	63	92	100 %		
Total	**11**	**100 %**	**31**	**100 %**	**47**	**100 %**	**111**	**100 %**	**200**	100 %		

Discussion:

Self-medication is global public health problem that affecting children and adolescents. The types and nature of self-medication varies that, affected by many factors such as cost, age, sex, income, self-care awareness, educational level and level of medical awareness. It is a common practice: for common minor health problems, It provides cheap, convenient , and rapid solutions, away of the health care institutions of majority of countries. Chemical Supplements as antibiotics and analgesic are the drugs most frequently used also natural herbs and supplements the best and most used in most of worldwide countries . Side effects include incorrect self-diagnosis, inappropriate dosage, and choice of therapy, masking of severe disease and drug interference.**(Kannan, et al ,2018).**

Lack of knowledge of side effects, precautions and storage conditions, as well as adverse reactions increase the risk of adverse effects. Little is known about the self-medication regarding dysmenorrhea among adolescent female. Some adolescent female discuss dysmenorrheal pain and practices towards this pain with parents or family and friends, and the majority not seek medical advice. **(Azitio l et al ,2020).**

As dysmenorrhea is essential adolescents health issue that these female must be aware of the normal and abnormal syndromes of menstruation. Regarding these findings, the family, health professionals and care givers also schools and health institutions have very important role for the implementation of measures to this health problem in a more effective way **(Asmaa Gomaa and Entisar Mohmad,2019).**

Dysmenorrhea is one of the most common gynecologic disorders. It is the most cause of lost of school days among adolescent female. Composed of 200 girl students were recruited from two governmental secondary schools. 45.3% of the adolescent's female had moderate pain, 41.3% of the adolescent's female take analgesic during dysmenorrhea, 79.7% of adolescent's female had lack of knowledge level, 87.0% of them had insufficient practice during

dysmenorrhea, and 55.7% of them had positive self-practices and attitude regarding dysmenorrhea. half of the adolescent's females have a moderate pain. While near to third of studied sample had pain in back, lower of abdomen, , and lower extremities and the majority of adolescent's females had lack of knowledge and poor attitude during dysmenorrhea, but more than half of studied sample had a positive practices toward dysmenorrhea.

In the current study more than half (54.5%) of study sample was spending 4≤5 days of menses as duration of menstruation. That table also show that, more than half (60%)of study sample was have Interval of menstruation about 21 days while more than third (41%) of study sample had 21 days. Also (62.5%) of study sample have moderate amount of menstrual flow.
In present study more than 3 thirds (78.5%) of studied sample was starting menstrual pain with menstrual bleeding starts and continues for 24 hour. As well this table show that (69.5%) of studied sample was suffering of pain at all sites of pain in their body during menstruation.
normal dysmenorrheal pain (primary dysmenorrhea (PD)) usually begins in adolescence female after the beginning of ovulatory cycles. PD is resulting in uterine ischemia causing pain due to myometrium activity. This activities are occurs and increases by prostaglandin synthesis. Uterine contractions can produce uterine pressures greater than 60 mm Hg. Multiple other factors may play a role In the perception and the severity of the pain **(Shaviv, et al., 2018).**
In our study were 55% of studded sample were suffered from severe pain due to primary dysmenorrhea.
The pain may begin before menses and continues during and even after menses. The pain may begin before menses and continues during and even after menses. The attitude towards menstruation depends upon knowledge and awareness about the this issue. The way In which a female knows about menstrual cycle and its specific changes may have an impact on them response to the menarche. Although menstruation is linked with several practice, which sometimes result into a dangerous health outcomes. Much of adolescent female have a faulty information about the anatomical site and function of the reproductive organs and their functions towards important events like menstrual cycle to be coming from the abdomen,or from abdominal organs (**Orhan et al., 2018).**
In our study half of sample (50%) their age was ranged from 15-16 years . Regarding In to the grade of education, half of study sample (50%) was for students at first level . Also (55%) of study sample were from urban areas. .
cultural, ethnic, and religious backgrounds all of them are factors that affecting the attitude towards dysmenorrheal pain and attitude , television, and books , Mothers, friends, teachers, family members are the main sources of knowledge regarding menstruation for adolescent female **(Farotimi, et al., 2015).**

In current study, more than two thirds (68.5 %) of study sample was taking analgesics without doctor discretion, Diclofenac and Ibuprofen are the most common types of analgesics that were used with percentage (28% and 23.5%), respectively. More than half (61%) of studded sample was taking hot drinks before and during menstruation, more than half (56.5%) of study sample was drinking Fenugreek also (75.5%) of study sample taken rest at home during menstrual period, while the majority (92.5%) of studded sample refused to perform physical activities during menstrual period. 59% of studded sample declared their knowledge of the negatives resulting of self-medication while near to half (46%) of studied sample did not feel any improvement after using self-medication .

Nurses as a care givers are often asked for advice regarding dysmenorrheal syndrome like an suitable position . The nurse role as health promoters and health educators to offer knowledge

for self-care. Adolescents female should be informed that dysmenorrheal syndrome is a treatable health status and the prognosis of dysmenorrhea is good. The nurses understand the pattern and nature of menstrual cycle and know well the physiology and anatomy of the reproductive system and its disorders Issues . This will help them to give adolescent female a better understanding of their condition (**Said & Mettwaly, 2017).**

The dysmenorrheal effects is greater than any of gynecological health complaints. The effects extending beyond adolescents female to society, resulting annually in an important loss of productivity. The World Health Organization informed that dysmenorrhea is one of the most causes of chronic pelvic pain (**Bernardi M, et al, 2017).**

According to Santina, et al, (2011) there is high Prevalence of dysmenorrhea among adolescents was ranged (50%-70%) especially In the first years of their reproductive life. Other study done by (Mohamed& Mansour) reported that dysmenorrhea has effect on quality of life as It reduced ability of female to concentrate, changes in normal physical activity, the psychosocial adverse effect well-being, absence from school, sleep disturbance and health institutions admission . An epidemiological study in Egypt reported that 75% of pubertal adolescent experienced dysmenorrhea (**Mohamed and Mansour, 2013**).

Abd El-Hameed, et al.,(2011) that assessed dysmenorrhea and menstrual hygiene attitudes and practices regarding adolescent female. In nursing schools at Minia governorate, found that (26.9%) were absences from schools. Self-medication attitude, prevalence and practice of adolescents and paradigm of dysmenorrhea self-management in different countries **(Bedhomme S, et al. BMC Prim Care. 2023).**

My opinion That the level of awareness of the negative impact of self- medication increased with students lived in urban areas and strongly correlation between age of adolescents students and degree of pain, which shown as, the degree of pain increased with age(15 -16) .

Limitation:

1. The limitation of this studied was increase in the percentage of absentees of the second and third grades.
2. Some female were ashamed to participate in the research, and others were afraid and refused to share.

Conclusion:

There were multiple variables were studied among adolescent's female. These included sociodemographic characteristics, assessment of past and present history of menstrual cycle and outcome variables such as assessment associated with systemic symptoms of dysmenorrhea, pain degree , attitude and practices of the self-medication. Also in conclusion, this prospective randomized trial showed high statistically used for self- medication with dysmenorrheal syndrome . strong effect of traditional and cultural factors that increase the use of self-medication among students female despite awareness of side effects. Also this randomized descriptive study was designed to assessing students female for their systematic symptoms, severity of pain during menstrual cycle .

Recommendations:

Based on the important findings revealed by the present study the following recommendations are suggested: -

1. Developing and dissemination of illustrated guideline included self- medication bad effect on primary dysmenorrheal syndrome among adolescents female.

2. Primary dysmrnorrhea need an in-depth research look at the variables that negatively affect the lives of female in adulthood as ((The effect of dysmenorrhea on dropping out of education)).
3. Preparing training program for high school health provider regarding the professional and healthy paradigm of self-care for primary dysmenorrhea
4. Further researches of self-medication to relieve dysmenorrhea for female out of adolescent age.

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الملخص العربى

سلوك وممارسات العلاج الذاتي ونموذج الرعاية الذاتية الأولية لعثر الطمث للبنات المراهقات

المقدمه: ان عثر الطمث *إحدى الاضطرابات النسائية وانه السبب الاعظم والوحيد في ترك العمل والمدرسة بين البنات* المراهقات

الهدف: من الدراسة الحالية كان عقد سلوك وممارسات العلاج الذاتي و الرعاية الذاتية و الأولية لعثر الطمث لدي البنات المراهقات

التصميم: الدراسة الوصفية المنعقدة في مدرسة عين شمس للبنات بالفيوم .العينة المختارة غرضية اختيرت بطريقة عشوائية طبقاً للمواصفات المطلوبة مكونه من 200 طالبة و تشمل أربعة ادوات مستخدمة لتحقيق أهداف الدراسة. أول أداة هي استمارة استبيان مصممة لتجميع بيانات خاصة بالصفات العامة و أسئلة تتعلق بالدورة الشهرية الحالية و الماضية للبنات المراهقات، و الاداة الثانية تشمل نظام الترقيم المحادثي متعدد الاغراض، و الاداة الثالثة هي الرسم البياني المرءي و الاداة الرابعة كانت مصممة من قبل الباحث لتجميع البيانات التي تشمل لممارسات التي لها علاقة بالعلاج الذاتي لتخفيف الم الطالبات البنات المراهقات بعثر الطمث الأولي .

النتائج: توضح أن أكثر من ثلثان العينة تأخذ مسكنات بدون وصف طبيب بينما أكثر من نصف العينة يأخذ مشروبات ساخنة قبل وبعد الدورة الشهرية وما يقرب من ثلثان العينة لديه معلومات متدهورة عن العلاج الذاتي على الرغم من أن ما يقرب من النصف لا يشعر بتحسن بعد استخدام العلاج الذاتي

الخلاصة والتوصيات: يوجد ارتباط إحصائي بين درجة الالم وناتج العلاج الذاتي العينة المدروسة بينما يوجد ارتباط سلبي بين عمر الفتاة في أول دورة تأتي لها ودرجة الم عثر الطمث أيضاً يوجد علاقة شديدة بين موطن الفتاة والوعي السلبي تجاه العلاج الذاتي