Assessment of knowledge, Attitude and Practice among Adolescent Girls Regarding Dysmenorrhea

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Abstract:

Background: Dysmenorrhea is one of the most common gynecologic disorders. It is the greatest single cause of lost work and school days among adolescent girls. The **aim** of this study was to assess knowledge, attitude and practice among adolescent girls regarding dysmenorrhea. **Subjects and methods**: A descriptive research design was utilized to fulfill the aim of this study. Purposive samples composed of 300 girl students were recruited from two governmental secondary schools. **Tools** for data collection were consisted of five tools: a structure self-administrative interview questionnaire, visual analogue scale, knowledge assessment, attitude scale, and practice assessment. **Results**: 45.3% of the adolescent's girls had moderate pain, 41.3% of the adolescent's girls take analgesic during dysmenorrhea, 79.7% of adolescent's girls had unsatisfactory knowledge level, 87.0% of them had poor practice during dysmenorrhea, and 55.7% of them had positive attitude toward dysmenorrhea. **Conclusion**: about half of the adolescent's girls had moderate pain, more than one quarter of them had pain in lower abdomen, back, and legs and the majority of adolescent's girls had unsatisfactory knowledge level, poor practice during dysmenorrhea, but more than half of them had positive attitude toward dysmenorrhea. **Recommendation**: initiate educational program during adolescent stage by using a multitude of audiovisual materials that suite for each adolescent's girls and achieve a satisfactory level

Keywords: Attitude, knowledge, Practice, Adolescent Girls, Dysmenorrhea

Introduction

Dysmenorrhea, painful menstruation, is one of the most common gynecologic disorders. It is the greatest single cause of lost work and school days among young women. Dysmenorrhea may be primary, with no associated organic pathology, or secondary, with demonstrable pathology (Iacovides, et al., 2015).

Primary dysmenorrhea usually begins in adolescence after the establishment of ovulatory cycles. Primary dysmenorrhea is caused by myometrium activity resulting in uterine ischemia causing pain. This myometrium activity is modulated and augmented by prostaglandin synthesis. Uterine contractions can last many minutes and may 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).

Secondary dysmenorrhea means pelvic pain caused by (secondary to) a disorder or disease. Secondary dysmenorrhea most commonly begins in women who are in their late teens or early twenties and progressively worsens. The pain may begin before menses and continues during and even after menses. Dyspareunia is also common. Gynecological problems that can cause secondary dysmenorrhea includes pelvic inflammatory disease, leiomyomata, endometriosis, adenomyosis, and intrauterine device use (Bernardi, et al., 2017).

The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. Although menstruation is a natural process, it is linked with several misconceptions and practice, which sometimes result into adverse health outcomes. Many girls have a faulty knowledge of the location and function of the reproductive organs and their inter-relationships some even perceiving events like menstrual bleeding to be coming from the abdomen, intestines, and kidneys, or occurring as a consequence of expletive from god, sin, and disease (Orhan et al., 2018).

Attitudes towards dysmenorrhea are affected by many factors, including cultural, ethnic, and religious backgrounds. Mothers, teachers, friends, relatives, television, and books are the main sources of information on menstruation for adolescent girls (Farotimi, et al., 2015).

Nurses are often asked for advice about dysmenorrhea and are in an ideal position in their role as health educators and health promoters to offer suggestions for self-care. Patients should be informed that dysmenorrhea is a treatable condition and that the prognosis for primary dysmenorrhea is excellent. It is vital, therefore, that nurses understand how the menstrual cycle works and are familiar with the anatomy and physiology of the reproductive system and its associated disorders. This will enable them to give patients a better understanding of their condition (Said & Mettwaly, 2017).

Significance of the Study

The burden of dysmenorrhea is greater than any other gynecological complaint: dysmenorrhea is the leading cause of gynecological morbidity in women of reproductive age regardless of age, nationality, and economic status. The effects extend beyond female adolescents to society, resulting annually in an important loss of productivity. Thus, the World Health Organization estimated that dysmenorrhea is the most important cause of chronic pelvic pain (Bernardi M, et al, 2017).

Santina, et al, (2011) showed that 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 girls to concentrate, changes in normal physical activity, adverse effect on psychosocial well-being, sleep disturbance, absence from school and hospital admission . An epidemiological study in Egypt reported that 75% of pubertal adolescent experienced dysmenorrhea (Mohamed and Mansour, 2013).

Also, Abd El-Hameed, et al.,(2011) who assessed dysmenorrhea and menstrual hygiene practice among adolescent girls in some nursing schools at Minia governorate, found that (26.9%) from sample taken rest at home (absences from schools).

Aim of the Study

The aim of the current study was to:

Assess knowledge, attitude and practice among adolescent girls regarding dysmenorrhea.

Research Question

What are the levels of adolescent girls' knowledge, attitude and practice regarding dysmenorrhea?

Subjects and Methods

Research Design

A descriptive research design was utilized to fulfill the aim of this study.

Setting

This study was conducted at two governmental secondary school (Abdelgaber Mohamed & Tala secondary school) representing two villages at Minia city (west to Minia city) in Minia governorate

Sample:

Purposive sample composed of 300 girl's students was recruited for the current study through using the following multistage sampling:

- Stage 1: List all villages (20) at Minia city.
- Stage 2: Select two villages from Minia city at randomly from available villages.
- Stage 3: List all schools in each of the 2 villages (each villages contain one school).
- Stage 4: Select all girl students who had dysmenorrhea in the selected school in each village.

The inclusion criteria were girls who had age ranged between 15 - 19 years, had experienced primary dysmenorrhea, and has risk factors for dysmenorrhea. While girl students who have medical diseases (diabetes, anemia, cardiac diseases,……) were excluded.

Tools for data collection used in this study were consisted of five tools:

Tool I: A structured self-administrative questionnaire designed by the investigator after reviewing of the related literature. It consisted of two parts:

Part (One): Concerned with socio-demographic characteristics related to adolescent's girls including age, residence, class number, mother's education, and mother's occupation)

Part (Two): This part involving menstrual and dysmenorrhea characteristics including age of menarche, menstrual cycle, duration of menstrual flow, number of bad changed / days, duration of cycle, drink hot fluids, take analgesic, timing of analgesic use, number of days when take analgesic, total number of tables, onset of dysmenorrhea, duration of pain and site of pain.

Tool II: Visual Analogue Scale (VAS). It developed by Andersch and Milsom (1982) and used as a self-report pain to assess the adolescent girls experience of pain. It is a measurement instrument that tries to measure a degree that is believed to range across a continuum of values. For example, the amount of pain that a girl feels ranges across a continuum from none to an extreme amount of pain (Rijkenberg et al., 2015)

Scoring systems of VAS:

Scores from the VAS was categorized on a scale of 0 to 10 which 1–3 means mild pain; 4-7 means moderate pain; and 8–10 means severe pain.

Tool III: Knowledge Assessment tool designed by the investigator to assess adolescents' girls' knowledge regarding dysmenorrhea included (47) items related to definition, causes, time of dysmenorrhea relieve, risk factors, signs and symptoms and effect of primary dysmenorrhea. With response (Yes or No).

Scoring System

Answers obtained from the adolescents girls related to knowledge were scored and calculated according to their answers, their responses were evaluated using the models key answers sheet prepared by investigator. Correct response scored as (One) while incorrect responses scored as (Zero). The total knowledge scores were 47. Scores <15 were classified as unsatisfactory level of knowledge, scores 15-30 were classified as moderate level of knowledge, and scores >30 were classified as satisfactory level of knowledge.

Tool IV: Attitude assessment scale which was designed by the investigator to assess adolescents' girls' attitude regarding dysmenorrhea. It involves 20 questions as menstrual pain is considered to be annoying only if attention is paid to them, the menstrual pain something that difficulties to me and I hate, I am really moody. But when i get menstrual pain I feel crazy, do evil deeds during menstrual pain, wish that the pain of menstruation away from me…….

Scoring System

A three point Likert scale (agree- neutral- disagree) was developed to assess the students responses to attitude statements toward dysmenorrhea, it consisted of (20) statements to which the girls were asked to response to one the choices.

A scoring for girls was consisted of given three scores for agree, two scores for neutral, and one score for disagree. Total attitude score was (60) scores. If their total scores were ≤ 30 were classified as negative attitude while a total scores ≥ 31 were classified as positive attitude.

Tool V: Practice Assessment Sheet designed by the investigator to assess Adolescents' girls' practice regarding dysmenorrhea which involved 22 items as isolate from my family, taking hot bathing, taking hot drinks, prevent some food intake which increase dysmenorrhea, taking some food that decrease dysmenorrhea, perform physical exercise, rubbing / massaging the abdomen or worst pain, ……..etc with response done or not done.

Scoring System

Done practice was scored as (One) while not done practice was scored as (Zero). The total practice scores were 22 scores. Score of ≤11 was classified as poor practice; scores ≥12 was classified as good practice.

Validity and Reliability

The tool was tested for content validity by a jury of five experts in the field of maternal nursing and psychologist staff and necessary modifications were done. The tool which was tested for internal consistency by using Cronbach's' alpha test were 0.812, 0.80, 0.790 &0.759 respectively that indicated strong reliable tools.

Pilot Study:

After developing the tools, a pilot study was conducted on 10% of students (30 students). It was conducted to test clarity, and feasibility and applicability of the tools used in the current study for data collection as well as to determine the time required for filling the data sheets. According to the results of pilot study, the needed modifications, omissions and/or additions for some items were done. The sample of the students who participated in the pilot study was excluded from the main study sample.

Data collection procedure:

An official letter was requested from the Dean of the faculty of Nursing at Minia University to head manager of Abdelgaber Mohamed & Tala secondary schools, asking for permission to collect data. Meeting with selected schools manager to explain the objectives and aim of the study who helped to gain their cooperation and to allow interviewing students during minimal workload activities.

The investigator was attending to selected schools to collect the data from 8.30 AM to 1.00 PM in two days each week (Saturday and Sunday) for three months. The investigator was collect data from every grade secondary in four weeks. The investigator was collect data from 20- 30 students each week

All students were informed that their participation is voluntary and reassurance was given to the students about the confidentiality of their responses. The investigator explained the aim and nature of study briefly through direct personal communication that it was take time from 20-25 minutes with the participants. Oral consent was obtained from the participants before inclusion in the study.

After that the investigator was distribute all questionnaires to students who participated in the study and asked them to fulfill them and the investigator spend this time with students during fulfilling the questionnaires. The investigator was reminding students to answer all questions that present in questionnaires. Duration of data collection was started from middle February 2018 to the middle of May 2018.

Ethical Consideration:

A written initial approval was obtained from the dean of the Faculty of Nursing and from the research ethical committee of the Faculty of Nursing, Minia University. Oral informed consent was obtained from students who participated in this study. Each assessment sheet was coded and students' name was not appearing on the sheets in the purpose of anonymity and confidentiality.

Statistical Design:

Data entry was done using compatible personal computer. Statistical analysis was done using statistical package of social science (SPSS) version 20 and excel for figures. The content of each tool was analyzed, categorized and then coded. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. Statistical significance used at P value <0.05.Chi-square/ or fisher exact test was used to detect the relation between adolescents' girls knowledge, attitudes, practices based on their selected socio-demographic characteristics

Results

The results of this study are presented under 5 heading: demographic descriptions of the girls, knowledge of adolescents regarding dysmenorrhea, their attitude, their practice and relationship between demographic descriptions of them and their knowledge, their attitude, their practice regarding dysmenorrhea.

Table (1): Percentage distribution of socio-demographic characteristics of adolescent girls (n = 300).

Items	no. (n= 300)	%
Age / Year		
< 15	29	9.6
15 –< 17	167	55.7
17- <19	104	34.7
Mean ± SD	16.2 ± 1.23 years	
Grade No.		
1st	110	36.7
2nd	90	30.0
3rd	100	33.3
Mother's education		
Illiterate	80	26.7
Read and write	54	18.0
Primary education	20	6.7
Secondary education	121	40.3
University education	25	8.3
Mother's occupation		
House Wife	221	73.7
Employed	57	19.0

Items	no. (n= 300)	%
Free Work	22	7.3

Table (1) shows that 55.7% of the adolescents' girls aged between 15 – 17 years with mean 16.2 ± 1.23 years , 36.7% of them in 1st grade, 40.3% of them their mothers had secondary education and 73.7% their mothers were housewives

Table (2): Percentage distribution of adolescent's girls according to visual analogue scale (n = 300).

Dysmenorrhea Characteristics	no.	%
Degree of pain		
Mild	95	31.7
Moderate	136	45.3
Severe	69	23.0
Mean ± SD	5.8 ± 2.3	
Onset of dysmenorrhea		
Before one week of menstruation	50	16.7
2- 3 days before menstruation	121	40.3
At the day of menstruation	116	38.7
After one day of menstruation	13	4.3
Duration of pain in months / hours		
< 1 hour	39	13.0
1- 4 hour	91	30.3
5- 8 hour	67	22.3
More than 8 hours	103	34.4
Site of pain		
Lower abdomen	61	20.3
Lower abdomen and back	84	28.0
Lower abdomen, back and legs	91	30.3
Chest pain	10	3.3
All body parts	54	18.0

Table (2): presents that 45.3% of the adolescent's girls had moderate pain with mean 5.8 ± 2.3, 40.3% of them dysmenorrhea onset at 2- 3 days before menstruation, 34.4% of them duration of pain in moths more than 8 hours and 30.3% of them the most common site of pain in lower abdomen, back, and legs

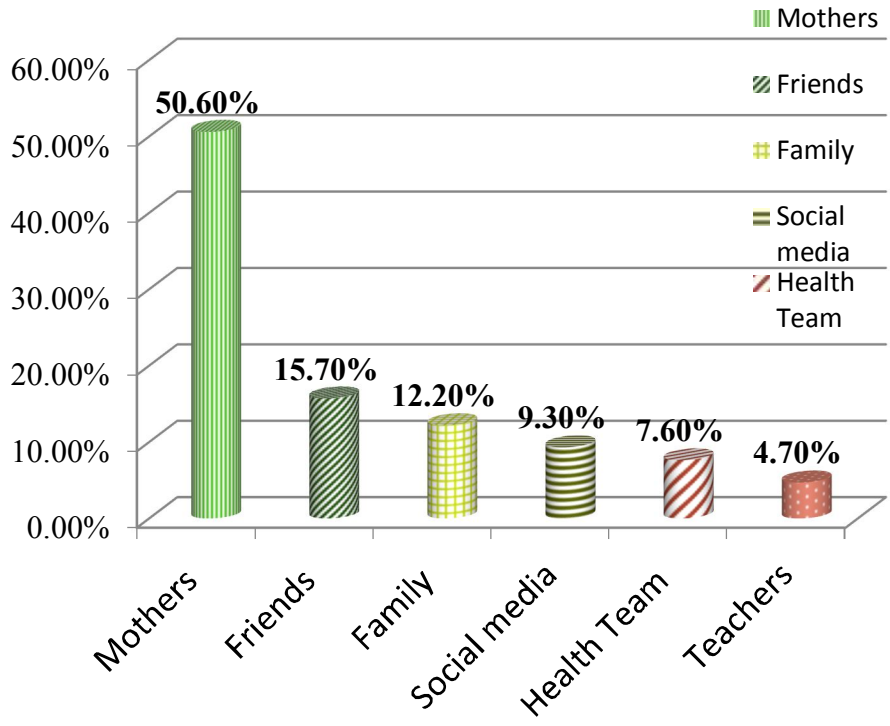

Figure (1): Percent distribution of adolescents' girls regarding their source of knowledge about dysmenorrhea (n = 300)

Figure (1) illustrates that 50.6% of adolescent's girls their source of knowledge about dysmenorrhea was their mothers.

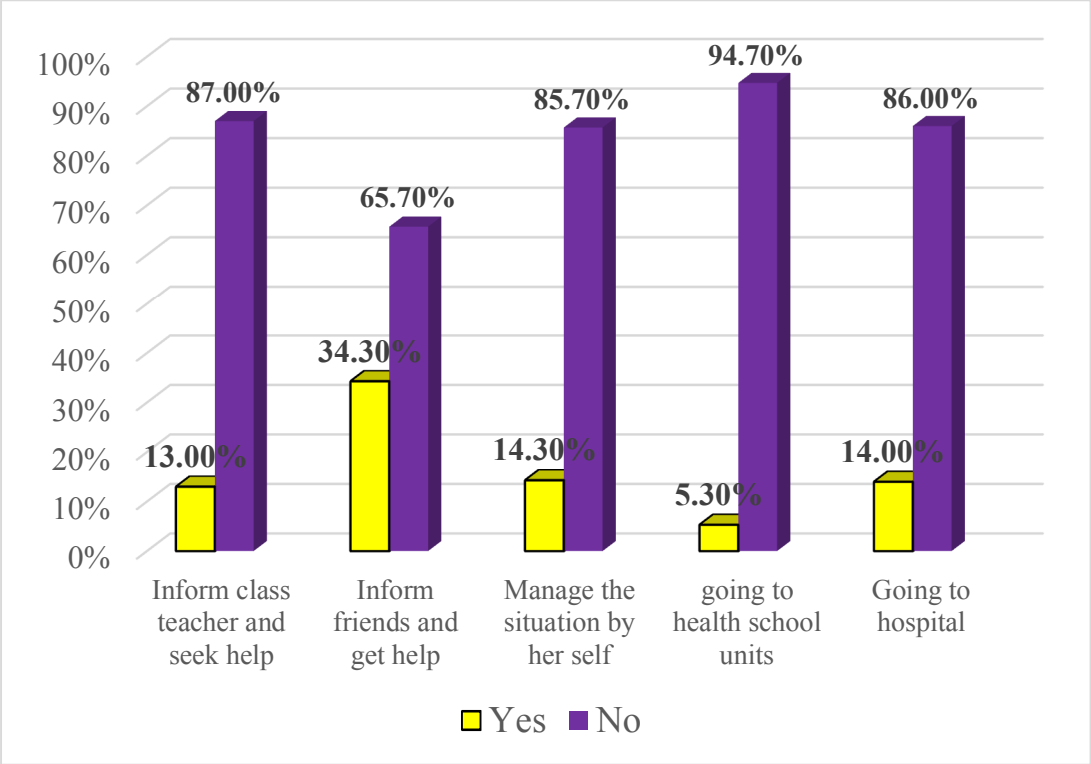

Figure (2): Distribution of action taken for dysmenorrhea during school hours

As regard distribution of action taken for dysmenorrhea during school hour's figure (2) illustrates that 34.3% of adolescent's girls inform their friends and get help while the minority of them (13.0%) inform teacher and seek help

Table (3): Distribution of adolescent's girls regarding their total knowledge, practice and attitude about dysmenorrhea (n= 300).

Items	No. (n = 300)	%
Knowledge level		
Unsatisfactory (< 15 scores)	239	79.7
Moderate (15 – 30 scores)	57	19.0
Satisfactory (≥ 30 scores)	4	1.3
Mean ± SD	22.5 ± 6.6	
Practice level		
Good (≥ 12 scores)	39	13.0
Poor (≤ 11 scores)	261	87.0
Mean ± SD	8.0 ± 3.2	
Attitude level		
Positive ((≥ 31 scores)	167	55.7
Negative (≤ 30 scores)	133	44.3
Mean ± SD	21.0 ± 4.1	

Table (3): shows that 79.7% of adolescent's girls had unsatisfactory knowledge level, 87.0% of them had poor practice during dysmenorrhea, but 55.7% of them had positive attitude toward dysmenorrhea

Table (4): Relations between adolescent's girls' total knowledge levels and their socio-demographic data (n= 300).

Items	Total knowledge levels						Fisher	P – value
	Unsatisfactory		Moderate		Satisfactory			
	no.	%	no.	%	no.	%		
Age / Year								
< 15	22	75.9	6	20.7	1	3.4	13.448	.009**
15 – < 17	145	86.8	21	12.6	1	0.6		
17- < 19	72	69.2	30	28.8	2	1.9		
Grade No.								
1st	94	85.5	14	12.7	2	1.8	11.979	.02*
2nd	76	84.4	14	15.6	0	0.0		

Items	Total knowledge levels						Fisher	P – value
	Unsatisfactory		Moderate		Satisfactory			
	no.	%	no.	%	no.	%		
3rd	69	69.0	29	29.0	2	2.0		
Mother's education								
Illiterate	65	81.3	15	18.7	0	0.0	.06	15.181 NS
Read and write	46	85.2	5	9.3	3	5.6		
Primary education	15	75.0	5	25.0	0	0.0		
Secondary education	96	79.4	24	19.8	1	.8		
University education	17	68.0	8	32.0	0	0.0		
Mother's occupation								
Housewife	181	81.9	36	16.3	4	1.8	6.603	.158 NS
Employed	40	70.2	17	29.8	0	0.0		
Free work	18	81.8	4	18.2	0	0.0		

Table (4): presents that there were statistically significance differences between adolescents' girls' total knowledge levels and their age and grade number which P – value ≤ .009& .02 respectively

Table (5): Relations between adolescent's girls attitude levels and their socio-demographic characteristics (n= 300).

Items	Total Attitude				X^2	P – value
	Positive (n = 167)		Negative (n = 133)			
	no.	%	no.	%		
Age / Year						
< 15	13	7.8	16	12.0	2.060	.357 NS
15 –< 17	92	55.1	75	56.4		
17- < 19	62	37.1	42	31.6		
Grade No.						
1st	55	32.8	55	41.4	2.355	.308 NS
2nd	52	31.1	38	28.6		
3rd	60	35.9	40	30.1		
Mother's education						
Illiterate	45	26.8	35	26.3	.484	.975 NS
Read and write	32	19.2	22	16.5		
Primary education	11	6.6	9	6.8		
Secondary education	65	38.9	56	42.1		
University education	14	8.4	11	8.3		
Mother's occupation						
Housewife	121	72.5	100	75.2	.453	.797 NS
Employed	34	20.3	23	17.3		
Free work	12	7.2	10	7.5		

NS= not statistically significance

Table (5): shows that there were no statistical significance differences between adolescent's girls' attitude levels and their socio-demographic characteristics.

Table (6): Relations between adolescent's girls' total knowledge levels and their total practice and attitude level (n= 300).

Items	Total knowledge levels						Fisher	P – value
	Unsatisfactory (n= 239)		Moderate (n = 57)		Satisfactory (n= 4)			
	no.	%	no.	%	no.	%		
Practice level								
Good (≥ 12 scores)	30	76.9	8	20.5	1	2.6	.606	.739 NS
Poor (≤ 11 scores)	209	80.1	49	18.8	3	1.1		
Attitude level								
Positive ((≥ 31 scores)	129	77.2	36	21.6	2	1.2	1.625	.444 NS
Negative (≤ 30 scores)	110	82.7	21	15.8	2	1.5		

NS= not statistically significance

Table (6): presents that there were no statistical significance differences between adolescent's girls knowledge level and their total practice and attitude level

Table (7): Relations between adolescent's girls total practice levels and their socio-demographic data (n= 300).

Items	Total practice level				X^2	P – value
	good (n = 39)		poor (n= 261)			
	no.	%	no.	%		
Age / Year						
< 15	4	13.8	25	86.2	1.774	.412 NS
15 –< 17	18	10.8	149	89.2		
17- <19	17	16.3	87	83.7		
Grade No.						
1st	18	16.4	92	83.6	2.445	.294 NS
2nd	8	8.9	82	91.1		
3rd	13	13.0	87	87.0		
Mother's education						
Illiterate	12	15.0	68	75.0	2.935	.569 NS
Read and write	10	18.5	44	81.5		
Primary education	2		18			
Secondary education	12	9.9	109	90.1		
University education	3	12.0	22	88.0		
Mother's occupation						
Housewife	28	12.7	193	87.3	.083	.959 NS
Employed	8	14.0	49	86.0		
Free work	3	13.6	19	86.4		

Table (7): shows that there were no statistical significance differences between adolescent's girls total practice levels and their socio-demographic characteristics

Discussion

The adolescents' girls that were included in the study were revealed that more than half of adolescents' girls aged between 15 – 17 years, more than one third of them in 1st grade, and less than three quarters of them their mothers were housewives. This result relevant to other studies at this research point as Abd El-Hameed, et al., (2011) who studied the assessment of dysmenorrhea and menstrual hygiene practices among adolescent girls in some nursing schools at EL-Minia Governorate, Egypt and reported the same results.

As regards distribution of adolescent's girls regarding their dysmenorrhea characteristics around half of adolescent's girls had moderate pain. This result in the same line with Tanmahasamut & Chawengsettakul, (2012) who studied dysmenorrhea in Siriraj medical students; prevalence, quality of life, and knowledge of management and reported that the prevalence of one third of studied had mild, more than one third of them had moderate pain . Also this result were confirmed with Chang & Chuang, (2012) reported that one quarter of participant reported feeling mild pain (1–3 points), more than one third of them felt moderate pain (4–7 points) and near to one quarter participants experienced severe pain (8–10 points). Moreover, Wijesiri & Suresh, (2013) found in their study that more than half of the students experienced moderate pain during their menstruation.

The present study reported that slightly more than one third of them their duration of pain was more than 8 hours and the most common site of pain were in lower abdomen, back, and legs. These results come in accordance with Abd El-Hameed et al., (2011) who reported that near half of the students had the pain with menstrual beginning and continues for 24-hours while the most common site of pain was the lower abdomen. Also, Kamel et al., (2017) who reported that mean duration of menstrual pain was 2.07 ± 0.95 days and the most of respondents reported feeling pain in the abdomen and back (VAS score, 5.00) in additional to Rabiepoor, et al., (2017) mentioned the same.

The present study illustrated that the more than three quarters of adolescent's girls had unsatisfactory knowledge level and only one fifth of them had satisfactory knowledge. This result come in the same line with Ogunfowokan & Babatunde, (2010) who studied management of primary dysmenorrhea by school adolescents in ILE-IFE, Nigeria and found that adolescents have limited knowledge regarding menstruation and dysmenorrhea.

But this results contradicted with Chang` & Chuang, (2012) who mentioned that participants had moderately good knowledge about dysmenorrhea and Wijesiri & Suresh, (2013) who study and find that more than one third of the participants had high knowledge about dysmenorrhea. Also, Farotimi et al., (2015) mentioned that more than one third of the participants had adequate knowledge about dysmenorrhea, more than one third had moderate knowledge, and more than one fifth of them had low knowledge. Moreover, Sherpa et al., (2017) who studied knowledge regarding dysmenorrhea and its health seeking behavior in colleges of Sik and reported that more than three quarters of participants had moderate knowledge regarding dysmenorrhea and its health seeking behavior.

This result confirmed that health education about the menstrual period should begin before the first menstrual period for physical and mental preparing of girls.

According to adolescent's girls practice during dysmenorrhea more than half of the adolescents girls taking hot bathing. This result agreed with Abd El-Hameed et al., (2011) who reported in their study mentioned that the

majority of adolescent girls taking hot bath to decrease the menstrual pain.

Concerning to management of dysmenorrhea the present results found that more than one third of adolescents' girls ignore the pain. This result in the same line with Farotimi et al., (2015) who determined the knowledge, attitude, and healthcare-seeking behavior of female students is a prerequisite for planning interventions that seek to improve the management of dysmenorrhea among female students reported that more than one third of participants usually ignore the pain.

Regarding to rest at home during dysmenorrhea the current result reported that about half of them taking rest at home during dysmenorrhea. This result was in the same line with Abd El-Hameed et al., (2011) who reported in their study that more than one-third of the students mentioned that menstrual pain decreases their daily activities. Also, Wijesiri & Suresh, (2013) who reported in his study that the near to two third of the adolescents in the present study used rest as their pain-relief method.

Regarding to adolescent's attitude about dysmenorrhea the most of them agreed with the menstrual pain something that difficulties to them and they hate it, wish get menstruation period without pain, and more than two third of them agree with hope that menstrual pain comes to a few minutes. This results were confirmed by (Wijesiri & Suresh, 2013) who indicated that the studied sample had negative attitude towards dysmenorrhea and also reported that there was a statistically significant association between pain and poor mental health status of the adolescent girls.

Regarding total practice scores the present study showed that majority of adolescent's girls had poor practice during dysmenorrhea may be due to lack of knowledge regarding management of dysmenorrhea.

The present study showed that more than half of adolescent's girls had positive attitude toward dysmenorrhea. This result inconsistence with Farotimi et al., (2015) showed that more than one third of participants had positive attitude towards dysmenorrhea while near to two third of them had negative attitude towards dysmenorrhea.

Regarding the relations between adolescent's girls' total knowledge levels and their socio-demographic data there were statistically significance differences between adolescents' girls' total knowledge levels and their age and grade number which P – value ≤ .009& .02 respectively. This may be due to the experience and knowledge of the adolescent increase with increasing age and affected by mother's education, mother's occupation because the mother is a mainly source of knowledge for adolescent girl.

Regarding the relations between adolescent's girls total practice levels and their socio-demographic data, there were no statistical significance differences between adolescent's girls total practice levels and their socio-demographic characteristics. The adolescent's girl's total practice regarding dysmenorrhea is not affected by the socio-demographic characteristics. They learn this practice from their mothers, sisters and friends.

Regarding to the relations between adolescent's girls' attitude levels and their socio-demographic characteristics there were no statistical significance differences between adolescent's girls' attitude levels and their socio-demographic characteristics. Wijesiri & Suresh, (2013) who studied knowledge and attitudes towards dysmenorrhea among adolescent girls in an urban school in Sri Lanka and report that dysmenorrhea among adolescent girls is a common condition that has been studied extensively. Dysmenorrhea represents a common problem for all adolescent's girls so the adolescents' attitude not affected by socio-demographic characteristics.

Regarding relationship between adolescent's girls knowledge level and their total practice and attitude level there were no statistical significance differences between its. This result in the same line with Farotimi et al., (2015) reported that participants knowledge level did not showed any significant association with their attitude towards dysmenorrhea (P = 0.7). Contradicted to this result Rabiepoor et al., (2017) indicated that there was a significant relationship between levels of knowledge of adolescent girls and positive attitude to menstruation cycle

Conclusion: Based on the results of the present study, it can be concluded that: about half of the adolescent's girls had moderate pain, more than one quarter of them the most common site of pain in lower abdomen, back, and legs and the majority of adolescent's girls had unsatisfactory knowledge level, poor practice during dysmenorrhea, but more than half of them had positive attitude toward dysmenorrhea.

Recommendation:

Ongoing education is highly needed for the Adolescents' girls. It should initiated during adolescent stage by using a multitude of audiovisual materials that suite for each adolescents girls and achieve a satisfactory level.

Further researches:

Replication of the study on a larger probability sample in different geographical areas in Egypt to figure out the main aspects of these problems

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