# Improving Life Style among Nursing Students Regarding Menstrual Disorders through an Educational Training Program

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**Abstract** **BACKGROUND:** The pattern of menstrual cycle plays an important part of female reproductive health but some variety of menstrual disorders occurs in adolescent girls may affect normal life of adolescent and young adult women. The studies reported that high proportion of adolescence suffering from menstrual disorders. It is very important for girls and their parents to understand a normal menstrual cycle, in order to evaluate any disorders of menstrual cycle. **AIM** of this study was to improve life style among nursing students regarding menstrual disorders through an educational training program. Quasi-experimental **design** (pre and post intervention) was utilized. A total **sample** of (84) girl who suffered from menstrual disorders were recruited in the study. **SETTING:** The study was conducted at the Faculty of Nursing, Benha University. Data were collected through two main **tools:** A structured interviewing questionnaire, and modified likert scale toward menstrual disorders. **Results** revealed that 89.20% of girls had poor knowledge before training program. However, 95.20% of them had good knowledge after training program respectively. As well as, only 86.9% of the studied nursing students didn't follow healthy life style toward menstrual disorders before training program. Meanwhile, after training program, there was a significant improvement in the student's practices after applying educational training program compared with that before applying it. **Conclusion** the implementation of an educational training program was effective and significantly improved nursing student's life style toward menstrual disorders. Most of nursing students with menstrual disorders didn't follow practices that related diet and exercises before applying guidelines. The study **recommended** that, this study can be replicated on a larger sample in other faculties for generalizing the findings. **As well as** further research can be built on the results of this study in nutritional habits and healthy physical activity among all students at the faculties for effective management of menstrual disorders can be done.

**Keywords** Menstrual disorders, Life style & girl's knowledge and practices

## 1. Introduction

Menstrual cycle disorders or its irregularities are a major gynecological problem among female adults, especially adolescent and a major source of anxiety to them and their family. A severe and prolonged menstrual disorders are often associated with Physical, psychological, social, mental and reproductive problems that lead to menstrual dysfunction in adolescent girls which have an effect on their life style, so, it is very important to evaluate the health practices of dietary habits and exercises in young female through adolescence to estimate their effect on menstrual disorders through exploration, identification and management of abnormal menstrual patterns *Thapa & Shrestha (2015)*.

Menstrual cycle is normal physiological phenomenon from menarche to menopause that is characterized by Periodic and cyclic uterine bleeding in response to cyclic hormonal changes once a month accompanied by loss of blood. The usual duration of the menstrual cycle is 3-5 days, but flows as short as I day & as long as 8 days can occur in normal girls. The average amount of blood lost is 30 ml but may range normally from slight spotting to 80 ml. Loss of more than 80 ml. is abnormal *Rajsinh, et al (2013)*.

It is regulated by cyclical changes in female sex hormones and regularity of menstrual cycles reflects changes the level of these hormones that may affect physical, emotional and psychological wellbeing. Menarche is the first menstrual period which usually occurs between 11 and 13 years of age. Early menarche is associated with cardiovascular disorders and higher susceptibility to cancer, especially of the breast

and increased mortality. Late menarche is associated with increased fracture risk and osteoporosis *Fujiwara, et al (2013).* Regularity and amount of flow of a girl's menstrual cycle can be affected by various factors, including hormonal changes, genetics, serious medical conditions, body mass index age, family history, socio-economic, dietary habits, education, lifestyle, exercises, weight, height and psychological upset *Deliwala et al., (2013).*

Body mass index is defined as the individual's body weight (kg) divided by the square of height (m$^2$). It is the most widely used diagnostic tool to identify weight problems within a population by measure of kg/m$^2$, usually whether individuals are underweight, overweight or obese. It is used to estimate a healthy body weight based on a person's height, assuming an average body composition due to its ease of measurement and calculation *Schuiling and Likis (2011).*

The most preferred and effective method of management for adolescents with menstrual disorders is lifestyle modification. Healthy dietary habits & regular exercises are the most beneficial therapies in managing menstrual disorders symptoms and preventing future complications *Dars, et al (2014).*

Healthy life style modification incorporating the complementary components of health promoting & preventing health behavior toward reducing health risks by increasing the girl's level of well- being, self-actualization and personal fulfillment, thus it is important for all students with menstrual disorders, Whether overweight or in the healthy weight range, adopting a healthy intake of nutrients, vitamins and minerals, in addition to focus exercise guidelines on process-a healthy lifestyle across the lifespan *Pillitter A., (2013).*

### Significance of the Study:

Menstrual dysfunction is a major gynecological problem occurs in female adolescent girls. However, it may affect normal life & reproductive health, due to change in life style and healthy habits. A variety of studies have shown that weight loss and weight gain can both significantly affect menstrual cycle and reproductive health morbidity. *Deshpande., et al, (2014).* Therefore in the present study was conducted to increase awareness and information about life style modification for nursing students with menstrual disorders and can also potentially reduce the risk of long-term complications such as malignant diseases in the uterus as well as in other organs. in addition to there is no previous studies are undertaken at Faculty of Nursing , Benha University about improving life style for students regarding menstrual disorders.

**AIM:** to improve life style among nursing students regarding menstrual disorders through an educational training program.

**Research Hypothesis:** Students at the Faculty of Nursing, Benha University who received an educational training program would have improved lifestyle toward menstrual disorders than before intervention.

## 2. Subjects and Methods

### Research design:

Quasi-experimental design (pre and post intervention) was utilized to fulfil the aim of this study.

**Setting:** The study was conducted at Faculty of Nursing, Benha University.

### Sample:

- **Type of the sample:** Multistage sampling
- **Size and technique of sampling:**
- All female students in the four grades of the faculty (400) included to identify signs &symptoms of menstrual disorders.
- All female students who suffered from menstrual disorders determined by the researcher .Total number were 84 girls.
- ***Inclusion criteria included:*** From the same Faculty, age from 18 to 25 years, not married and absence of self-reported genital diseases & history of abdominal pelvic surgery.

### Tools of data collection:

#### Two main tools were used for data collection:-

#### 1. Structured interviewing questionnaire:

It was designed by the researcher after reviewing related literature. It was written in an Arabic language in the form of close and open-ended questions. It encompassed three major parts:

**First part** included personal and socio demographic data such as (age, grade, and residence. Height and weight (Anthropometric measurements) was also measured by using the formula: BMI (kg/m$^2$) = Weight (kg) / Height 2 (m$^2$).

**Second part** included details of menstrual cycle for students' as menstrual history as age of menarche, cycle length, date of last menstrual period, amount of menstrual flow (i.e. scanty, normal or heavy), presence or absence of menstrual disorders.

**Third part** was concerned with students' knowledge about menstrual disorders. It consisted of (2) sections;

***Section (1)*:** general knowledge regarding menstrual disorders, it consisted of (4) items (definition, causes, signs & symptoms and complications).

***Section (2):*** Knowledge related to practices regarding daily activities of the students with menstrual disorders, it consisted of (3) items:-

- Diet which included (healthy diet, favorite foods, number of meals, and way of cooking food………….).
- Exercises which included (type of exercises, and duration of practicing exercises…………).
- Rest and sleep which included (times of comfort and duration of sleep time………..).

Scoring system of the girls has been scaled according to summation of knowledge and total practices. The scale was ranged between 0 and 6 and is divided into 3 grades; Poor (0), average (1) and good (2).

## 2. Modified quality of life scale:

This tool was developed by the researcher after reviewing related literatures to assess student's lifestyle regarding menstrual disorders and consisted of (5) items such as (regular practices of physical exercises, balanced diet, Adequate rest and sleep..............etc.,).

### Scoring:

The items were judged according to a five point Likert scale constructed to measure the degree of girl's life style modification regarding the menstrual disorders. The degree of satisfaction was scored as follow always (5) mark, usually (4) mark, sometimes (3) mark, rarely (2) mark and never was (1) mark.

### Ethical considerations:

An official permission was granted from the Dean of the Faculty of Nursing. Each girl was informed about the purpose of the study then a written consent was obtained before starting the data collection. Confidentiality was ensured throughout the study process, and the girls were assured that all data was used only for research purpose. Each student was informed that participation is voluntary and free to withdraw from the study at any time.

### Pilot study

The pilot study was carried out on nine girls (about ten percent of the total sample) to test the efficiency, clarity and applicability of the study tools as well as estimation of the time needed to fill the questionnaire. Required modifications were done in the form of adding or omission of some questions and change types of some questions from open ended questions to closed ended questions'. The girls involved in the pilot were excluded from the study.

### Procedure

The following phases were adopted to fulfil the aim of the current study; assessment, planning, implementation, and evaluation phases. These phases were carried out from the beginning of October 2014 to the end of March 2015 covering six month. Official approvals and letters to conduct this research were obtained from Dean of Faculty of Nursing. The tool was distributed to three experts in the field, these included two maternity nursing professors and one obstetrician, the aim was to test its appropriateness, comprehensiveness, clarity, importance and applicability. The jury recommended omissions of some items or addition which were done the items on which 90% or more of the experts have agreed were included in proposed tool.

### Assessment phase:

This phase encompassed interviewing the girls to collect baseline data, at the beginning of interview the researcher greeted each student, explained the purpose, duration, and activities of the study and taken written consent. Pre-test was done to assess students' knowledge and healthy physical lifestyle regarding menstrual disorders. The data obtained during this phase constituted the base line for further comparison to evaluate the effect of an educational training program. Average time for the completion of each student interview was around (30-40 minutes).

### Planning phase

Based on baseline data obtained from pre-test assessment and relevant review of literature, the educational training program was developed by the researcher in a form of printed Arabic booklet to satisfy the studied students regarding lifestyle modification regarding menstrual disorders.

**General objective of the educational intervention:** was to improve student's lifestyle about menstrual disorder.

**Specific objectives of the educational intervention:** after completion of the educational intervention, each student should be able to:

- Describe normal menstrual cycle.
- Explain clinical manifestation menstrual disorder.
- Enumerate causes of menstrual disorder.
- Discuss pattern of menstrual disorders.
- Recognize short term & long term complication of menstrual disorders.
- Identify healthy habits & practices to modify lifestyle.

### Implementation phase

Implementation of an educational intervention took (24) weeks period. Data were collected 3days /week by the researcher. The girls gathered in class room after finishing the lectures or after ending of clinical area's day. Informed written consent was obtained from the girls prior to data collection. The educational intervention involved (5) scheduled sessions. These sessions were repeated to each subgroup of (3-5) girls. The duration of each session lasted from half an hour to one hour including periods of discussion according to their achievement, progress and feedback. At the beginning of the first session an orientation to the educational training program and its aims took place. Different methods of teaching were used such as modified lecture, group discussion and brainstorming. Suitable teaching media were included an educational booklet that distributed to students who suffered from menstrual disorders in the first day of the educational training program.

### Evaluation phase

After implementation of the educational training program, the post test for improving students' lifestyle were done by the same format of the pre-test to evaluate the effect of the implemented educational training program.

### Statistical analysis:

Data were verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 20.0) was used. Descriptive statistics were applied (e.g., mean, standard deviation, frequency and percentages). Test of significance (chi square and paired t test) was applied to test the study hypothesis. Correlation coefficient was calculated between knowledge, and attitude scores. A statistically significant difference was considered at p-value $p \leq 0.05$, and

a highly statistically significant difference was considered at p-value p ≤ 0.001.

# 3. Results

**Table (1)** shows socio-demographic characteristics of the studied students. It was found that more half of students (54.76%) were aged from 20-25years, with a mean of age± SD 21.57 ± 2.6 years. As far as student's resistance, more than three quarters of them (78.57%) live at rural area. Regarding mean height ±SD was (160.32± 6.4 cm).

**Table (2)** illustrates characteristics of student's menstruation. It was found that mean ± SD amount of menstrual flow was 160.3 ± 6.4. Regarding age of menarche, most of them 30.95% attained 13 years.

**Table (3)** displays that there was highly statistically significant difference before and after implementing educational training program in relation to Physical characteristics of students with menstrual disorders. Regarding mean weight ±SD was (65.90 ± 10.9 Kg). Mean body mass index ±SD was (25.81 ± 4.7 kg/m²) before program, while Mean Weight ± SD was (60.90 ±7.2 Kg). Mean Body Mass Index was ±SD was (24.80 ±2.57kg/m²).

**Table (4)** represents that there was statistically significant difference before, and after implementing educational intervention in relation to studied girl's knowledge regarding definition, causes, and changes of menstrual disorders ($p < 0.05$),While there was a highly significant difference regarding their knowledge about obesity & menstrual disorders as compared before and after application of the program ($p < 0.001$).

**Figure (1)** illustrates that student's types of menstrual disorders, more than half of the students (54.8%) had menstrual irregularities. While only 20.2% had premenstrual syndrome.

**Table (5)** reflects that, there was highly statistically significant difference at p-values($p<0.001$) in all items of life style modification after application of the educational training program as compared with before application of the educational training program.

**Figure (2)** shows that distribution of the study sample total knowledge before and after educational training program, most of the students (10.80%) had average knowledge level before intervention. However after educational training program, the majority of them (95.20%) got good knowledge level.

**Figure (3)** reflects that distribution of the study sample total score of their nutritional habits before and after application of the program. Most of them (3.6%) did not practice healthy dietary habits before intervention. However after intervention, the majority of them (96.4%) practiced healthy dietary habits.

**Figure (4)** represents that distribution of the study sample total score of their life style before and after application of the program. Most of the students (86.9%) did not follow healthy lifestyle before educational training program.

However after educational training program, most of them (71.41%) followed healthy lifestyle.

**Table (1).** Distribution of the studied sample according to their general characteristics (n = 84)

| Characteristics of the girls | No. | % |
|---|---|---|
| **Age (years)** | | |
| < 20 | 38 | 45.24 |
| 20 - 25 | 46 | 54.76 |
| **Mean ± SD** | **21.5 ± 2.6** | |
| **Residence** | | |
| Urban | 18 | 21.43 |
| Rural | 66 | 78.57 |
| **Height (cm)** | | |
| < 155 cm | 21 | 17.14 |
| 156 – 165 | 46 | 48.57 |
| > 165 | 17 | 12.86 |
| **Mean ± SD** | **160.3 ± 6.4** | |

**Table (2).** Distribution of the studied sample according to history of menstruation

| Amount of menstrual flow | No. | % |
|---|---|---|
| Scanty | 17 | 12.86 |
| Moderate | 21 | 17.14 |
| Heavy | 46 | 48.57 |
| **Mean ± SD** | **160.3 ± 6.4** | |
| **Age at menarche (in years)** | | |
| **11** | 3 | 3.57 |
| **12** | 31 | 36.90 |
| **13** | 26 | 30.95 |
| **14 & above** | 24 | 28.57 |

**Table (3).** Physical characteristics of study sample with menstrual disorders before and after application the program (n= 84)

| Physical characteristics | Before program | | After program | | X² | P value |
|---|---|---|---|---|---|---|
| | No | % | No | % | | |
| Weight (Kg) | | | | | | |
| 45-60 | 16 | 19.0 | 3 | 3.6 | 854.60 | 0.000** |
| 61-75 | 32 | 38.1 | 40 | 47.6 | | |
| >75 | 36 | 42.9 | 41 | 48.8 | | |
| **Mean ±SD** | **65.90 ±10.9** | | **60.90 ±7.2** | | | |
| Body Mass index (kg / m²) | | | | | | |
| Under weight (<18.5) | 1 | 1.2 | 1 | 1.2 | | |
| Normal weight (18.5 - 25) | 19 | 22.6 | 20 | 23.8 | 273.85 | 0.000** |
| Over weight (25 - 30) | 61 | 72.6 | 38 | 45.2 | | |
| Obese ( > 30) | 26 | 31 | 2 | 2.4 | | |
| **Mean ±SD** | **25.81 ±4.7** | | **24.80 ±2.57** | | | |

A highly statistical significant difference (P ≤ 0.001)

**Table (4).** Distribution of the studied sample according to their knowledge about menstrual disorders before and after educational training program (n=84)

| Items | Preprogram intervention | | | | | | Post program intervention | | | | | | X $^2$ | P value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Complete correct | | Incomplete correct | | Don't know | | Complete correct | | Incomplete correct | | Don't know | | | |
| | No | % | No | % | No | % | No | % | No | % | No | % | | |
| **Definition of menstruation** | 0 | 0.0 | 11 | 13.1 | 73 | 86.9 | 81 | 96.4 | 3 | 3.6 | 0 | 0.0 | 20.64 | 0.002* |
| **Causes of menstrual disorders** | 0 | 0.0 | 4 | 4.8 | 80 | 95.2 | 79 | 94 | 5 | 6 | 0 | 0.0 | 14.55 | 0.016* |
| **patterns of menstrual disorders** | 0 | 0.0 | 5 | 6 | 79 | 94 | 79 | 94 | 5 | 6 | 0 | 0.0 | 11.00 | 0.027* |
| **Information about relationship of obesity &menstrual disorders** | 0 | 0.0 | 10 | 11.9 | 74 | 88.1 | 81 | 96.4 | 3 | 3.6 | 0 | 0.0 | 23.02 | 0.000** |

**A statistical significant difference (P ≤ 0.05)**
**A highly statistical significant difference (P ≤ 0.001)**
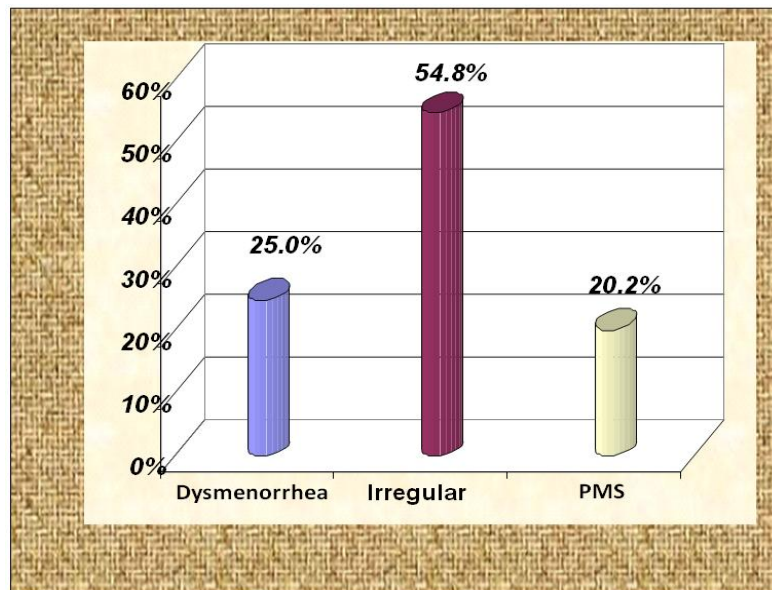


**Figure (1).** Distribution of the studied sample according to pattern of menstrual disorders (n=84)
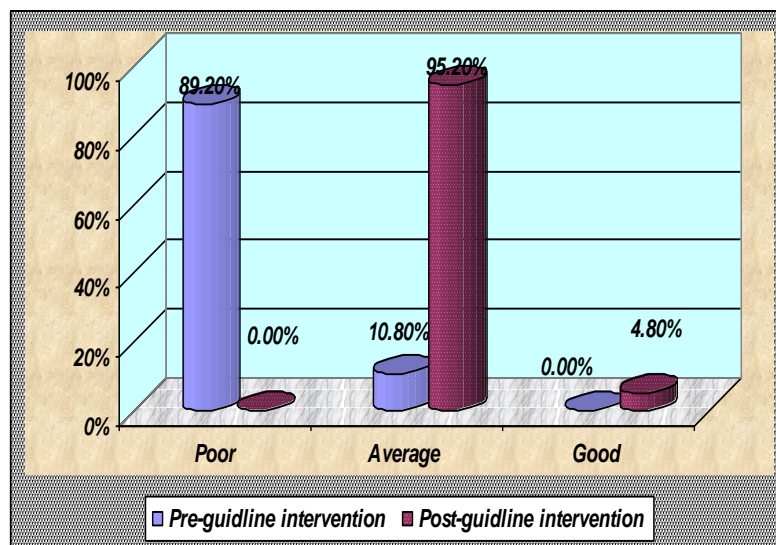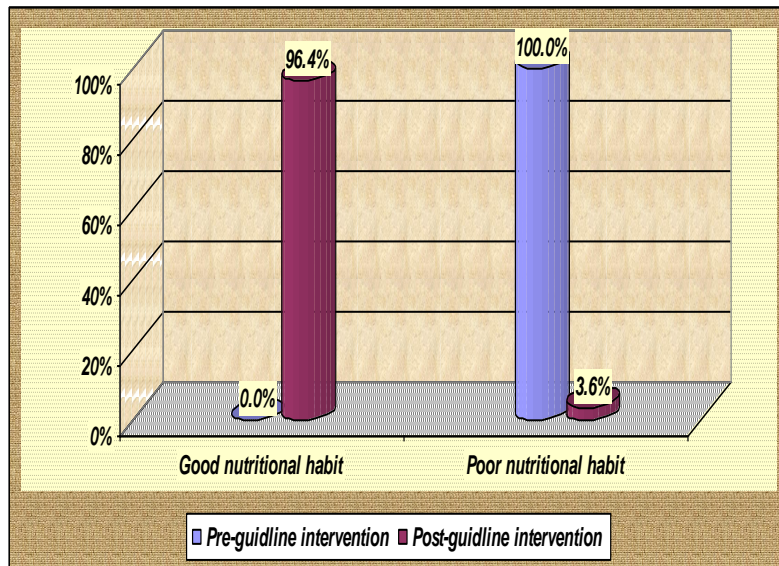


**Figure (2).** Distribution of the studied sample according to their total knowledge score before and after educational training program regarding menstrual disorders (n=84)
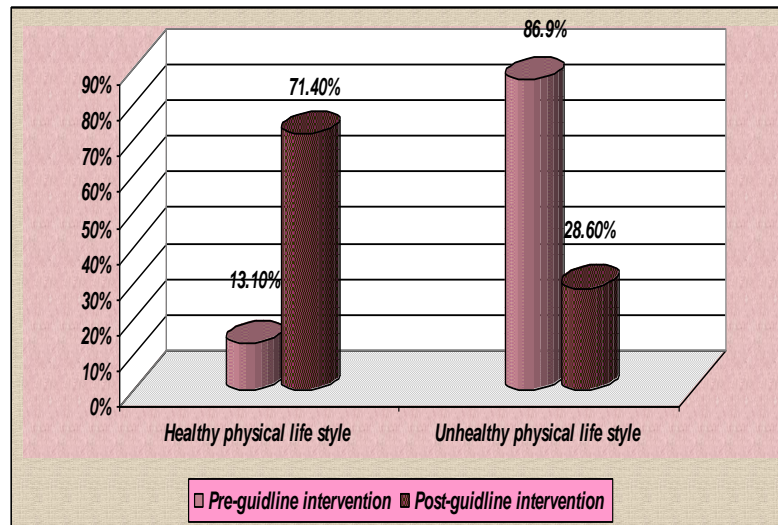
**Table (5).**   Distribution of the studied sample according to their lifestyle toward menstrual disorders before and after application of the program (n=84)

| Items | | Before program | | after program | | X² | P-value |
|---|---|---|---|---|---|---|---|
| | | No | % | No | % | | |
| **Regular practice of physical exercises.** | Never | 21 | 25 | 3 | 3.6 | 168.00 | 0.000** |
| | Rarely | 42 | 50 | 2 | 2.4 | | |
| | Sometime | 21 | 25 | 18 | 21.4 | | |
| | Usually | 0 | 0.0 | 21 | 25 | | |
| | Always | 0 | 0.0 | 40 | 47.6 | | |
| **Regular walking** | Never | 0 | 0.0 | 7 | 8.3 | 73.39 | 0.000** |
| | Rarely | 28 | 33.3 | 7 | 8.3 | | |
| | Sometime | 56 | 66.7 | 31 | 36.9 | | |
| | Usually | 0 | 0.0 | 14 | 16.7 | | |
| | Always | 0 | 0.0 | 25 | 29.8 | | |
| **Adequate rest and sleep.** | Never | 15 | 17.9 | 9 | 10.7 | 211.36 | 0.000** |
| | Rarely | 24 | 28.6 | 0 | 0.0 | | |
| | Sometime | 37 | 44 | 43 | 51.2 | | |
| | Usually | 8 | 9.5 | 8 | 9.5 | | |
| | Always | 0 | 0.0 | 24 | 28.6 | | |
| **Tolerance to do heavy works** | Never | 23 | 27.4 | 5 | 6 | 147.09 | 0.000** |
| | Rarely | 27 | 32.1 | 18 | 21.4 | | |
| | Sometime | 34 | 40.5 | 27 | 32.1 | | |
| | Usually | 0 | 0.0 | 23 | 27.4 | | |
| | Always | 0 | 0.0 | 11 | 13.1 | | |
| **Follow balanced diet** | Never | 1 | 1.2 | 27 | 32.1 | 97.33 | 0.000** |
| | Rarely | 30 | 35.6 | 25 | 29.8 | | |
| | Sometime | 42 | 50 | 32 | 38.1 | | |
| | Usually | 11 | 13.1 | 0 | 0.0 | | |
| | Always | 0 | 0.0 | 0 | 0.0 | | |

**A statistical significant difference (P ≤ 0.05)**
**A highly statistical significant difference (P ≤ 0.001)**



**Figure (3).**   Distribution of the studied sample according to their nutritional habits before and after application of the program (n=84)

**Figure (4).** Distribution of the studied sample according to their total score of their life style before and after application of the program (n=84)

# 4. Discussion

This study was carried out to improve lifestyle among nursing students regarding menstrual disorders through educational training program. As regard characteristic of the studied sample, it was found that more than half of nurses were aged from 20-25 years with a mean age of $21.57 \pm 2.6$ years.as far as student's residence more than three quarters of them lived in rural areas. More over mean height $\pm$SD of them was $(160.32 \pm 6.4$ cm). This study is almost similar with *Samir., et al (2010)* conducted to determine the correlation between body mass index and menstrual profile among nursing students of Ain Shams University who mentioned that the mean age of studied sample were $20.11 \pm 1.40$ years. In addition, nearly three quarters of them (69.8%) of the students came from rural area.

In this study nearly half of studied students (48.57) had heavy in menstrual flow, more than half of them attained the first menstruation (menarche) within normal range at (12-13 years). The results of present study were consistence with *Barde, et al (2014) who* studied that, the association between menstrual irregularities to body mass index & nutritional status among adolescent girls, showed that most of the girls attained menarche before the age of 14, and added that a higher percentage of them have scanty flow of menstruation and lower percentage of those with heavy menstrual flow.

*Furthermore,* this result is supported by *Santos, et al (2011) who* reported that, the majority of adolescent girls at the community had heavy menstrual flow and is associated to age, low level of education, obesity, as well as with other characteristics of menstruation, as longer period of menses, bleeding between periods, and clots in the flow. Also *Bassi., et al (2015)* observed that there was a statistically significant relationship between body mass index and flow of menstruation.

This study shows that, there was a highly significant difference of weight and body mass index before and after

educational training program. These findings are supported by *Karout, et al, (2012)* who studied that relationship between overweight and menstrual irregularities concluded that 30:47% of obese girls have irregular menstruation compared to those with normal weight, and in addition to most of them greater exposed for risk of menstrual irregularities.

Moreover *Kafaei., et al (2014)* concluded that menstrual irregularities are very common in obese adolescent girls. Obesity is one of the important factors of irregular menstrual cycles, Hence recommended that those girls should be modified their lifestyle through followed regular exercises and healthy dietary habits for maintaining normal body weight for getting ideal body mass index in order to prevent menstrual irregularities.

After implementing the educational training program, there was a statistically significant improvement for subtotal and total knowledge scores in relation to definition, causes, and patterns of menstrual disorders. Such improvement might be accounted on girl's interest to learn and acquire knowledge about the study topics, as well as the written booklet distributed for them was helpful in girl's acquisition of knowledge. In addition, encouragement of girls with questions, participation, and interactions throughout the educational sessions with as well as the use of multimedia. This is in similar to the study by *Blakey., et al (2010) who* concluded that the structured teaching program was effective in improving the knowledge of them regarding unhealthy nutritional habits, and encouraging them to preserve & utilize the teaching programme by educating the appropriate methods to prevent any reproductive health problems through early detection and early management of menstrual problems.

Regarding healthy life style before and after application of the educational training program, the present study demonstrated a highly statistically significant difference regarding their healthy physical lifestyle after application of

the educational training program as compared with those. This result is consistent with **Latthe., et al (2014)** who reported that there was a positive correlation between decreased the risk of dysmenorrhea and followed regular exercises & healthy physical activities for adolescent girls.

Additionally **Sharad BP, (2014)** assured that health education & counseling, management program , regular routine medical examination, adequate social support by family & colleagues, dietary improvements through complete life style modification can help to prevent menstrual problems and disorders. These indicates that life style modifications such as regular physical activity, intake of balanced food, practiced & followed healthy dietary habits and maintaining optimal body mass index should improve and prevent many of future menstrual disorders & problems as heavy menstrual bleeding flow, dysmenorrhea and premenstrual symptoms.

Furthermore **Alwyn., et al (2015)** emphasized that success of lifestyle modification such as physical activity & regular exercises in obese adolescent girls should be associated with supporting management and health education to enable them to make positive choices for getting health promoting behaviors. Also **Seedhom, et al (2013)** illustrated that physically activities, regular exercises and swimming during menstruation helps the adolescent girls to relieve the symptoms of premenstrual syndrome, dysmenorrhea, psychological upset and stress.

From point of this view early Identification, exploration and detection of abnormal menstrual periods during adolescence through health education about dietary improvements & regular exercises, routine medical examination, supporting measures, and total life style modification may be helpful for enhancement of overall health status especially reproductive health to prevent many of menstrual problems & disorders.

# 5. Conclusions

The study concluded that the implementation of an educational training program was effective as well as there was a statistically significant improvement in nursing student's knowledge and healthy lifestyle modification before and after educational training program, towards menstrual disorders. Most of nursing students with menstrual disorders didn't follow practices that related diet and exercises before applying guidelines. So, adolescent nursing students have to take balance diet in order to maintain the normal body mass index and regulate their menstrual cycle which is a determinant of student's health. Furthermore, the above mentioned findings proved and supported the research hypothesis.

# 6. Recommendations

In the light of the current study findings, the following recommendations are suggested:

- Simple booklets regarding how to coping with menstrual disorders should be available and easily access in the faculty.
- This study can be replicated with larger subjects in different faculties for generalizing the findings
- The nursing curriculum should include the current life style modification to update the knowledge regarding menstrual disorders.
- Further studies can be built on the results of this study should be performed in nutritional pattern to determine the newer strategies need to be employed among all nursing students for effective management of menstrual disorders.

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