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"A CORRELATIONAL STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF DIET ON PREMENSTRUAL SYNDROME AND OCCURRENCE OF PREMENSTRUAL SYNDROME AMONG ADOLESCENT GIRLS IN SELECTED COLLEGE"

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ABSTRACT **Introduction:** Premenstrual syndrome(PMS) is a group of symptoms that occur in women typically between ovulation and menstruation. The aim of the study was to evaluate the correlation between the knowledge and practice of diet on PMS and occurrence of PMS among adolescent girls. The **objectives** of the study were to assess the knowledge on diet of PMS among adolescent girls, to assess the practice on diet of PMS among adolescent girls, and to identify the occurrence of PMSamong adolescent girls, to correlate the practice on diet of PMS and occurrence of PMS among adolescent girls, to associate the knowledge scores on diet of PMS with selected socio - demographic variables. **Methodology:** The study was undertaken with 60 samples. Purposive sampling technique was used. The research design was correlation prospective design. Structured knowledge questionnaire and checklist were used for collecting the data. The data was analysed by using descriptive and inferential statistics. **Result:** The study findings showed that, among 60 samples , 37(62%) has poor knowledge,20(33%) have good knowledge and 3 (5%) has very good knowledge .At 0.05 level of significance, the hypothesis (H_1) was rejected and(H_2)was accepted Hence it can be concluded that there is statistically significant difference in the knowledge level of the adolescent girls regarding the knowledge on practice of diet on PMS. **Conclusion:**The study outcome revealed that the practice of diet on PMS was moderately positive correlated with occurrence of PMS among adolescent girls

KEYWORDS : Premenstrual syndrome, Adolescent girls, Knowledge and Practice

INTRODUCTION

PMS which is sometimes called premenstrual tension (PMT)[1] is a condition that affects a woman's emotions, physical health, and behavior during certain days of the menstrual cycle, generally just before their menses. PMS is a very common condition[2]. PMS is defined as faulty function of the ovaries related to the women's menstrual cycle. It affects a women's physical and emotional state, and sometimes interferes with daily activities as a result of hormone fluctuation.[3]It's symptoms affect more than 90 percent of menstruating women .It is a group of symptoms that occur in women typically between ovulation and menstruation. It has a wide variety of signs and symptoms, including mood swings, breast tenderness, food cravings, fatigue, irritability and depression. It is estimated that every 3 or 4 menstruating women have experienced some form of PMS.[4] Premenstrual disorders consist of psychiatric or somatic symptoms that develop within the luteal phase of the menstrual cycle, affect the patient's normal daily functioning, and resolve shortly after menstruation. The luteal phase begins after ovulation and ends with the start of menstruation.[5] A diagnosis of PMS consists of determining the timing of the symptoms in relation to menses, meaningful change between post- and PMS severity and a clinically significant severity of the symptoms.[6]Choose foods that provide calcium, such as low-fat milk or yogurt, almonds, kale, beans or fortified foods.

Include sources of vitamin B6, which can be found in pistachios, turkey, garbanzo beans, bananas, potatoes and fortified cereals. Skip the salt to help decrease bloating and fluid build-up .Limit caffeine and alcohol, which may affect mood and sleep. Incorporate physical activity most days of the week**,** as it may help with fluid status and to improve mood[7]. Often symptoms are present for around six days. An individual's pattern of symptoms may change over time. Emotional symptoms must not be present during the initial part of the menstrual cycle. A daily list of symptoms over a few months may help in diagnosis. Other disorders that cause similar symptoms need to be excluded before a diagnosis is made[8]. A descriptive analytics study was conducted by Fadia Hussein, Dr. Fatin Abdul Amir Al-Saffar in 2013 on Al-Diwanyia nursing secondary school at Governorate, Muscat to assess adolescent student's knowledge toward PMS in nursing secondary. The sampling technique was purposive sampling technique with sample size of 282 adolescent girls with PMS. The data collected through structured questionnaire. The result shows that the majority of the study sample 44.6 % had insufficient knowledge toward PMS. The assessment of knowledge is not affected by demographic characteristics and menstrual cycle characteristics that means the questionnaire can be amend for all individuals of the studied population. The distribution of the socio demographic characteristics of adolescents girls had revealed that the highest percentage (41.1%) of the study sample were within age group of 18 years. The findings agree with five studies who reported that PMS is experienced by up to 5%-90% of girls in adolescent age.[9]

Objectives

- To assess the knowledge on diet of PMS among adolescent girls.
- To assess the practice on diet of PMS among adolescent girls.
- To identify the occurrence of PMS among adolescent girls.
- To find the correlation between the practice on diet of PMS and occurrence of PMS among adolescent girls.
- To find the association between the knowledge score on diet of PMS with selected socio -demographic variables.

Hypotheses

H1: There will be significant correlation between practice on diet of PMS and occurrence of PMS among adolescent girls.

H2: There will be significant association between knowledge score on diet of PMS with selected socio-demographic variables among adolescent girls.

Methods And Materials

The research approach is Quantitative approach, it indicates the basic procedure for conducting research. This aims to identify the correlation between knowledge and practice of diet on PMS and occurrence of PMS among adolescent girls in Holy Cross College of Allied Health and Science, Kollam in 2021.

The study was undertaken with 60 samples.Purposive sampling

techniques were used. The research design was correlation prospective design. Structured knowledge questionnaire and checklist were used for collecting the data. The data was analysed by using descriptive and inferential statistics.

Results

Section A:

Part 1: Analysis of socio demographic variables by using frequency and percentage distribution**.**

The baseline variables included in this study are age, education, age of menarche, pattern of menstruation, family history of PMS, type of family, area of residence, dietary pattern, previous knowledge and source of knowledge.

On the basis of age, among the 60 samples, 75 % samples belongs to the age group of between 21-23years, 21.67% samples belongs to18-20 years of age, and 3.33% belongs to 24-26 years of age.

Regarding education among 60 samples, 100% of samples are graduates.

On the basis of age of menarche, 95% of samples belongs to 9-15 years, 5% of samples belongs to >15 years of age.

While regarding the pattern of menstruation among 60 samples, 86.67% are having regular and 13.33% are having irregular menstrual pattern.

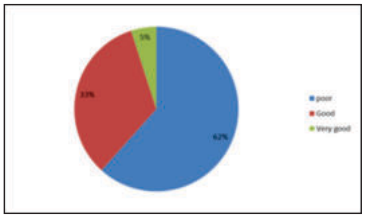
In case of family history of PMS, among 60 samples, 78.33% have no family history of PMS and 21.67% are having family history of PMS Based on type of family among 60 samples, 88.33% belongs to nuclear family and 11.67% belongs to joint family While regarding area of residence in among 60 samples, 68.33% are from rural area and 31.67% are from urban area.

In dietary pattern among 60 samples, 86.67% of samples are non vegetarian and 13.33% of samples are vegetarian.

Regarding previous knowledge, among 60 samples, 60% of the samples are having previous knowledge and 40% are not having previous knowledge.

On the basis of source of knowledge, among 60 samples, 37 %acquired knowledge from peer group,33% acquired knowledge from family, 17% acquired knowledge from media, 13% acquired knowledge from professionals .

Section B: Frequency and percentage distribution of Knowledge on PMS.

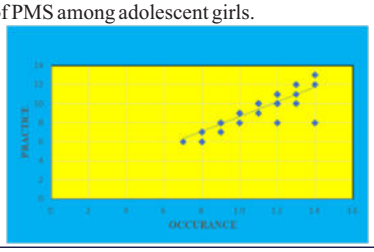


This shows that among 60 samples, 37(62%) has poor knowledge,20(33%) have good knowledge and 3 (5%) has very good knowledge on diet of PMS.

Section C: Frequency and distribution of practice of diet on PMS

This study shows that among 60 samples 55% are having good practice of diet on PMS and 45% have average practice on diet of PMS.

Section E: Correlation between the practice on diet of PMS and occurrence of PMS among adolescent girls.



In this study the correlation coefficient of practice on diet and occurrence of PMS among adolescent girls gives a moderately positive correlation. The correlation coefficient is 0.821.

Section D: Association between the knowledge scores on diet of PMS with selected socio -demographic variables.

Sl no	Demographic variables	Chi square	Tabulated value	significance
1.	Age	2.998	9.49	NS
2.	Education	0	9.49	NS
3.	Age of menarche	9.848	9.49	Significant
4.	Pattern of menstruation	7.566	5.99	significant
5.	Family history	8.673	5.99	Significant
6.	Type of family	9.268	5.99	Significant
7.	Area of residence	4.497	5.99	NS
8.	Dietary pattern	2.657	5.99	NS
9.	Previous knowledge	2.802	5.99	NS

Association of knowledge score with selected demographic variables were computed by Chi-square test.

The Chi-square value for age 2.998 (table value=9.49); for education 0 (table value=9.49); for age of menarche 9.848 (table value=9.49); for pattern of menstruation 7.566 (table value=5.99); for family history8.673(table value=5.99); for type of family 9.263(table value=5.99); for area of resisdence4.497(table value=5.99); for dietary pattern2.657 (table value=5.99); for previous knowledge on PMS 2.802(table value=5.99) Chi-square values are less than table value at 0.05 level of significance. Hence the research hypotheses H_2 was accepted. So there is significant association between knowledge score and selected demographic variables.

DISCUSSION

The present study shows that among 60 samples, 37(62%) has poor knowledge,20(33%) have good knowledge and 3 (5%) has very good knowledge on diet on PMS.

This study is supported by a descriptive analytics study was conducted by Fadia Hussein, Dr.Fatin Abdul Amir Al-Saffar on 2013 in Al-Diwanyia Nursing School Iran , to assess adolescent student's knowledge toward PMS in nursing school. The sampling technique was purposive sampling with sample size of 282 adolescent students with PMS in nursing schools at Al-Diwanyia governorate. The data collection was done through structured questionnaire. The result shows that the majority of the study sample 44.6 % had insufficient knowledge toward PMS and the assessment of knowledge is not affected by demographic characteristics and menstrual cycle characteristics.[9]

The present study shows that among 60 samples 55% are having good practice of diet on PMS and 45% have average practice of diet on PMS. The present study is supported by a cross sectional study was conducted by Kubra Isgin-Atici, ZehraBuyuktuncer on 2018 in Ankara,Turkey,to assess eating attitudes of adolescents with PMS. The sampling technique was purposive sampling and sample size was 383.The data collection was done through questionnaire. The result shows that PMS prevalence was 55.9% according to PMSS subscales. In the PMS group, total TFEQ-R18 score, emotional eating behavior and uncontrolled eating behavior scores were significantly higher ($p<0.001$).[10]and another study was supported by a case control study regarding western dietary pattern is related to PMS in cambridge university, 320samples were selected 160 were with PMS and rest without PMS. The study reveals that western dietary pattern might be associated with PMS morbidity.[11]

The present study shows that among 60 samples 76.67% are moderate 18.33% are severe and 5% are mild. This study is supported by a cross sectional study was conducted by Mariam Muhammed Ali ,NourahAlkharraz on 2020 in King Khalid University Hospital and King Saud University , Riyadh ,to assess prevalence of PMS levels and its management among female students of medical and non-medical colleges .The sampling technique was consecutive sampling and sampling size was 513. The data collection was done through self-reported questionnaires. The result shows that the majority of female students have a moderate level of PMS, and only 8% have severe PMS. Notably, 8.9% of the students have moderate anxiety while 1.7% and 0.7% have severe and extremely severe anxiety, respectively. Moreover, 11.8% and 3.4% of the students have moderate depression

and stress, respectively, whereas 1.7% has severe depression. The results show a positive correlation between PMS and anxiety, depression, and stress.[12] and this study supported by another study which was a cross sectional survey conducted in Bhavnagar, Gujarat. The aim of this study is to study the prevalence of PMS and PMDD among college students.529 subjects approached, 489 college girls were finally analyzed for socio demographic data, menstrual history, and PSST. SCID-PMDD was applied among those who were positive on PSST and 20% of those who were negative. The study finding shows that prevalence of PMS was 18.4%. Moderate to severe PMS was 14.7% and PMDD was 3.7% according to DSM IV-TR and 91% according to International Classification of Diseases, 10th edition criteria.[13]

The findings of present study show that the correlation coefficient was 0.821. There is a moderately positive correlation between practice of diet on PMS and occurrence of PMS among adolescent girls. The present study was supported by another study aims to focus on the menstrual characteristics and its association with socio-demographic factors and nutritional status among the urban slum adolescent girls of North 24 Parganas district, West Bengal. This community-based study was conducted among a group of 90 Bengali speaking Hindu adolescent girls aged between 16 to 18 years. A pre-tested structured schedule was used to collect detailed information about the socio-economic conditions and menstrual characteristics. A highly significant difference was found among underweight, healthy and overweight girls in terms of duration of menstrual bleeding, mean number of days of peak discharge and occurrences of PMS. Result of linear regression and step wise logistic regression (backward elimination) shows that various socio-economic and anthropometric variables are the influential predictors of menstrual characteristics like duration of menstrual discharge, cycle length, days of peak discharge as well as menstrual problems like cycle irregularity and heavy flow ($p<0.05$). Therefore, the present study unwraps a podium to focus on the menstrual health issues of the adolescent girls and enforce health education as well as instigates nutritional intervention programme to fortify the existing menstrual health status.[14] and a prospective correlation research design was conducted by Jumana Husseine , Ayman M Humdan on 2018 in female university students ,Jordan, to assess prevalence and association of PMS and premenstrual dysphoric disorder with academic performance among female university students . The sampling method was convenience sampling and the sample size was 858 .The data collection was done through questionnaire. The result shows that prevalence of PMS was 92.3% and that of PMDD was 7.7%. There were significant differences in self-determination levels between students with PMS and those with PMDD.[15]

CONCLUSION

The present study was aimed to find the correlation between the knowledge and practice of diet on PMS among adolescent girls in a selected college. The study outcome revealed that the practice of diet on PMS was moderately positive correlated with occurrence of PMS among adolescent girls. The finding of the present study can apply among adolescent girls to improve their ability in all settings.

REFERENCES

1. Family planning NSW reproductive and sexual health, Australia, Australian Charities and Not-for-profits Commission (ACNC).
2. Bendich A. The potential for dietary supplements to reduce PMS symptoms. Journal of the American College of Nutrition. 2000 Feb 1;19(1):3-12
3. Abdalla NO, Gibreel MS. Effects of an educational program in increasing knowledge and reducing PMS signs, symptoms and severity among nursing college students. International Journal of Basic and Applied Sciences. 2016 Oct 1;5(4):200-9.
4. Valencia Higuera. PMS. Health line.2019 May 19.
5. Sabrina Hofmeister, DO, Seth Bodden, MD,PMS and premenstrual disorder WisconsinAm Fam Physician. 2016 Aug 1;94(3):236-240.
6. Freeman EW. PMS and premenstrual dysphoric disorder: definitions and diagnosis. Psychoneuroendocrinology. 2003 Aug 1;28:25-37.
7. *Sarah Klemm, RDN, CD,* LDN PMS. Eat right acacdemy of nutritions and dietetics. 2021 April 5
8. PMS. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization. 2021 Sep 21.
9. Ali FH, Al-Saffar FA. Assessment Of Adolescent Student's Knowledge Toward PMS In Nursing Secondary Schools At Al-Diwanyia Governorate. Journal of Kufa for Nursing Science Vol. 2014;4(1).
10. Isgin-Atici, K., Buyuktuncer, Z., Akgül, S., &Kanbur, N. (2018). Adolescents with PMS: not only what you eat but also how you eat matters!. Journal of pediatric endocrinology & metabolism
11. Farasati N, Siassi F, Koohdani F, Qorbani M, Abashzadeh K, Sotoudeh G. Western dietary pattern is related to PMS: a case–control study. British Journal of Nutrition. 2015 Dec;114(12):2016-21.
12. Mariam muhammedali ,NourahAlkharraz (2020) ,to assess prevalence of PMS levels and its management among female students of medical and non-medical colleges national library of medicine DOI: 10.7759/cureus.11595
13. Raval CM, Panchal BN, Tiwari DS, Vala AU, Bhatt RB. Prevalence of PMS and premenstrual dysphoric disorder among college students of Bhavnagar, Gujarat. Indian Journal of psychiatry. 2016 Apr;58(2):164.
14. Samanta A, Thakur J, Goswami M. Menstrual characteristics and its association with socio-demographic factors and nutritional status: a study among the urban slum adolescent girls of West Bengal, India. Anthropological Review. 2019;82(2):105-24.
15. JumanaHusseine ,Ayman M Humdan (2018) , to assess prevalence and association of PMS and premenstrual dysphoric disorder with academic performance national library of medicine DOI: 10.1111/ppc.1221