PREVALENCE OF DYSMENORRHEA AND DIETARY PATTERN AMONG THE SELECTED FEMALE IN REPRODUCTIVE AGE

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Abstract -Dietary habits are closely associated with quality of life of women in reproductive age, with this background, this study aims to examine the relationship between dietary patterns and risk of dysmenorrhea among single and healthy female understudies.

Key words: menstrual cycle, Dysmenorrhea, Dietary pattern

1.INTRODUCTION

Youthfulness is the time of change among adolescence and adulthood. Menarche is one of the markers of pubescence and subsequently can be considered as a significant occasion in the existence of juvenile young ladies. Studies recommended that menarche will in general show up prior in life as the clean, wholesome, and financial states of a general public improve. For most females, it happens between the age of 10 and 16 years; nonetheless, it shows a noteworthy scope of variety. The typical reach for ovulatory cycles is somewhere in the range of 21 and 35 days. While most periods last from 3 to 5 days, length of feminine stream ordinarily goes from 2 to 7 days. For the initial, not many years after menarche, sporadic and longer cycles are common.75 per cent of young ladies experience a few issues related with period including postponed, unpredictable, excruciating, and substantial feminine dving, which are the main explanations behind the doctor office visits by teenagers. Feminine examples are additionally affected by various host and natural variables. Be that as it may, barely any investigations in India have depicted the way of life factors related with different feminine cycle designs. (Shabnam et al., 2018)

Dysmenorrhea is one of the most common gynaecologic complaints reported by young women. One of the notable mechanism or dysmenorrhea is the raised arrival of prostaglandins into the uterine tissue once the monthly cycle starts. These metabolites increment vasoconstriction and myometrial withdrawals causing uterine ischemia and torment. Some potential danger components of dysmenorrhea are youthful age (under 30 years of age), Body mass index (BMI), early menarche, distorted feminine stream, longer monthly cycles, family background of dysmenorrhea and stress. Although the proof on the connection between dietary variables and dysmenorrhea is uncertain, it appears to be that maximum usage of fish, leafy foods may diminish the force of feminine torment. (Nastaran, 2018)

Dietary habits are directly related with individual quality of life, and adolescence is a potential group to view the rapid growth and maturation which requests extra nutrients and energy-rich food. Food habits of adolescents in the recent past have changed in their nutrient intake and needs such as widespread consumption of fast food, skipping of food intake. (Priyanka et al., 2018).

Hence the study was taken with the objective to study the prevalence of dysmenorrhea among the selected women in reproductive age and to assess their dietary pattern.

2. METHODOLOGY

1. SELECTION OF SAMPLE

A total of 163 female in the age group of 15-25 years from different areas of Palakkad district of Kerala were included for the study by using random sampling method. Married female and female below 15 years were excluded from this study. A well structured questionnaire was framed for online survey and circulated in social media.

2. FORMULATION OF QUESTIONNAIRE AND CONDUCT OF STUDY.

. The participants were requested to participate in the study, wilfully and were required to fill responses upon receiving the link of the form. The form consisted of 47 questions, consisting of 14 answer type The study questionnaire consisted of five sections. In the initial section, students were asked to state their demographic data. Different socio demographic variables like age, socioeconomic status, level of

education, occupation of head of the family, type of family and religion of the family were included in this section. In the second section, they were asked about their anthropometric information such as height and weight and in the third section personal characteristics like sleeping behaviour, physical activity and emotional behaviour were included. In the fourth section, they were asked about their menstrual characteristics over the past months, including severity of dysmenorrhea, age at menarche, bleeding length, length and regularity of menstrual flow and major symptoms of menstruation. In the fifth section, they were asked about their dietary pattern, whether they excluded meat and/or animal products from their diet (vegetarian status), food skipping behaviours, junk/fast food consumption, frequency of junk food intake, iron rich food consumption, special food consumption during periods, food taboos and their view about menstrual pain. The collected data were consolidated and tabulated.

RESULTS AND DISCUSSION

Among the 163 respondents, majority of selected samples were in the age group of 21-25 years, followed by the age group of 15-20 years. Among them 65 per cent attained their menarche in the age range of 10-13 years and rest in the age range of 14-16 years. Menstrual phase, which typically lasts from day one to day five, is the time when the lining of the uterus is actually shed out through the vagina if pregnancy has not occurred. From the selected population, we could note that 53 per cent of samples had 3-4 days of periods, 41 per cent showed 4-6 days ,4 per cent showed 1-2 days and meagre per cent stated more than 6 days of bleeding.

Menstrual cycle regularity of the selected samples shown that the majority (67%) of people had irregular menstruation. Irregular periods may be caused by some medicines, having a very low or high body weight, or not eating enough calories.

Greatest per cent (87 per cent) of the selected population rated their menstrual flow as moderate, followed by heavy (7 per cent) and light (6 per cent). Many factors can alter a person's menstrual flow and make their period usually light and heavy. Body weight, stress, and the food may have complementary relationship with menstruation.

The length of the menstrual cycle varies from woman to woman, but average is to have periods every 28 days. Length of menstruation of the selected population was stated to 28 to 35 days by 53 per cent, 20 days by 24 per cent, three to four months by 9 per cent.

Dysmenorrhea is the medical term for painful menstrual periods which are caused by uterine contractions. Among the selected samples, it was observed that 47 per cent were suffering from dysmenorrhea and 31 per cent had pain sometimes, 22 per cent were never had menstrual pain.

Common symptoms of menstruation are abdominal pain, headache, vomiting, fever, chills, sleeplessness, sleepiness and difficulty in concentrating. From the data it was clear that 34 per cent of the selected population were suffering from abdominal pain. About 16 per cent,14 per cent,11 percent and 10 per cent were facing difficulty in concentrating, headache, sleepiness and vomiting respectively. About 5 per cent were suffering from sleeplessness. Approximately two to three per cent suffering from fever and chills.

Data elicited on the duration of menstrual pain of the selected population showed that 42 per cent of the selected population facing one day followed by ,38 per 2-3 days (38 per cent) and 3-4 days (16-18 per cent). Four per cent were having menstrual pain more than 4 days.

Food habit of the selected samples showed that majority (83 per cent) of people were vegetarians and 17 per cent were nonvegetarians.

Junk food is the unhealthy food that is high in calories from sugar or fat, with little dietary fibre, protein, vitamins, minerals, or other important forms of nutritional value. The consumption of fast foods was comparatively more among the students than others. It was clear that 67 per cent of selected samples preferred to eat junk/fast foods frequently, 19 per cent were like to eat occasionally and14 per cent did not like to eat fast/junk foods.

Some foods are really helpful to treat the pain caused during the time of menstruation. Foods like walnuts, almonds, pumpkin seeds, ginger, fenugreek which eases the menstrual cramps. Antioxidant rich foods, helps to reduce the swelling and inflammation. This study showed that 72 per cent of the respondents were did not take any special foods during periods and 13 per cent included fruits, 6 per cent preferred cadburries, 4 per cent preferred ginger water and 2 per cent had nuts during their menstrual period.

Food taboo is abstaining people from food and or beverage consuming due to various reasons like religious and cultural reasons. It can be permanent or temporal. Permanent Food taboos are avoiding food and or drinks throughout life, while some foods are avoided for certain period of time. From the data it was clear that 86 per cent were not following any food restriction during periods. Only 14 per cent restrict foods like chicken and fish during menstrual period.

Women need more iron than in men to make up for the amount of iron they lose in their menstrual period. Around 1 mg of iron is lost for every day of bleeding. Iron deficiency is the most common nutrient deficiency in women, insufficient iron can lead to anaemia. About 51 to 48 per cent of the selected samples were not concentrating on iron rich foods in their regular diet and only 17 per cent included iron rich foods in their regular diet.

Majority of selected samples had positive attitude towards menstrual pain, while a very small per cent had negative attitude towards menstrual pain. It indicated that majority of young female adults were aware about the process of menstruation and its importance.

CONCLUSION

The food and the menstrual cycle have a complementary relationship. Consumption of fast foods are increasing worldwide, and the consumption of vegetables is comparatively lower, especially among college students are associated with dysmenorrhea. Calcium and iron deficiency and unsaturated fatty acids are also associated with dysmenorrhea. The result of this study implies that diet, characterized by the high consumption of sugars, processed foods, fast foods, ready to eat foods, bakery foods and confectionaries was common among the majority of the respondent and it might be associated with an increased risk of dysmenorrhea among young women.

REFERENCES

- Omidvar, S., Amiri, F. N., Bakhtiari, A., & Begum, K. (2018). A study on menstruation of Indian adolescent girls in an urban area of South India. *Journal of family medicine and primary care*, 7(4), 698.
- [2] Najafi, N., Khalkhali, H., Tabrizi, F. M., & Zarrin, R. (2018). Major dietary patterns in relation to menstrual pain: a nested case control study. *BMC women's health*, *18*(1), 1-7.
- [3] Negi, P., Mishra, A., & Lakhera, P. (2018). Menstrual abnormalities and their association with lifestyle pattern in adolescent girls of Garhwal, India. *Journal of family medicine and primary care*, 7(4), 804.

- [4] Al-Dabal, B. K., Koura, M. R., Al-Sowielem, L. S., & Barayan, S. S. (2014). Dysmenorrhea and associated risk factors among university students in Eastern Province of Saudi Arabia. World Family Medicine Journal: Incorporating the Middle East Journal of Family Medicine, 99(1145), 1-11.
- [5] Bajalan, Z., Alimoradi, Z., & Moafi, F. (2019). Nutrition as a potential factor of primary dysmenorrhea: A systematic review of observational studies. Gynecologic and obstetric investigation, 84(3), 209-224.
- [6] Bavil, D. A., Dolatian, M., Mahmoodi, Z., & Baghban, A. A. (2016). Comparison of lifestyles of young women with and without primary dysmenorrhea. Electronic physician, 8(3), 2107.
- [7] Fallatah, S. A., Khan, A. M. M. E., Al Reqei, H. M., Alalshaikh, Z. A., Alnabhani, J. M. A., Alomari, M. A., ... & Alhawiti, B. H. M. (2018). The prevalence of dysmenorrhea among women. The Egyptian Journal of Hospital Medicine, 70(4), 520-525.
- [8] Fujiwara, T., & Nakata, R. (2010). Skipping breakfast is associated with reproductive dysfunction in post-adolescent female college students. Appetite, 55(3), 714-717.
- [9] Gong, E. J., Garrel, D., & Calloway, D. H. (1989). Menstrual cycle and voluntary food intake. The American journal of clinical nutrition, 49(2), 252-258.
 - [10] Hallberg, L., & Rossander-Hulten, L. (1991). Iron requirements in menstruating women. The American journal of clinical nutrition, 54(6), 1047-1058.
 [11] Harel, Z. (2006). Dysmenorrhea in adolescents and young adults: etiology and

management. Journal of pediatric and adolescent gynecology, 19(6), 363-371

- [12] Akhila, S., & Rosy, M. (2019). Assess the Menstural Irregularities Among Adolescents. International Journal of Obstetrics, Perinatal and Neonatal Nursing, 5(2), 1-5
- [13] Singh, A., Kiran, D., Singh, H., Nel, B., Singh, P., & Tiwari, P. (2008). Prevalence and severity of dysmenorrhea: a problem related to menstruation, amongfirst and second year female medical students. Indian J Physiol Pharmacol, 52(4), 389-397.
- [14] Sundari, N., Sari, D. N. A., Timiyatun, E., & Kusumasari, V. (2020). Dietary Habit is100

Associated With Dysmenorrhea Among Adolescent. STRADA Jurnal Ilmiah Kesehatan, 9(2), 1359-1369.