

ASSESSING THE PREVALENCE OF PRIMARY DYSMENORRHEA AND COMPARING THE SEVERITY OF SYMPTOMS WITH MARRIED AND UNMARRIED WOMEN: AN OBSERVATIONAL STUDY

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ABSTRACT

Background: primary dysmenorrhea [PD] or menstrual cramp is a natural phenomenon which occurs throughout the reproductive years of every women. It characterized by cramping and lower abdominal pain just before and during menstruation. It occupies 20% - 90% of female population.

Purpose: The aim is to assessing and comparing the intensity of pain and symptoms for PD in married and unmarried.

Methodology: A total 100 female with PD were recruited by simple random sampling to participate in this study. Recruited female with PD were allocated into two groups, Group A unmarried women and Group B married women were provided with MOOS menstrual distress questionnaire [MDQ], WaLIDD score and pain scoring NPRS numerical pain rating scale were used to assess the severity of pain and symptoms.

Result: Group A shows significant difference [$p < 0.01$] in MDQ and NPRS when compared to Group B.

Conclusion: The study shows unmarried women's have increase intensity of pain and symptoms than married women.

KEY WORD: Dysmenorrhea, MOOS, Married, Unmarried women.

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INTRODUCTION

Dysmenorrhea is defined as pain associated with menstruation of sufficient magnitude so as to affect day- to- day activities [1]. The term dysmenorrhea comes from Greek word for difficulty monthly flow [2]. Adolescence is the period of transition from childhood to adulthood where the menarche age take place. WHO has defined adolescence as the age group of 10 to 19 years [3]. During the stage of puberty, the changes are hormonal, psychological, cognitive

and physical changes are occurred simultaneously [4]. Every woman experience one or other type of menstrual problem before or after marriage in their lifetime [5]. Menstrual period is the natural phenomenon which occurs throughout the reproductive year [6].

Dysmenorrhea is classified into two: Primary dysmenorrhea [PD] is defined as painful menstruation experienced by women with normal pelvic anatomy and Secondary dysmenorrhea is defined as who have pelvic pathology

like endometriosis etc.,[7]. In primary dysmenorrhea pain is spasmodic in nature and pain felt in suprapubic area [lower abdomen], it may radiate to lower back and thighs [8]. The onset is usually 6 to 12 months after menarche with regular ovulatory cycle [9]. The etiology of PD is not understood but most symptoms explained that increase amounts of prostaglandins, particularly PGF₂ – A1Fa. Spasmodic dysmenorrhea comes under the membranous dysmenorrhea which is characters by the endometrial action [10,11].

The intensity of pain and symptoms of menstruation is directly proportional to the amount of PGF₂ released [7,12,]. Vasopressin and leuko-triene concentration is higher in women who have severe menstrual pain than others. Vasopressin involved in myometrial hyperactivity, reduced blood flow which is secrete by posterior pituitary gland [4,9,7,12]. The pain result from contraction of uterus when the blood supply to the endometrium is reduced and become worse as endometrial tissue shed and pass through cervix [13]. It occurs at monthly intervals throughout the reproductive life [14] occurs in a normal cycle of 21 – 45 days with 2 – 6 days of flow, 20-60 ml of blood loss lasting in 40 years of their life [15]. In modern times girls may have physical problems arise in relation with menstruation such as dysmenorrhea, weight gain, headache, backache, breast tenderness, mood swings, depression [5].

It may often associated with problems and risk factors of irregular menstruation, excessive bleeding, nulliparity, smoking, attempt to weight loss, physical inactivity, disruption of social network, anxiety [16,17]. Significantly higher in coffee consumers, menstrual bleeding more than 7 days, who also have positive history of dysmenorrhea or any other gynecological problems [18], extroverted uterus [19]. The prevalence for primary dysmenorrhea as high as 90 percent and also affects the quality of life [20,21]. 5 -10 percent of late teens suffer severe spasmodic pain which interpreting their education and social life [22].

Dysmenorrhea may lead to absenteeism from school or college and decrease work efficiency [23]. Pain is subjective symptoms cannot be accurately estimated by an outside observe [24].

It can be treated by both pharmacological and non- pharmacological methods. Pharmacotherapy like oral contraceptives pills [OPS], Non-steroidal anti-inflammatory drugs [NSAIDs] and analgesic tablets which reduce pain [25]. Other treatment like Transcutaneous electrical nerve stimulation [TENS], massage, exercise, vitamins, essential fatty acid, acupuncture [26]. Regular exercise women experience reduced menstrual pain and symptoms than others [27]. A holdover of increase level of progesterone from pregnancy may cause endometrial implants to get smaller and childbirth eliminates some of prostaglandins receptors sites in uterus so the primiparous women have less pain than nulliparous women [28].

METHODOLOGY

Requisite permission and approval from all the participant in the study. Married and unmarried women under the age of 18 – 35 years are included in the study. 100 female is taken. A baseline questionnaire was taken to evaluate the medical h\o of menstruation. Women's who have pain for at least one or two days after the menstruation starts, pain starts with in 6 – 12 hours, women after their first live birth are included in this study. Females who have irregular menstrual cycle, no pain during their menses, under any medication for pain control, regular exercise or active in any sports activities, other treatments, gynecological issues before or after delivery, postpartum women [during puerperal age], intrauterine contraceptive devices [ICP] are excluded in this study. The individual grade of dysmenorrhea was assessed by MOOS menstrual distress questionnaires to identify the mild, moderate, severe symptoms, WaLIDD [working ability, location, intensity, days of pain] scoring where used to identify the severity and pain was assessed using NPRS numerical pain rating scale were used based on the inclusion and exclusion criteria.

In this study married and unmarried women were compared according to the scoring of MOOS, WaLIDD, NPRS scoring.

Data analysis:

Data was computed and analyzed using SPSS (statistical package for social sciences) software version.20.

RESULT

The result of the study showed significantly differences in pain and menstrual distress questionnaires' as measured using NPRS and MMDQ in married and unmarried women's are compared.

Table 1: Numerical pain rating scale.

	Mean	SD	SE	t-value	p-value
Group A	5.78	1.43	0.2	-1.11	0.27
Group B	3.04	1.12	0.15		

Table 2: MOOS menstrual distress questionnaires.

	Mean	SD	SE	t-value	p-value
Group A	82.6	26.4	3.74	-1.59	0.11
Group B	32.2	16.5	2.34		

Table 3: Working Ability, Location, Intensity, Days Of Pain, Dysmenorrhea (WaLIDD) Scale.

	Mean	SD	SE	t-value	p-value
Group A	6.8	2.44	0.34	-1.5	0.13
Group B	4.5	1.61	0.22		

DISCUSSION

According to Dawood dysmenorrhea is the common gynecological complaints that can affect 50% of women with 10% of these women suffering severely enough to incapacitate for 1 to 3 days of each menstrual cycle [29]. The present study was conducted to assess and compare the prevalence, severity of symptoms and intensity of pain in both married and unmarried women. MOOS menstrual distress questionnaire was used to primary dysmenorrhea for both group A and group B. similar scale was used in the study done by Susan L Hendrix et al [30]. Pain intensity was measured by using numeric pain rating scale. Similarly, the study was done by GitiOzgoli et al [31]. Married women have less pain than unmarried women because of their physiological changes by Theodore F Robles. WaLIDD scoring were used for primary dysmenorrhea by Anibal A Teheran [32]. According to V. Rajalakshmi school girls and college girls have more pain then postpartum women.

CONCLUSION

The study shows that unmarried women have increase severity of symptoms and intensity of pain than the married women.

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Conflicts of interest: None

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