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A Cross – Sectional Study on the Prevalence Dysmenorrhoea Among Women in the Reproductive Age Group (15 – 49 Years) in A Chennai Based Rural Population

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ABSTRACT

A cross – sectional study was done on 327 women in the reproductive age group who were selected by simple random sampling. The study was conducted in a rural population served by Thiruninravur Primary Health Centre (PHC) in Thiruvallur district. Of the study subjects , 52.6 % were less than or equal to 30 years of age and the rest 47.4 % were more than 30 years of age. The study population comprised of Hindus, predominantly (82.3%), most of the study population were from low socio – economic status (78%). The prevalence of dysmennorhoea in the study population was found to be 56.27 with a 95 % C.I of 50.89 – 61.65. The high prevalence of dysmenorrhea in the study population emphasizes on the need for promotion of menstrual health in the rural population of Chennai.

KEYWORDS : Dysmenorrhoea, rural, S.L.I (standard of living index)

Introduction:

Dysmenorrhea is a common gynecological condition with painful menstrual cramps of uterine origin. Two categories of dysmenorrhea are primary and secondary dysmenorrhea. Primary dysmenorrhea refers to menstrual pain without any pelvic pathology. These symptoms have underlying cause of elevated endometrial prostaglandins and their metabolites [1]. Although dysmenorrhea is a common gynecological problem in young females but there are limited studies in this subject especially in India. It is unclear, the extent to which young girls are incapacitated each month due to the severity of dysmenorrhea[2]. Dysmenorrhoea specifically is a leading gynaecologic complaint, resulting in a significant number of both work and school absences.In fact, it is estimated that over 600 million hours are lost from work each year due to dysmenorrhea[3].

Materials and Methods:

Study Population: The study was done on women in the reproductive age group (15 – 49 years) residing in the field practice areas of Thiruninravur PHC of Thiruvallur district

Sampling method: The subjects were selected through simple random sampling method

Sample size: Based on literature review the prevalence of dysmenorrhea was found to be 71.2% [3]. The limit of accuracy was set at 7% of prevalence and the minimum sample size required was calculated to be 314 and finally a sample size of 327 was achieved.

Inclusion and Exclusion Criteria

Women in the reproductive age group (15 – 49 years [4])who were willing to participate were included after obtaining their informed consent. Only women who were currently menstruating were included in the study

Classification of main study variables

Standard of living index (S.L.I)

Standard of living index was calculated as per the procedure followed in NFHS-2 (1998-1999) India survey. S.L.I is considered as a predictor of the socio-economic status. The subjects were divided into three groups based on their S.L.I as low, medium and high. The low S.L.I. group was matched as a risk factor for depression against the medium and high S.L.I. subjects who were grouped together[5].

Data Analysis

The data entry and analysis were done using statistical package for social sciences (SPSS) version 15. The final data was summarized into percentages and 95% confidence intervals were calculated wherever appropriate.

Results:

Socio – demographic profile of the study subjects:

Of the study subjects 52.6 % were less than or equal to 30% of age and the rest were above 30 years of age. Majority of the study subjects were Hindus (82.3%). Details can be seen in Table 1 and Figure 1 . Most of the study subjects had low Standard of living Index (78%). Details can be seen in Table 1 and Figure 2. Currently married subjects contributed of the 90.2% of the study population. Details can be seen in Table 1

Prevalence of dysmenorrhea

Of the 327 study subjects who were included for the study 184 subjects gave a history of dysmenorrhea and the prevalence was found to 56.27 % with a 95% C.I of 50.89 – 61.65. Details can be seen in Table 2.

Discussion:

This study was a population based cross sectional study done using simple random sampling method, which ensures generalisability of results to the study population. The present study shows that the overall prevalence of the dysmenorrhoea among reproductive age group women(15-49years) in this rural population (Thiruninravur Primary Health Centre area) is high to the extent of 56.27% the 95% C.I was quite narrow(50.89 – 61.65)indicating the good precision of the study.

The prevalence of dysmenorrhea was found to be 56.27 % in the current study, this was significantly lower than the results of a study done in Indore. This difference could be because of the difference in population types and also the differences in assessment methods[2]. A study done in Gwalior showed that the prevalence of dysmenorrhea was 79.67%, this was also higher than the prevalence in the current study. This difference could be because the Gwalior study was done on adolescent girls whereas this study included all women in the reproductive age group. There is a wide variation in the prevalence of dysmenorrhea done in India as the operational definition differs in different regions. The current study shows a very high prevalence of dysmenorrhea which in turn emphasizes on the need to emphasize on menstrual health and menstrual hygiene of the women, particularly residing in rural areas.

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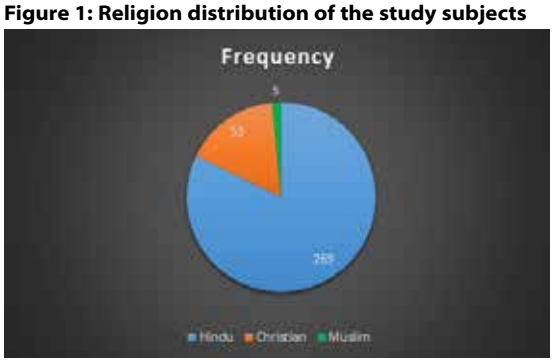
Table 1: Socio – demographic profile of the study subjects

Variable	Frequency (Out of 327)	Percentage
Age		
≤30 years	172	52.6
> 30 years	155	47.4
S.L.I		
Low	255	78
Medium	56	17.1
High	16	4.9
Marital status		
Currently married	295	90.2
Separated/ widowed	8	2.4
Never married	24	7.3
Religion		
Hindu	269	82.3
Christian	53	16.2
Muslim	5	1.5

Table 2: Prevalence of dysmennorrhoea

Dysmenorrhoea	Frequency	Percentage	95% C.I
Yes	184	56.27	50.89 – 61.65
No	143	43.73	

Figure 1: Religion distribution of the study subjects



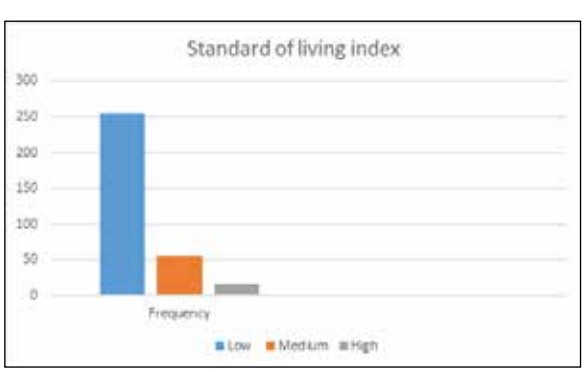


Figure: Standard of living index of the subjects

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