

Menstrual Irregularities in Married Females in Jawan District Aligarh during Covid 19 Pandemic in Aligarh

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ABSTRACT

Introduction: There are various attitudes which are associated with the COVID-19 pandemic. Stress was a common consequence of pandemic, As stress in females is proven to be having direct effect on menstrual cycle. In present study we had estimated onset of

menstrual irregularities in married females of reproductive age living in vicinity of RHTC Jawan, Aligarh UP.

Methodology; This study was conducted on 200 females of reproductive age without any chronic illness. We asked for their menstrual history. Only those females were included who had no prior menstrual disorder before pandemic. Then we calculated the percentage of females who complained of onset of menstrual disturbance during pandemic. We also tried to assess the mental stress among females with irregular menses.

Results and Conclusion: 21% females have given the history of irregular periods. Among these 42 females 36 have history of emotional and social stress.

Key Words: Practices, attitude, Covid 19.

INTRODUCTION

COVID-19 is expected to push an estimated 47 million additional women and girls into extreme poverty and further widen the gender poverty gap. Women have done 29% more childcare per week than men during the pandemic, based on data from 16 countries. Nearly 1 in 2 women reported that they or someone they know have experienced violence since the start of the pandemic, according to survey results from 13 countries.(1)

Stress impacts hormonal pathways in the body, and this can affect the hormones that control the menstrual cycle. (2) Covid-19 pandemic has affected women more profoundly than men in several areas, both at workplace and at home with an increased workload due to lockdown and quarantine measures.

So we conducted this study to find the incidence of menstrual irregularities /dysfunctional uterine bleeding(DUB) in married females of reproductive age group .

Aims and objectives

To study relation between stress and DUB.

To study the effect of COVID 19 pandemic on reproductive health of females

Methodology

- Type of study : Cross -sectional study
- Study population : women of reproductive age living near /visiting RHTC Jawan
- Inclusion criteria :married women with no history of previous gynecological complaint any chronic disorder were included

Written consent was taken prior to study

- Duration of study- From 1/7/2020 to 30/11/2021
- Sample size- 200 women
- Sample questionnaire

Name

Age

Monthly income before and during pandemic

Family size

Working/housewife/self employed

Occupation suffered or not as a result of pandemic

History of domestic abuse

- Stress level was calculated by Percieved Stress scale.(3)
- Menstrual history : Women were asked whether they have developed one or more of following : amenorrhoea, menorrhagia, intermenstrual bleeding, scanty menses or dysmenorrhoea Then we calculated percentage of women with history of menstrual disturbances.

Chi square test for significance is done and p value is estimated. Menstrual disturbances were correlated with level of stress. Mean PSS score was calculated in women with history of DUB and those without history of DUB

Results

- Total number of females – 200
- Females with complaints of DUB – 42/21%
- P-value<.05
- This number was statistically significant.

PSS SCORE IN FEMALES WITH OR WITHOUT DUB

FEMALES	MEAN PSS SCORE
WITH DUB	28.7 WITH SD 1.57
WITHOUT DUB	17.4 WITH SD 2.74

Percent change was 39.37%. Here paired t test was done and p-value <0.05So the variation Percent change was 39.37%. Here paired t test was done and p-value <0.05So the variation is statistically significant.

DISCUSSION

According to a survey women are more likely than men to have significant childcare responsibilities and insecure employment and finances, and therefore are more affected by the COVID-19 pandemic 26% of the global population are women of reproductive age and the vast majority menstruate.(4) In addition to affecting women’s physical health, mental well-being (6) and quality of life, menstruation-related symptoms are an important source of economic burden, through decreased productivity and increased absence from the workplace .

A study had suggested exacerbation of menstrual symptoms during the pandemic may be further compounded by pandemic-related issues with living arrangements and privacy, access to and affordability of menstrual products and reduced availability (7)and accessibility of reproductive health care services. These findings are relevant in our study as our study population also belongs to rural area.

According to some studies lack of adequate domestic and emotional support during pandemic consequences on women's mental health. The risk of anxiety, depression and post-traumatic stress disorder (PTSD) is also much higher in women (8,9).

According to an online study on 210females, more than half (54%) reported changes in their menstrual cycles. These included changes in menstrual cycle length (50%), the duration of menses (34%), and changes in premenstrual symptoms (50%). Respondents with high perceived stress scale (PSS) scores during Covid were more likely to experience a longer duration of menses ($p < 0.001$) and heavier bleeding during menses ($p = 0.028$) compared with those with moderate Covid PSS scores.(10)

As our study was based on rural population so most of the females were housewives or with small jobs as shopkeeping, stitching, making things for their husbands to sell. Their as well as their husbands’ economy got affected . This plus deaths, disease and lockdown affected their mental condition severely which got reflected in hormonal changes leading to DUB . Maximum PSS score in females with DUB was 34 and minimum was 19 . Most of the females have score more than 25 suggestive of severe stress. Even mean PSS score in females without DUB was more than 17 showing presence of moderate stress in them . Maximum value in that group was also 31. This mental stress may be the cause of diabetes and cardiac problems.

CONCLUSION

By uncovering a trend in increased menstrual cycle irregularities during the COVID-19 pandemic, this study contributes to our understanding of the implications of pandemic on women's reproductive health.

To better understand the underlying impact of the COVID-19 pandemic on women's reproductive health, further investigation is needed.

REFERENCES

1. <https://www.unwomen.org/en>
2. [Shahida Nagma](#),¹ [Garima Kapoor](#), (2015) To Evaluate the Effect of Perceived Stress on Menstrual Function QC01–QC03. *J Clin Diagn Res*. Mar; 9(3)
3. Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.
4. Burki T(2020). The indirect impact of COVID-19 on women . *Lancet Infect Dis*;20:904–05
5. Schoep ME, Adang EMM, Maas JWM, De Bie B, Aarts JWM , NieboerTE(2019). Productivity loss due to menstruation-related symptoms: a nationwide cross-sectional survey among 32 748 women. *BMJ Open*; 9:e026186
6. ACOG Committee(2015). Opinion No. 651: Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. *Obstet Gynecol* ;126:e143–46
7. Jahan N(2020). Bleeding during the pandemic: the politics of menstruation. *Sex Reprod Health Matters*
8. Yu S(2018). Uncovering the hidden impacts of inequality on mental health: a global study. *Transl Psychiatry*. doi: 10.1038/s41398-018-0148-0
9. Jalnapurkar I, Allen M, and Pigott AT(2018). Sex differences in anxiety disorders: a review. *J Psychiatry Depress Anxiety*. doi: 10.24966/PDA-0150/100012
10. [Noelle Ozimek](#) et al(2022) Impact of Stress on Menstrual Cyclicity During the Coronavirus Disease 2019 Pandemic: A Survey Study Published Online:12 Jan 022