

STUDY AND SURVEY ON IRREGULAR MENSTRUAL CYCLE

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Abstract: The regular and irregular menstrual cycles are the significant factors of women's reproductive health. Further studies can explain the relationship between menstrual cycle irregularities and other conditions influencing women's physical and mental health. This study and survey highlights the complications caused by irregular menstrual cycle in the age groups of 18-21. Irregularities in menstrual cycle can be considered as a precursor of metabolic disorders and a susceptible factor influencing the perimenopause.

IndexTerms: Menstrual Cycles, Irregularities, Perimenopause, Metabolic disorders.

I. INTRODUCTION

The menstrual cycle is a unique physiological phenomenon that leads to major gynecological problems in the reproductive system of females. The first menstrual cycle (menarche) generally starts between the age of 12-15 and ends around the age of 50 years known as menopause. The menstrual cycle is the duration from the first day of bleeding to the beginning of the next bleed which is 28 days on average, and it is prone to fluctuate. The menstrual cycle conventionally lasts between 21 and 35 days. A regular menstrual period is a sign that your body is healthy. Irregular or heavy, painful periods are eccentric.

II. SYMPTOMS

Some women experience backache, headache, or abdominal pain during their menstrual cycle. Joint pain or muscle cramps, pain around the breasts, swelling, soreness, or heaviness also occurs during menstruation. Abdominal cramps are the most common symptom. These are caused by the involuntary contraction of the uterine muscles. Women tend to have mood swings, anxiety, depression, or aggression along with physical stress during those days.

III. WHY IT SHOULD NOT BE IGNORED

Cycles that are continually irregular can have a serious impact on short and long-term health. They can lead to a wide range of serious health conditions, and cause painful symptoms. Menstrual cycle health is related to metabolism, sleep, fertility, stress, diet or hereditary, and more. It is important to diagnose any potential issue with the help of a gynecologist.

IV. TYPES

- Menorrhagia – It is a heavy and prolonged periods, i.e. the bleeding which continues above 8 days.
- Metrorrhagia – Uterine bleeding at irregular intervals
- Menometrorrhagia – Irregular, frequent periods with heavy bleeding. .
- Oligomenorrhea – Less than 8 periods a year, or the cycle coming less frequent than every 35 days.
- Dysmenorrhea – Painful periods i.e. periods with severe abdominal pain, nausea, diarrhea or heavy blood loss may co – exists.
- Amenorrhea – Absence of periods.
- Euromenorrhea – Menstrual cycle that has no abnormalities of flow, timing or pain

V. FACTORS INFLUENCING MENSTRUATION

NATURAL: After menarche (2-3 years after menstrual begins), perimenopause (the cycle comes to an end)

ENVIRONMENT: Factors such as proper diet or eating habits, lack of sleep, and exposure to pollution among teens (14-18) can cause irregular menstrual issues.

PSYCHOLOGICAL: Chronic stress, intensive exercise, substance abuse, changes in weight, mental health.

MEDICAL CONDITION: Polycystic ovary syndrome, thyroid disorder, unmanaged diabetes, infection of reproductive tract, uterine polyps, uterine fibroids, abnormalities of cervix or vagina or cancer.

VI. COMMON TREATMENT

- Oral contraceptives
- Hormone therapy (HT).
- Cyclic progestin
- Nutritional therapy for an eating disorder

- Surgical removal of polyps or uterine fibroids

VII. SURVEY

Age:

Marital status:

Age of menarche:

Menstrual period: Regular/ Irregular

If irregular: Twice in a month/ Once in 3 months/

Once in 6 months/ Once in 9 months/

Once in a year/Never have bleeding after 1st period

Period of menses: 1 day/ 1-3 days/ 5 days/ 7 days

Bleeding: Light/ Medium/ Heavy

BMI rate: Underweight/Normal/Sometimes

Have you been diagnosed with PCOS: Yes/No

Are you physically active throughout the week: Active/Moderately active/Mildly active/Inactive

Junk food consumed throughout the week: Once or Twice/More than twice/Everyday

Portions of fruits and vegetables consumed throughout the week: Once or twice/More than once/Everyday/Never

Pain during menstrual periods: Yes/ No/ Sometimes/All the days

Increased appetite: Intense/ Less intense/ Sometimes

Anxiety/Depression/Mood swings during periods: Yes/ No/ Sometimes

Taking treatment: Yes/ No

Type of treatment: Drugs/ Hormones/ Others

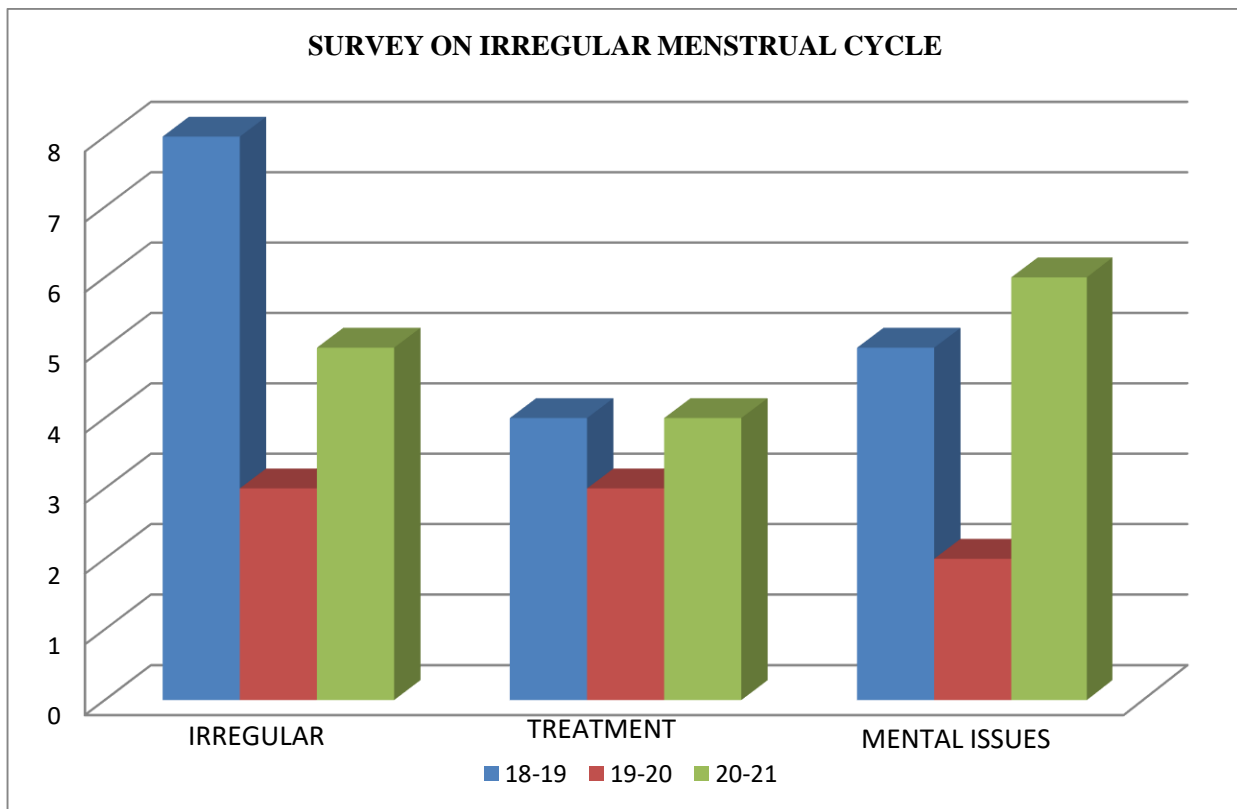
Taken tablets to post – pone periods: Yes/ No/ Sometimes

Any other major disease: Yes/ No If any

VIII. RESULTS AND DISCUSSION

Table 1: Results based on the survey

	18-19	19-20	20-21
IRREGULAR CYCLE	8	3	5
TREATMENT	4	3	4
MENTAL ISSUES	5	2	6



From the above graph, we conclude that in the age group 18-19, 8 girls suffer from irregular menstrual cycle, 3 girls are taking treatment and 3 girls suffer from mental issues such as anxiety, depression, and mood swings, etc. In the age group 19-20, 3 girls suffer from the irregular menstrual cycle, 3 girls are taking treatment and 2 girls suffer from mental issues. In the age group 20-21, 5 girls suffer from the irregular menstrual cycle, 4 girls are taking treatment and 6 girls suffer from mental issues. The total no. of girls is 30.

IX. CONCLUSION

From the above results, we conclude that a majority of teenagers between the age groups 18-21 are suffering from the irregular menstrual cycles. We have considered poor health maintenance as one of the major factors affecting the menstruation. Given the fact that many are undergoing drug treatments and prioritizing health, there is an expected evolution of the regularity of the menstrual cycle amongst the teenagers in the near future.

REFERENCES

- [1] <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0168402>
- [2] <https://helloclue.com/articles/cycle-a-z/polycystic-ovary-syndrome-pcos->
- [3] <https://go.gale.com/ps/i.do?id=GALE%7CA474078697>
- [4] <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0168402>
- [5] https://www.researchgate.net/publication/311759444_Menstrual_Cycle_Irregularity_and_Metabolic_Disorders_A_Population-Based_Pro prospective_Study
- [6] <https://pubmed.ncbi.nlm.nih.gov/27992506/>
- [7] <http://hindi.nirogam.com/menstrual-problems-the-walk-into-womanhood/>
- [8] <https://go.gale.com/ps/i.do?id=GALE%7CA474078697>
- [9] <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0168402>
- [10] https://scholar.google.com/scholar_lookup?title=A%20study%20on%20floating%20and%20sinking%20pulse%20by%20classification%20of%20pulse%20pattern%20through%20analysis%20of%20P-H%20volume-curve%20at%205%20applied%20pressure%20levels&author=S.%20M.%20Kown&author=H.%20J.%20Kang&author=Y.%20K.%20Yim&author=&author=Y.%20H.%20Lee&publication_year=2010
- [11] https://scholar.google.com/scholar_lookup?title=Effect%20of%20heart%20rate%20variability,%20pulse%20wave%20velocity%20in%20women%20of%20breast%20cancer%20patients%20care%20by%20mountain%20cultivated%20ginseng%20pharmacopuncture&author=G.%20C.%20Kim&author=S.%20W.%20Park&author=&author=Y.%20S.%20Kim&publication_year=2011
- [12] https://scholar.google.com/scholar_lookup?title=Variations%20in%20endothelial%20function%20and%20arterial%20compliance%20during%20the%20menstrual%20cycle&author=M.%20R.%20I.%20Williams&author=R.%20A.%20Westerman&author=B.%20A.%20Kingwell%20et%20al.&publication_year=2001
- [13] https://scholar.google.com/scholar_lookup?title=Effect%20of%20heart%20rate%20variability,%20pulse%20wave%20velocity%20in%20women%20of%20breast%20cancer%20patients%20care%20by%20mountain%20cultivated%20ginseng%20pharmacopuncture&author=G.%20C.%20Kim&author=S.%20W.%20Park&author=&author=Y.%20S.%20Kim&publication_year=2011