

A Short Survey for Understanding Hormonal Imbalance and Its Causes

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ABSTRACT

Women's health is greatly affected by hormones. Women's hormonal imbalances can be brought on by a variety of as an assortment of variables, including stress, medical condition, use of drugs, tension, lifestyle changes, etc. increased use of pesticides, and many other chemical substances, environmental pollute affects the overall health of the people. The understanding of causes of hormonal variations is most important for female wellbeing. A specially designed data sheet was used for the collection and analysis for causes of hormonal imbalance in urban area Bangalore females. Our overview investigates contributing variables hormonal lopsided characteristics in females. However Hormonal imbalance affects several ways in women. Sometimes medication may lead to interference in hormone levels. The present study deals with some of the symptoms and signs correlated with hormone imbalance that if unrecognized may lead to shortening of life time. It is most be all for to take the advice of health practitioner to upgrade he lifestyle and dietary habits. Hormones play a vital role in the health of human females and hormonal imbalance can cause several pathological conditions. Improper diet, stressful or depressed lifestyles and use of drugs can cause hormonal imbalance. This study aimed for consider pointed to discover out the causes of hormonal imbalance in

females aged between 15-50 years. A cross-sectional and random sampling method was used to collect data from young females of this age group in Bangalore, A specially designed questionnaire was used for data collection and a total of 240 females participated in the study.

Keywords: Hormonal Imbalance, Stress, Diet, Age, PCOS

INTRODUCTION

Hormones are basically for regulation body proper function and structure. Hormone imbalance or hormonal changes is asymptomatic or inconsequential and can cause diseases from mild to severe which include thyroid disorders, diabetes, dermatological disorder, overweight, and infertility. changes in hormonal secretion may implicate in problems that evolved in life terrible. Hormone imbalance or changes may be called as a silent killer and is emerging as a true epidemic worldwide (1). Commonly Hormonal imbalance is defined as the increase or deficient secretion of one or more hormones in the body [2]. Most of the cases body functions such as, metabolism and appetite heart rate sleep cycles reproductive cycles and sexual activity general growth and development mood and stress levels, body temperature, etc. are directly or indirectly regulated by hormones. . Hormonal imbalances are more common during puberty, menstruation, and pregnancy. But some people experience

continual, irregular hormonal If females are exposed with estrogen for a longer or shorter periods in their lifespan, they may suffer with hormone dependent diseases.(3) right nutrition also one of a complete daily meal contains 50% whole foods, 25% protein, 25% complex carbohydrates, probiotics, 20-30g of fiber, moderate physical activity, and proper sleep and relaxation, with the addition of natural stimulants for proper hormone function, the basis for a happy and enhance life is the hormonal balance(4). In today's quick growing society, privatization, modernization, globalization, intensive advancement in agriculture, more population and jobless has made man more vulnerable to disturbed, stress, restlessness, mood swings, anger, depression, intolerance and disturbed in behavior. All these symptoms have contributed to hormone imbalance (5). Fluctuation in hormone levels, especially in a female may have negative impact on her mood, sexual desire, ovulation and fertility of a female (6,7). Hormonal Changes During Stress In response to stress, the level of various hormones changes. Reactions to stress are associated with enhanced secretion of a number of hormones including glucocorticoids, catecholamines, growth hormone and prolactin, the effect of which is to increase mobilization of energy sources and adapt the individual to its new circumstance. (8) PCOS is for significant health-care costs and distress and has a one of the most impact on the quality of life and fertility. Polycystic ovary syndrome (PCOS) is a heterogeneous, multifactorial, complex disorder with a broad spectrum of clinical manifestations such as hyperandrogenism, polycystic ovaries, and ovulatory abnormal function (9). Some of the Reports suggest that women Bleeding also known as "Menstruation". The first period usually starts from 12 and 15 years of age, a point in time known as menarche. The typical length of time between the first day of the next is 21 to 45 days in young women and 21 to 35 days in adult. Bleeding usually lasts around

2 to 7 days. Menstruation ends with occurring after menopause which usually occurs between 45 and 55 years of age. (10). Some Signs and symptoms of hormonal imbalance include. Changes in menstruation, pimple, oily skin, fever, tiredness, body increase hair growth, dizziness, anxiety, allergy, decrease sexual desire, weight gain, headache, water retention, endometriosis, urinary tract infections (UTI's) and premenstrual syndrome (PMS) (11,12). All of females will suffer natural periods of hormonal imbalance or fluctuations at particular points in their life. But hormonal imbalances can also occur when the endocrine gland's abnormal function. for Several medical conditions are known as Certain lifestyle habits and environmental factors may also play a role in hormonal imbalances (9)

Causes of Hormonal Imbalances in females

- poor diet
- nutrition
- overweight
- treatment of hormonal replacement
- Family planning (birth control medications)
- steroid medications
- pituitary tumors
- benign tumors
- cysts (fluid-filled sacks) that affect the endocrine glands
- endocrine gland injury
- severe allergic reactions or infections
- cancer that involves endocrine glands
- chemotherapy and radiation therapy
- Turner syndrome (females with only one functioning X chromosome)
- estrogens,
- exposure to toxins, pollutants, and endocrine
- disrupting chemicals, including pesticides and herbicides (,13'14).

Common Treatments for females: Treatment choice for females suffering from hormonal abnormalities include:

- Hormone therapy like Medication combining estrogen and progesterone can help manage irregular menstrual periods.
- Estrogen to vaginal cavity: To decrease the symptoms of vaginal dryness caused by changes in estrogen levels.
- Hormone replacement therapy: There are drugs available to temporarily decrease severe menopausal symptoms such as hot flashes and night sweats.
- Anti-androgen therapy: Medications that stops the male-sex hormone androgen can help reduce severe acne and excessive hair growth or loss.
- Letrozole plus clomiphene (Clomid) (Femora): These drugs aid in the stimulation of ovulation in PCOS patients attempting to conceive (,15'16).

MATERIALS & METHODS

A random sampling method is used to find out the causes of hormonal imbalance in female of age group between 11-50 years. The study was conducted by survey in urban area. A specially designed questionnaire was used for collection of data where 240

women participated. Data was collected for 60 days. Questionnaire included close ended questions related to age, diet, cycle length, stress, medication, disease condition was collected. Various causes of hormonal imbalance were recorded.

STATISTICAL ANALYSIS

Analysis: Data collected was compiled in MS excel and SPSS and analyzed into graphical and tabular form.

RESULT

According to our survey report 35% young females of Bangalore, facing irregular periods due to different reasons. Whereas 2.5% young females of Bangalore city facing abnormal hair growth due to different causes,10%PMS symptoms,12% menus trial pain while 6% young females facing these both conditions i.e. irregular periods and abnormal hair growth due to several different factors like there food intake and their treatment with different medications specially antibiotics and other causative factors out of 240.

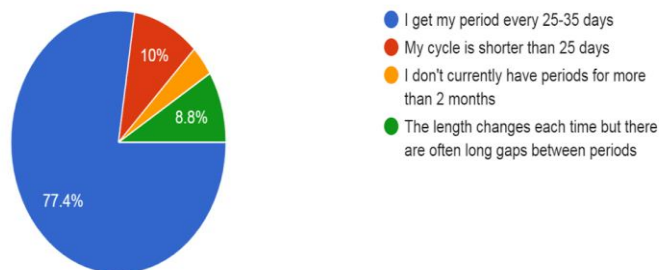
TABEL 1

Age group	Count of Do you experience the premenstrual symptom (PMS) symptoms?	Count of Do you know when your period is going to show up?	Count of Are you under a great deal of emotional stress?
20-30	80	98	41
30-40	14	18	13
40-50	11	17	12
11-20	29	43	20

Our survey Compare to above age groups 20-30 age females more suffered PMS (80) symptoms and stress (41), and 98 females

know there cycle, out of 239.this result shows that most of young females suffering.

How often do you get a period at the moment?
239 responses

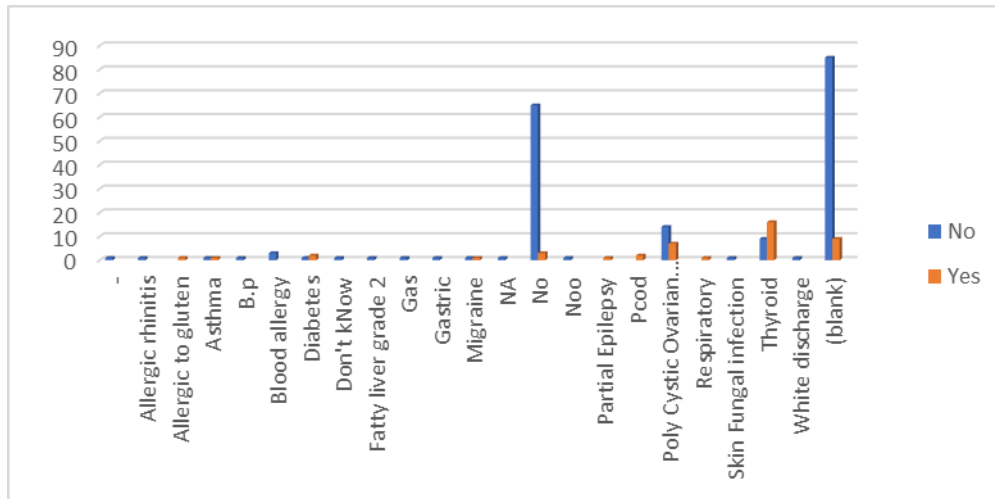


TABEL 2

Count of Are you currently taking any medications?			
Age group	No	Yes	Grand Total
20-30	106	18	124
30-40	16	10	26
40-50	17	9	26
11-20	51	7	58

Our survey identifies the less practice the medication as their disease condition only 44 taking medicine out of 192. From 20-30

age group are more use to taking medicine their treatment, this also one of the reasons for hormonal imbalance.

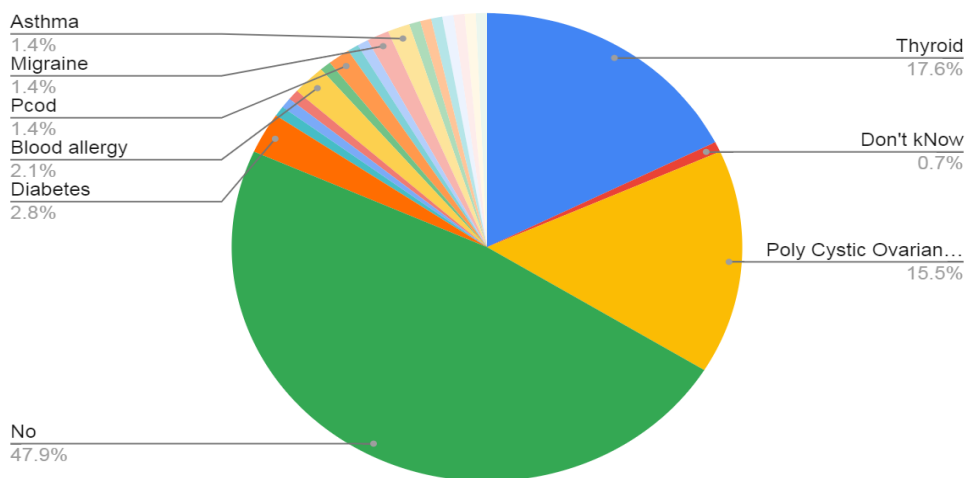


Our survey identifies that most of young females suffering lifestyle disorders total 190 number females not taking medicines for their disease condition, 44 females are taking treatment in that diagnosed thyroid and PCOS few are taking. They not aware

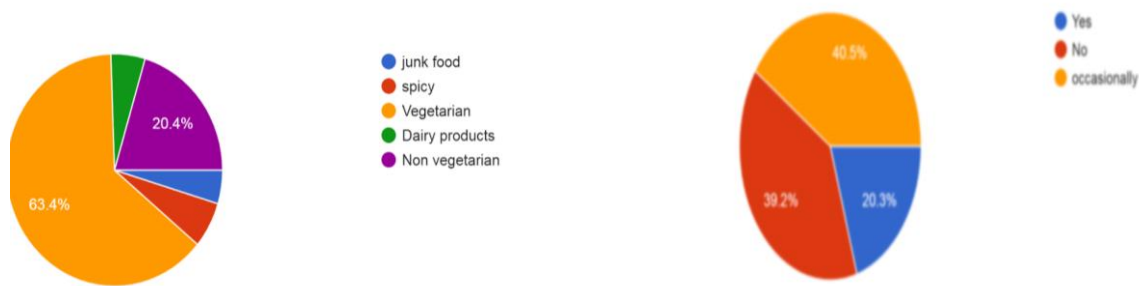
about the disease complications. And this is also one of the important cause for hormonal imbalance.

Total 53% have lifestyle disorders and 47% are free from disease,0.7% are not aware.

Count of Any lifestyle disorder?



Type of food intake do you regular excise



Total 40% females not practice yoga or exercise, 39% of female doing exercise occasionally, 20% have regular exercise out of 240 young females along with the diet Total 63% females are vegetarian (outside, instant food), 20% are non-vegetarians, other all 20% females have spicy, junk dairy product more consumption out of 240 females. Food and not regular excise also we consider for reason suffering hormonal imbalance

DISCUSSION

Hormonal balance has relation with food intakes, use of drugs and other factors like medication, Stress due to these facing irregular periods, facing abnormal hair growths and facing both of these problems. In present study about 190 females were showing the hormonal imbalance, some are irregular menstrual cycle and symptom shown in table 1 and 2. According tables 1, age groups 20-30 age females more suffered PMS (80) symptoms and stress (41), and 98 females know their cycle, this shows that most of young females suffering. Total 40% females not practice yoga or exercise, 39% of women's doing exercise. Total 40% females not practice yoga or exercise, 39% of female doing exercise occasionally, 20% females doing regular exercise out of 240 young females along with the diet Total 63% women are vegetarian (outside, instant food), 20% are non-vegetarian, other all 20% females have spicy, junk dairy product more taking, out of 240 females. Food and not regular excise also one of the important reasons suffering hormonal imbalance. As like similar results shown in some study

(11,17). For the life style disorder in females' maximum females not taken proper treatment. Our survey identifies that most of young females suffering lifestyle disorders total 190 number females not taking medicines for their disease condition, 44 females are taking treatment in that diagnosed disease condition like migraine, diabetes, thyroid and PCOS, in that few females are taking their medications. They not aware about the disease complications. And this is also one of the important causes for hormonal imbalance, similar result found for this study (11). Most of the females need education regarding hormonal imbalance and causes for that. Future same studies require for the large group female to identify the main reason for Hormonal imbalance.

CONCLUSION

The survey was conducted among all age group like school girls, college girls, married, unmarried, workers, home makers, educated, illiterate females of various age groups by using the survey method. Data was collected by online questionnaire. The major problem among adult girls and women is hormonal problem and it plays vital role in health. Most of the hormonal imbalance health related issues are due to lack of awareness and unhealthy lifestyle. the study mainly concentrated toward the young challenging women in Bangalore. Hormonal imbalance can cause menstrual abnormalities, severe problems like PCOD, infertility, psychological problems. the timely intervention after understanding the problem can be done by conducting the

study to provide better care to treat similar problems and help the society in larger group. Further research is required to establish the link between causes and female hormonal imbalance.

Survey was conducted of 240 number of the females. I had concluded the following points:

- 20 to 30 age group suffer from PMS symptoms stress, and they have life style disorder
- Not aware the condition (hormonal imbalance) and treatment also less females taking.
- Most of the females experience pain for first 2 or first 3 day of menstrual cycle. Few of them experience pain throughout menstrual period.
- Lifestyle disorder indirectly result of hormonal imbalance.
- Main cause for hormonal imbalance was lifestyle (stress. anxiety, food, exercise)

Declaration by Authors

Ethical Approval: Not Applicable

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Conflict of Interest: The authors declare no conflict of interest.

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