



Research Article

Hormonal imbalance and its causes in young females

Safila Naveed*¹, Sidra Ghayas¹, Asra Hameed¹

¹Department of pharmacy, Jinnah University for women Karachi, Pakistan.

Abstract

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 to find out the causes of hormonal imbalance in females aged between 15-40 years. A cross-sectional and random sampling method was used to collect data from young females of this age group in Karachi, Pakistan. A specially designed questionnaire was used for data collection and a total of 127 females participated in the study. 55% of the females had irregular periods, 39% had excessive hair growth on the face or body, and 6% had both conditions. 11% of the female took junk foods, 6.2% were vegetarians, 14.96% took spicy food, 60.62 % took all the three types of food. 36% took both vegetable and junk foods, and 4.72% took both junk and spicy foods. In addition, 59% of the females took no treatment, 26% took antibiotics, 10.25% were on hormone replacement therapy (HRT), and 4.75% took both antibiotics and HRT. 21.26% had depression, 24.41% had work load, 1.6% had both depression and workload while 52.73% had no specific cause for their hormonal imbalance .

Key words: hormonal imbalances, irregular periods, excessive hair growth.

***Corresponding Author: Safila Naveed**, Department of Pharmacy, Jinnah university for women Karachi, Pakistan. Email : safila117@yahoo.com

1. Introduction

In the health of women, hormones play a vital role. Fluctuation in hormone levels, especially estrogen and progesterone, in a female may have negative impact on her mood, sexual desire, ovulation and fertility of a female. Hormonal imbalance can cause menopause and some other symptoms (like hot flashes and neck or shoulder stiffness) [3] in females. Hormonal imbalance can be caused by contraceptive medications and hormone replacement

therapy or HRT, Too much of stress, Poor diet, Environmental reasons, including pollution, poisons, Above average consumption of non-organic and also animal products that have excessive amounts with estrogen and Cosmetics [1]. Treatment options for hormonal imbalance include antibiotics, herbal and homeopathic medications. A balanced diet is also crucial for hormonal health [2]. Signs and symptoms of hormonal imbalance include changes in

menstruation, acne, oily skin, fever, fatigue, excessive hair growth, dizziness, anxiety, allergy, low sexual desire, weight gain, headache, water retention, endometriosis, urinary tract infections (UTI's) and premenstrual syndrome (PMS) [2].

Menstrual Cycle and Hormonal Imbalance:

Several factors are present which may disrupt hormonal balance and a normal menstrual cycle. Different drugs and family planning pills, stress, and many other conditions are blamed for this. Drug use, reliance on stimulants like alcohol and caffeine, and improper nutrition seems to physically change the proteins in the brain such that they can no longer send the proper signals for normal ovulation [2]. Other factors which can disrupt hormonal balance and menstruation include adrenal exhaustion, eating disorders, ovulation disorders, polycystic ovary syndrome (PCOS), and abnormal cervical mucus[2].

2. Materials and Methods

A random sampling method was used to collect data from the females of age 15-40 years. Data was collected in the month of April to June, 2014 from different public places and hospitals. A specially designed questionnaire was used for data collection. Data of 127 females was collected and analyzed. Different questions were asked from the subjects to collect the data to conclude the impact of food, treatment from different medications specially antibiotics, and other different causative factors like anxiety/depression and workload on the hormonal imbalance showing as irregular periods and hair growth.

Data Analysis:

We have used tables for representation of data obtained.

3. Results

According to our survey report 55% young females of Karachi city facing irregular periods due to different reasons. Whereas 39% young females of Karachi city facing abnormal hair growth due to different causes while 6% young females facing these both conditions i.e. irregular periods and abnormal hair growth due to several different factors like their food intake and their treatment with different medications specially antibiotics and other causative factors such as depression and workload.

In our survey on the causes or reasons of hormonal disturbance in young females, we asked 127 young females about their food intake practice. 70 young females faced irregular periods from 127 young females. 10 of them took junk food, 5 of them vegetarian food, 7 of them spicy food, 42 of them all type foods, 2 of them vegetable and junk food both and 4 of them took both junk and spicy foods. 49 young females are facing abnormal hair growth on body and face out of 127 young females. 2 of them take junk food, 3 of them take vegetarian food, 9 of them take spicy food, 33 of them take all type foods, 1 of them takes vegetable and junk food both and 1 of them take both junk and spicy foods. 8 young females faced irregular periods and abnormal hair growth on body and face out of 127 young females. 2 of them take junk food, 3 of them take spicy food, 2 of them take all type foods, and 1 of them takes both junk and spicy foods.

According to our survey of 127 young females, total 14 took junk foods, 8 are taking vegetarian food, 19 are taking spicy foods, 77 females taking all type foods, 3 are taking both vegetable and junk foods, and 6 taking both junk and spicy foods.

		Type of food intake						Total
		junk food	vegetarian	spicy	all types	both vegetable and junk	both junk and spicy	
Hormonal disturbance	irregular periods	10	5	7	42	2	4	70
	hair growth	2	3	9	33	1	1	49
	both	2	0	3	2	0	1	8
Total		14	8	19	77	3	6	127

Table 1: Type of food intake in Hormonal disturbance female

		Treatment				Total
		no treatment	antibiotic	hormonal	both	
Hormonal disturbance	irregular periods	37	19	10	4	70
	hair growth	35	11	1	2	49
	both	3	3	2	0	8
Total		75	33	13	6	127

Table 2: Relationship between Hormonal disturbances and different treatment

		causative factors				Total
		None	Depression	Workload	Both	
Hormonal disturbance	irregular periods	39	12	18	1	70
	hair growth	26	11	11	1	49
	both	2	4	2	0	8
Total		67	27	31	2	127

Table 3: Relationship between Hormonal disturbances and Different factors

In our survey on the causes or reasons of hormonal disturbance in young females, we asked 127 young females about their treatment practice of this hormonal disturbance. 70 young females irregular periods from 127 young females. 37 of them took no treatment for their hormonal imbalance, 19 of them took antibiotics for their treatment of hormonal disturbance, while 10 of them HRT or hormone replacement therapy, and 4 of them take both hormone replacement therapy as well as antibiotics for their treatment of hormonal disturbance. 70 young females abnormal hair growth on body and face from 127 young females. 35 of them no treatment for their hormonal imbalance, 11 of them take antibiotics for their treatment of hormonal disturbance, while 1 of them takes HRT or hormone replacement therapy, and 2 of them take both hormone replacement therapy as well as antibiotics for their treatment of hormonal disturbance. 70 young females are facing irregular periods and abnormal hair growth on body and face from 127 young females. 3 of them take no treatment for their hormonal imbalance, 3 of them take antibiotics for their treatment of hormonal disturbance, while 1 of them takes HRT or hormone replacement therapy.

Total 75 females no treatment, 33 taking antibiotics, 13 taking HRT, and 6 taking both antibiotics and HRT out of 127 young females.

In our survey on the causes or reasons of hormonal disturbance in young females, we asked 127 young females about their causative factor of this hormonal disturbance. 70 young females are facing irregular periods from 127 young females. 12 of them have depression, 18 of them have workload and only one of them have both depression and workload. 39 young

females have no specific causative factor of their hormonal imbalance. 49 young females are facing abnormal hair growth on face and body from 127 young females. 11 of them have depression, 11 of them have workload and only one of them have both depression and workload. 26 young females have no specific causative factor of their hormonal imbalance. 8 young females are facing irregular periods as well as abnormal hair growth on face and body from 127 young females. 4 of them have depression, 2 of them have workload and 2 young females have no specific causative factor of their hormonal imbalance.

According to our survey of 127 young females, 27 have depression, 31 females have work load, and 2 of them have both depression and workload while 67 young females have no specific causative factor for their hormonal disturbance.

4. Conclusion:

After our survey on causes on hormonal imbalance in young females we have concluded that hormonal balance has relation with food intakes, use of drugs and other factors like depression, work load due to this 70 females out of 127 facing irregular periods, 49 facing abnormal hair growth and 8 facing both of these problems.

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