

# A Study to Assess the Knowledge regarding Preventive Measures on Hormonal Imbalance among Adolescents at Selected Colleges in Guntur, AP

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**Abstract:** A study to assess the knowledge regarding preventive measures on hormonal imbalance among adolescents at selected colleges in Guntur, AP. **Introduction:** Hormonal imbalance is a condition in which the normal levels of hormones in the body are disrupted, leading to either excess or deficiency. **Objectives of the study:** To assess the knowledge regarding preventive measures on hormonal imbalance among adolescents. To find out association between knowledge on hormonal imbalance among adolescents with their selected sociodemographic variables. **Design:** A quantitative research approach with descriptive research design. **Setting:** Selected colleges in Guntur, AP. **Sample:** 60 adolescents (boys and girls) **Intervention:** Data was collected by using structured questionnaire and data analysis was descriptive and inferential statistical method. **Results:** The results shows that majority of 65% adolescents having average level of knowledge, 13.33% of adolescents having below average level of knowledge, 21.67% of adolescents having above average level of knowledge regarding hormonal imbalance. From among the variables Age( $\chi^2=3.57$ ), Gender( $\chi^2=0.86$ ), Course( $\chi^2=2.72$ ), Religion( $\chi^2=17.91$ ), Parents occupation ( $\chi^2=13.68$ ), Monthly family income ( $\chi^2=25.74$ ), Place of residence ( $\chi^2=5.48$ ), Previous knowledge( $\chi^2=1.84$ ) were found significant at 0.05 level of significant. **Conclusion:** The study concluded that the prevalence of hormonal imbalance in adolescents was higher and lifestyle habits mostly effect the hormonal imbalance. A significant association was found between the prevalence of hormonal imbalance among adolescents and their age, gender, course, religion, parent's occupation, monthly family income, place of residence and previous knowledge regarding hormonal imbalance.

**Keywords:** Hormonal Imbalance, Adolescents

## 1. Introduction

Hormones are vital signalling molecules produced by the endocrine system. They regulate and coordinate numerous physiological processes throughout the body. By binding to target cells, hormones influences growth, metabolism, reproduction, immune system, and more. Hormones help maintain internal balance by responding to changing conditions such as stress or nutrients levels.

Hormonal imbalance among adolescents refers to abnormal levels of hormones during the period of puberty (10–19 years). Adolescence is a stage of rapid physical, emotional, and reproductive development, controlled mainly by the endocrine system. Any disturbance in hormone levels—such as estrogen, progesterone, testosterone, thyroid hormones, or insulin—can lead to imbalance and affect overall health.

### Need for Study

**Globally,** hormonal imbalance among adolescents is also common, with overall prevalence estimated at around 4% to 15%, meaning that roughly 1 in 10 adolescents worldwide may be affected by some form of endocrine disorder. Considering the global adolescent population (over 1.2 billion), this suggests that hundreds of millions of adolescents worldwide are affected by hormonal imbalances in some form. Overall, both in India and globally, the prevalence is substantial and the incidence is increasing, highlighting that hormonal imbalance is a significant and rising health issue among adolescents, requiring early detection, awareness, and preventive lifestyle interventions. The investigator through his personal experience while investing the adolescents has seen that there was lack in education to the adolescents especially who are studying in college's regarding preventive

measures on hormonal imbalance. the absence of proper and adequate knowledge and also India's global contribution towards research studies on hormonal imbalance is very low. Hence the investigator felt that there is a need to conduct a study on knowledge regarding preventive measures on hormonal imbalance.

## 2. Materials and Methods

A quantitative non experimental descriptive study was conducted among 60 adolescent boys and girls in selected college of Guntur, AP. Structured questionnaire method was used to collect data. Random sampling method was used to select the sample of the study. Both descriptive and inferential statistics was used to analyze the data.

Data were collected using a strength and difficulty questionnaire (SDQ) and supplementary questionnaire to assess knowledge regarding preventive measures on hormonal imbalance among adolescents. The tool included demographic variables and knowledge-based questions. Data collection was carried out after obtaining informed consent from participant's.

**Table 1:** Frequency and percentage distribution demographic variables among adolescents.

S No.	Demographic Variables	Frequency	Percentage (%)
1	<b>Age</b>		
	16 Years	0	0%
	17 Years	9	15%
	18 Years	24	40%
	Above 18 Years	27	45%
2	<b>Gender</b>		
	Male	14	23.33%

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	Female	46	76.66%
3	<b>Course</b>		
	B.Sc Nursing 1st Year	56	93.33%
	Intermediate	2	3.30%
	GNM 1st Year	2	3.30%
4	<b>Religion:</b>		
	Hindu	27	45%
	Christian	29	48.33%
	Muslim	4	6.66%
	Other's	0	0%
5	<b>Parents Occupation</b>		
	Business	2	3.30%
	Daily wages	24	40%
	Govt/Private Employee	12	20%
	Farmer	22	36.66%
6	<b>Monthly Family Income</b>		
	Below 17,000	29	48.33%
	17,001-30,000	13	21.66%
	30,001-60,000	10	16.66%
	Above 60,000	8	13.33%
7	<b>Place of Residence</b>		
	Hostel	43	70%
	Day scholar	12	21.66%
	Living with parents	4	6.66%
	Others	1	1.66%
8	<b>Previous Knowledge</b>		
	Yes	36	60%
	No	24	40%

Regarding **age**, 15% belong to the age group of 16years, 40% belongs to the age group of 18years, 45% belongs to the age group of Above 18years.

Regarding **gender**,23.33% of Males, whereas 76.66% of Female.

Regarding **course** ,93.33%of B.Sc.(n)1<sup>st</sup> year, whereas 3.3%of intermediate, and 3.3% of GNM 1<sup>st</sup> year.

Regarding **religion**,45% of Hindu, whereas 48.33% were Christians and 6.66% were Muslim none of the other religion.

Regarding their **parents occupation**, 3.3% of Business whereas 40% of Daily wages, and 20% of Government/Private Employee and 36.66% of farmer.

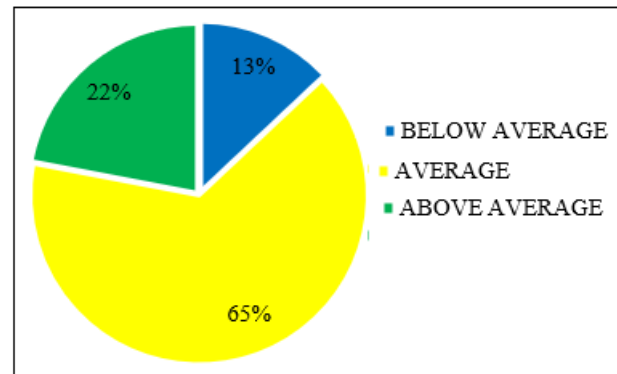
Regarding their **monthly income**, 48.33% of Below ₹17,000 whereas 21.66% of ₹17,000-₹30,000 and 16.66% of ₹30,000-₹60,000 and 13.33% of above ₹60,000.

Regarding their **place of residence**, 70% of Hostel whereas 21.66% of Dayscholar and 6.66% of living with parents and 1.66% of others.

Regarding **previous knowledge** 60% of previous knowledge regarding hormonal imbalance and 40% of No previous knowledge regarding hormonal imbalance.

**Table 2:** Frequency and percentage distribution of Adolescents according to their knowledge on hormonal imbalance, N=60

Level of Knowledge	Frequency	Percentage
Below average	8	13.33%
Average	39	65%
Above average	13	21.67%



**Figure 1:** Show that frequency and percentage distribution of adolescent to their knowledge.

**Table 3:** To find the mean and standard deviation of overall knowledge among adolescents in selected college's on hormonal imbalance, N=60

S.no	Variable	Mean	Standard deviation
1.	Level of knowledge score	20	7.845

### 3. Discussion

In this present study majority of 65% adolescents having average level of knowledge, 13.33% of adolescents having below average level of knowledge and 21.67% of adolescents having above average level of knowledge regarding hormonal imbalance among adolescents in selected demographic variables.

### 4. Conclusion

In the present study shows that frequency and percentage distribution of Adolescents according to their knowledge on hormonal imbalance majority of 65% adolescents having average level of knowledge, 13.33% of adolescents having below average level of knowledge and 21.67% of adolescents having above average level of knowledge regarding hormonal imbalance among adolescents in selected demographic variables.

### 5. Recommendation

Based on the findings of the present study, the following recommendations can be made:

- A similar study can be done on large sample to generalize the findings A quasi experimental study can be done.
- A similar study can be carried out to evaluate the effectiveness of various teaching strategies like structured teaching programme, self instructional module, information booklet, computer assisted instruction on hormonal imbalance.

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