

ASSESS THE LEVEL OF KNOWLEDGE AND PRACTICE REGARDING HEALTH HAZARDS OF EARPHONE USES AMONG ADOLESCENTS IN SELECTED COLLEGE, BHUBANESWAR, ODISHA.

Dhanya VJ*¹, B. Gomathi*², Satabdi Behera **³, Mitali Singh **, Saraswati Panda **,
Saswati Maity**.

¹Assistant Professor, ²Associate Professor, ³BSc Nursing 4th year students.

SUM Nursing College, Siksha‘O’Anusandhan (Deemed to be University), Bhubaneswar,
Odisha

Corresponding Author: Dhanya VJ; **E-mail:** dhanyajoseph54@gmail.com

ABSTRACT

Introduction: In the new era of urbanization and westernization of lifestyle in our hour is faster. Busy lifestyle influences the adolescents in hearing music. It is one of the stress busters in the modern world. Adolescents are spending more time on music with earphone and they are unaware of the health hazards. The main aim is to determine the knowledge and practices of earphone uses among adolescents.

Methodology: The quantitative approach with a non-experimental research design was adopted. The data was collected from 150 adolescents by a structured knowledge questionnaire and standardized practice questionnaire in selected +2 science college, Bhubaneswar, Odisha.

Result: The study shows that 44% of students are mild addiction 55.33% of students are moderate addiction, and 0.66% of students are severe addiction for using earphones. The majority (64%) of the adolescent children had average knowledge 21.3% of the sample had poor knowledge and 14.7% of the study sample had good knowledge regarding the hazards of earphone usage. There was no significant association between Sex, Types of family, Education among adolescents with selected socio-demographic variables.

Conclusion: The present study revealed that very few students who have severe level addiction and rest are the majority who have not excessively but moderately involved in addictive's uses. Hence, some awareness should be increased among students through various programs.

Keywords: *Health hazards of earphones, adolescents.*

INTRODUCTION

People are fascinated by the latest technology but it is moving ahead day by day, leaving everyone confined into comfort with many unknown bad effects on health. One of that technology popular among adolescents is the use of earphones which has increased dramatically in recent years. Many young students are addicted to their earphones or head phones¹. This has led to serious adverse effects like hearing loss in a few children. Indian council medical research (ICMR) reported that 10.7% of hearing impairment is because of earphone usage². A study conducted among Delhi high school students found that 8% of the students have high-frequency hearing loss³.

The upcoming generation of adolescents enjoy music very much and earphones become a part of their style to help them to move with the rhythm of music but most of them are unaware of the hazardous effect of its continuous usage. Prolonged use and too much sound are the most important causes of hearing loss among young pupils. If one can hear the sound being delivered into a person's ear through earphones, it indicates the sound is too loud and over a longer period it can result in permanent hearing loss. If anyone listens to more than 100 decibels even for 15minute, it may cause hearing loss¹. It is important to give some rest to ears in between while listening to music for a longer duration. However many people leave the earphones in their ears during sleep and left it overnight. To prevent hair cell damage in-ears adolescents have to be educated regarding the hazards of earphone usage⁴. A US study conducted among adolescents aged 12-19 years found that a 31% increase in hearing loss among those who use earphones constantly⁵.

The only way to accurately gauge the current level of hearing is to check it periodically. It gives an early warning to hearing loss. A negative change in hearing detected may help to get prevention and treatment. A study conducted among Korean adolescents in 2009 among 13-15 years old students found that 81.4% use earphones. The relative risk for hearing loss depends upon the duration⁶.

Objectives: The main objective of the study is to assess the level of knowledge and practice regarding the health hazards of earphones.

METHODOLOGY

Non-experimental Descriptive survey research design was used. 150 students were selected by the purposive sample technique. Students were +2 science college students aged between

14-17 years, were students of IHSE +2 Science College, Bhubaneswar, Odisha, who gave consent, can understand English, and present during the data collection period were included the study. The tools used to collect the data were 1. Sociodemographic questionnaire, 2. Questionnaire to assess the level of knowledge, 3. Questionnaire to assess the level of practice. Ethical clearance and permission were obtained from the institutional Ethical committee, SOA, and administrative permission obtained from the principal of IHSE +2 science college. The sample characteristics were analyzed using frequency and percentage.

Table 1: Description of sample characteristic

N=150

Characteristics	Frequency	Percentage
Age	123	82%
14—16 years		
17—19 years	27	18%
Sex	87	58%
Male		
Female	63	42%
Religion	144	96%
Hindu		
Christian	5	3.3%
Muslim	1	0.7%
Education	150	100%
Science		
Types of family	61	40.7%
Nuclear family		
Joint family	78	52%
Extended family	11	7.3%
Monthly income of the family	34	22.66%
<10,000		
11,000	18	12%
>21,000	98	65.33%

Table-1 shows that out of total 150 samples collected as per demographic variable, the majority (82%) of the adolescent children were 13-14 years, Most of the sample were Males and the majority of the sample were Hindu (96%). All of the study sample education is science. The majority of the sample belonged to the nuclear family and the Majority of the sample had monthly income >21,000.

TABLE 2: Description of knowledge scores of adolescent children regarding earphone uses

N=150

Categorization of knowledge	Frequency	Percentage
Poor knowledge (5-10)	32	21.3%
Average knowledge (11-15)	96	64%
Good knowledge (16-20)	22	14.7%

Table-2 shows that the majority (64%) of the adolescent had average knowledge, 21.3 % had poor knowledge, and 14.7% had good knowledge.

TABLE-3: Practise questionnaire of using earphone addiction

N=150

Level of addiction	Frequency	Percentage
Mild addiction (1-5)	66	44%
Moderate addiction (6-10)	83	55.33%
Severe addiction (11-15)	1	0.66%

Table-3 shows that out of 150 samples collected 44% having mild addiction, Moderate addiction 55.33%, and Severe addiction is 0.66%.

Table 4: Association between knowledge score and demographic variables.

N= 150

Sl.no	Characteristics	Chi-square value	Df	Tabulated P value	Inference
1	Age	4.83	1	0.027	Statistically Significant
2	Sex	1.92	1	0.164	Not statistically Significant
3	Religion	9.453	2	0.0021	Statistically Significant
4	Education	0	2	1.000	Not statistically Significant
5	Types of family	276.01 23	2	0.0001	Statistically significant
6	Monthly income of the	171.08 9	2	0.001	Statistically Significant

	family				
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Table-4 reveals that Age, Religion, Types of family, and Monthly income in the family are statistically significant, where Sex and Education are not statistically significant with the level of knowledge.

Table-5: Association between levels of practice among adolescent and demographic data.

N=150

Sl.NO	Characteristics	Chi-square	Df	Tabulated P value	Inference
1	Age	3.997	1	0.001	Statistically Significant
2	Sex	2.385	1	0.122	Not Statistically significant
3	Religion	64.77	2	0.001	Statistically Significant
4	Education	1	2	0.606	Not Statistically significant
5	Types of family	5.42	2	0.066	Not statically Significant
6	Monthly income of the family	2.54	2	0.285	Not Statistically significant

The table-5 reveals that Age and Religion are extremely statistically significant where Sex, Education, Types of family, and Monthly income of the family are not statistically significant with the level of addiction.

DISCUSSION

The present study reveals that 21.3% of students had poor knowledge, 64% had Average knowledge and 14.7% has good knowledge regarding the hazards of earphone uses. The present study was supported by Gupta et al. (2016) have done among high school students of Mangaluru. The result shows that 47% of the study sample had good knowledge and 6% of the students had poor knowledge of the hazards of earphone uses⁷. The study was supported by Saurav Basu et al. (2019) have done among medical students. The result showed that male students used earphones with greater frequency and perceived lesser susceptibility to adverse

effects on prolonged earphone uses compared to female students⁸. The findings are similar to the study which was conducted in Malaysia among 136 customer service representatives and there was no significant association between earphone usage, duration of earphone usage, and demographic variable⁹. The present study showed that there is Age, Types of family, Monthly income of the family are statistically significant, and Sex, Education is not statistically significant.

Conclusion

The present study revealed that very few students who have severe level addiction and rest are the majority who have not excessively but moderately involved in addictive's uses. Hence, some awareness should be increased among students through various programs. So, it also gives needs to pronounce that students will be educated about save and healthy practices of earphones.

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Ethical clearance: This study was approved by the institutional ethical committee and the informed consent was taken from the students

Conflict of interest: No conflict of interest

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