



## HIGH RISK BEHAVIOUR AMONG ADOLESCENTS STUDYING IN SELECTED SCHOOL, DISTRICT GURUGRAM, HARYANA

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### Abstract

**Background:** Adolescents is an age group between 10-19 years of life and in India every 5<sup>th</sup> person is graded under adolescent category, and it is very precious, dynamic phase of adaptation for every individual they learn and adopt behaviour patterns which determines their future health determinants i.e. physical, social and mental. For a healthy development the adolescents require to practice healthy behavior, due to unavoidable circumstances in life of adolescents they possess certain high-riskbehaviors that affects their physical, emotional and social develop. **Objective:** To assess the high-risk behaviour among adolescents studying in schools of district Gurugram, Haryana.

**Methods:** A quantitative approach and a cross sectional design was adopted. The study was conducted in selected schools of district Gurugram, Haryana, through convenient sampling technique 200 adolescents with the age group 10 -19 years were selected for the study. Data was collected using socio-demographic data sheet and standardized WHO, global school-based student health survey core questionnaire, GSHS(2021).

**Result:** In the present study majority of students 66.5% were between the age group of 18–19-year, alcohol use among adolescent concluded as low risk, 81% of adolescents were at low risk of unhealthy dietary behaviour and 19% at medium risk. all the adolescents were at low risk of drug use, Majority 73% were maintaining good hygiene, 77.5%, have poor mental health, 88.5% and 11.5% of the adolescents are having low and moderate risk of physical activity, 79.5% and 16% of the adolescents were having medium, and low protective factors, 93.5%, were having low risk of sexual behaviour, all the adolescents were at low risk of tobacco use and risk of violence and unintentional injuries.

**Conclusion:** This study reveals that adolescents were vulnerable to high-riskbehaviors. Hence health camps, seminars, workshop and health education programme can be organized on high-risk behaviour and its impact on physical, emotional, social and academic activities by involving adolescents.

**Keywords:** high risk behavior, adolescents, schools.

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## **1. Introduction**

Adolescent is a period of transition from childhood to adulthood. During this stage maturation in physiological and mental health occurs, they attain puberty<sup>1</sup>. This period is difficult for them to cope with as they are forced to select the lifestyle, changes in behavioural patterns which determine their future<sup>2</sup>. So, for building a normal adulthood, they should be free from physical and mental illnesses and disabilities this can be achieved when they have drug free environment, maintain hygiene, healthy dietary habits, healthy sleeping pattern, proper regular exercise, emotional flexibility a good interpersonal skill<sup>3</sup> and an acceptable behaviour towards peers, family member, teachers, and others. Sometime their behaviour make impact on health, such behavioris termed as high-risk behavior, e.g., smoking, consuming alcohol, taking drugs, poor dietary habits, lack of hygiene, etc., leads to several health issues and injuries that affects there later growth and development. A normal behaviour is always in accordance with social norms and society and if this influence is in a negative way it may lead to high-risk behaviour. The adolescent who has high self-esteem and locus of control may safe themselves from high-risk behaviour.

India has the highest adolescent population in the world, around 253 million and every 5<sup>th</sup> person belongs to the age group 10 - 19years.<sup>4</sup> Research studies have shown that the common factors for death among adolescence are road accidents, HIV infection, respiratory infection, violence, suicide and most of these deaths are associated with high risk behaviour includes drug abuse, smoking, alcohol, multiplex partner, mental health issues, lack of physical action, higher is sexual

activities, involvement in violence, eating habits and behaviour problems<sup>5</sup>.

In India tobacco is a leading cause for death, around 1.35 million death occur every year due tobacco consumption and this statistical records increases year by year because around 267 million adults above (15 year) which is 29% of all adults consume tobacco in India as evidence by global adult tobacco survey India (2016-17).<sup>6</sup> According to a survey conducted by Gurugram police and Sambandh health foundation, around 4.1% of subjects consume smokeless tobacco and 18% adult take in account the tobacco products<sup>7</sup>. Each year 8 million deaths registered globally due to cigarette smoking, 7 million deaths occur due to first hand smokers and 1.2 million termination of life occurs due to passive smoking<sup>8</sup>. Alcohol consumption among youth leads to alcohol abuse, violence, potential health risk, alcohol poisoning and road traffic accidents which further increase the mortality rate. Alcoholism in young youth occurs due to peer influence, cultural beliefs, and poor mental defence mechanism etc<sup>9</sup>.

Prior studies revealed that violence among adolescent leads to many psychological issues, such as substance use, low self-esteem, post-traumatic stress disorder, and depression<sup>10</sup> in later ages of life.<sup>11</sup> According to WHO, 2 lakh homicides were found among 10 to 29 years aged, 4<sup>th</sup> leading cause of death among adolescence. In present scenario adolescent's consumes increased amount of fat containing junk foods, and refined carbohydrate without having any physical activities and they take lower amount of fruits and vegetables which increases the risk of obesity, impaired glucose tolerance<sup>12,8</sup>, dental erosions, Gastro esophageal reflux disease (GERD), amenorrhea, osteoporosis in adulthood.<sup>13</sup> In India

according to a survey by Ministry of Social Justice and Empowerment (MOSJE) 2.8% of population were consuming cannabis, cocaine, opioids, amphetamine, and stimulants among this population adolescents were taking drugs affect health and leads conditions such as, heart attack, stroke psychosis, changing appetite and heart diseases, lung diseases, cancer, HIV when continued for a long duration. Another high-risk behaviour among adolescent is sexual behaviour the<sup>14</sup> adolescents are more vulnerable to sexually transmitted infection than other age groups. premarital sex, having several sex partners and unprotected sex were dangerous sexual behaviors which lead to HIV/AIDS and unintended pregnancies and unsafe abortions.<sup>15</sup> According to Lazarus&Folkman the relationship between perceived stress and potentially risky behaviours, such as substance abuse and other risky behaviours are more common during school year. Recent research studies shows that the use of internet and screens, playing video games, and bullying and victimisation were linked to poor diet, inactivity, sedentary behaviour, and substance abuse. Hence this study aims at addressing the prevalence of high-risk behaviours in adolescent's studying in selected schools of Gurugram, Haryana.

Research studies show that 41.5 % of adolescent's does text messages or sent emails while driving and distracted driving is on the rise. It was found that lack of preventative measures, such as using helmets, wearing seatbelts, and driving sober, is the main cause of adolescent injuries. Regarding the violence and self-injuries, young adults are greatly affected. Girls are twice as high as the rate for boys, 17.7 % of adolescents seriously tried to kill themselves in the past years. Research findings revealed that the leading cause

of death among adolescent in the US are due to interpersonal violence, claims approximately more than 4500 people every day. Violence may be of any forms such as sexual violence, child abuse or neglect, youth violence, self-inflicted violence, and group violence.

Alcohol use cause significant impairment associated with detrimental effects on physical health and social behaviour. Regular alcohol

consumption also causes dependence, which results in withdrawal symptoms that are dangerous and unfavourable. Up to 30% of Americans have an alcohol use issue at some point in their lives. Younger persons aged 18 and above and men are more likely to experience it. Ethnicity of African Americans, Asians, or Hispanics, the existence of mood disorders, substance addiction disorders, and disability are additional risk factors. Research finding reported that, 72.5 % of people consume fast food and 23% of students watch more TV or use their computers<sup>5</sup>.

Young people between the ages of 10 and 24 are one of India's most significant resources. During this time of growth and development, they are particularly vulnerable and regularly affected by both internal and extrinsic variables that have an impact on their health and safety. Health professionals need to pay quick attention to the health-harming behaviours and conditions that affect 10% to 30% of young people.

As there is no support for the earlier studies in Gurugram, it is important to conduct such research in large cities like Gurugram because youth are increasingly engaging in high-risk behaviours like smoking, alcoholism, drug use, etc. Early detection of such behaviours can prevent and promote good physical, mental, and social health in later life. Hence the researchers felt the need to identify the high-risk

behaviour among adolescents studying in selected school, district Gurugram, Haryana

**Problem statement:**

A Study to assess the high-risk behaviour among adolescents studying in selected school, district Gurugram, Haryana.

**2. Materials & Methods**

The research approach adopted for the study is a quantitative approach and research design was a cross sectional design as it was found to be appropriate to assess high risk behaviour in adolescent students. The study was conducted in Govt. Sr. Sec School Dhankot, Vinay Senior Secondary Public School Sultanpur, and New Shishu Kalyan Public School Chandu Gurugram. The population for our research study was adolescents of age group between 10-19 years. The sample size was comprised of 200 adolescent students studying in Govt. Senior Secondary School Dhankot, Vinay Senior Secondary Public School Sultanpur, New Shishu Kalyan Public School Chandu Gurugram who fulfil inclusion criteria. Non-probability convenient sampling technique for getting our sample for the research study. Data was collected using a structured questionnaire on socio demographic variable and standardized GSHS core questionnaire was selected to assess the high-risk behaviour in adolescents. This research study was done by keeping in mind the ethical considerations, Ethical clearance was obtained from the ethical clearance committee of SGT University Gurugram Haryana. Informed consent was obtained from the adolescents after explaining the nature of the study and procedure of data collection. Confidentiality and anonymity was assured and data was collected during

the free time, not affected the routine classes. It was decided that evaluation of demographic factors and modules of the questionnaire will be done by using descriptive statistical methods like frequency and percentage.

**3. Results**

**Section A: description of socio-demographic variables of adolescents**

**Table 1:** depicts that majority of the sample i.e. 66.5% were from the age group of 18-19 years. followed by 33.5% were from age group of 15-17 years.

In terms of education mostly respondent are studying in 12<sup>th</sup> standard which is 56.5%. and 41.5% of the respondent are studying in 11<sup>th</sup> standard and remaining 2% of the respondent are in 10<sup>th</sup> standard.

According to types of school around 80% of the students were studying in government school and the rest about 20% of the students are studying private school.

In terms of gender 56.5% are female's respondent and 43.5% are male respondent.

The total respondents are of Hindu religion.

In terms of father occupation 39% are employed in private sector and 37.5 are employing in government job, and 22% are having their own business and remaining 1.5% are working in other fields.

In terms of mother occupation 71% are housewife and 29% are employed in private sector.

The area of residence of respondents residing in urban area is 43% and in rural area is 41% rest of 16% were residing in semi-urban area.

Majority, 43.5% of Sample having single sibling following 31% of sample having two siblings ,24% of samples

don't have any sibling and rest 1.5% sample having more than two siblings.

In terms of birth order 46% of sample having second birth order, 42.5% of samples having first birth order and rest 11.5 % resembles third birth order.

In terms of family types majority of them 57.5% live in nuclear family and rest 42.5% live in joint family.

According to dietary pattern majority 38.5% are non-vegetarian and 31.5% are vegetarian. And rest 30% are having mixed dietary pattern.

In reference to monthly family income most of 27% have family monthly income in between 20,001 – 30,000 and 26% have family monthly income in between 10,001 – 20,000, 25.5% have family monthly income in between 30,001-40,000 and rest of 21.5% having family monthly income more than 40,000.

Mostly 28.5% samples spend Rs. 10-100 per day, 27.5% of samples spend Rs. 101-200 per day, 22.5% of samples

spend Rs. More than 300 per day, 11% of samples spends Rs. 201 to 300 per day and rest 10.5% doesn't spend any money on unwanted things.

In terms of personal habits majority of samples do not have any personal habit which is 88%, 8.5% samples chew tobacco, 2% of samples were smoke and rest of 1.5% were have other personal habit.

In terms of internet usage mostly 27% of samples spend more than 4 hours on internet, 23% of samples spend 3 hours on internet, 20% spent 4 hours on internet, 19% spends 2 hours on internet. And rest 11% sample spend 1 hour on internet.

In reference to time spend on social media mostly 45.5% of samples spend 1 -2 hours on social media, 20% spend 3-4 hours on social media, 18% spend more than 4 hours on social media and rest 16.5% spend less than 1 hour on social media.

**Table 4.1 Frequency and Percentage of Socio-demographic variables of Adolescents. (N=200)**

| Sl. No. | Socio-demographic Variables | Frequency (F) | Percentage |
|---------|-----------------------------|---------------|------------|
| 1.      | <b>Age</b>                  |               |            |
|         | 15-17 years                 | 67            | 33.5       |
|         | 18-19 years                 | 133           | 66.5       |
| 2.      | <b>Educational Status</b>   |               |            |
|         | 10 <sup>th</sup> Std        | 4             | 2          |
|         | 11 <sup>th</sup> Std        | 83            | 41.5       |
|         | 12 <sup>th</sup> Std        | 113           | 56.5       |
| 3.      | <b>Type of school</b>       |               |            |
|         | Private                     | 40            | 20         |
|         | Government                  | 160           | 80         |
| 4.      | <b>Gender</b>               |               |            |
|         | Male                        | 87            | 43.5       |
|         | Female                      | 113           | 56.5       |
| 5.      | <b>Religion</b>             |               |            |
|         | Hindu                       | 200           | 100        |
| 6.      | <b>Father's occupation</b>  |               |            |
|         | Private job                 | 78            | 39         |
|         | Government job              | 75            | 37.5       |
|         | Business                    | 44            | 22         |

|     |  |     |      |
|-----|--|-----|------|
|     | Other                                    | 3   | 1.5  |
| 7.  | <b>Mother occupation</b>                 |     |      |
|     | Housewife                                | 142 | 71   |
|     | Private job                              | 58  | 29   |
| 8.  | <b>Residential Status</b>                |     |      |
|     | Urban                                    | 86  | 43   |
|     | Rural                                    | 82  | 41   |
|     | Semi-urban                               | 32  | 16   |
| 9.  | <b>No. of Siblings</b>                   |     |      |
|     | None                                     | 48  | 24   |
|     | One                                      | 87  | 43.5 |
|     | Two                                      | 62  | 31   |
|     | >Two                                     | 3   | 1.5  |
| 10. | <b>Birth order</b>                       |     |      |
|     | First                                    | 85  | 42.5 |
|     | Second                                   | 92  | 46   |
|     | Third                                    | 23  | 11.5 |
| 11. | <b>Type of family</b>                    |     |      |
|     | Nuclear                                  | 115 | 57.5 |
|     | Joint                                    | 85  | 42.5 |
| 12. | <b>Dietary pattern</b>                   |     |      |
|     | Vegetarian                               | 63  | 31.5 |
|     | Non-Vegetarian                           | 77  | 38.5 |
|     | Mixed                                    | 60  | 30   |
| 13. | <b>Monthly family income (Rs.)</b>       |     |      |
|     | 10001 to 20000                           | 52  | 26   |
|     | 20001to30000                             | 54  | 27   |
|     | 30001to 40000                            | 51  | 25.5 |
|     | >40000                                   | 43  | 21.5 |
| 14. | <b>Per day money spending</b>            |     |      |
|     | Nil                                      | 21  | 10.5 |
|     | Rs 10-100                                | 57  | 28.5 |
|     | Rs 101-200                               | 55  | 27.5 |
|     | Rs 201-300                               | 22  | 11   |
|     | >Rs 300                                  | 45  | 22.5 |
| 15. | <b>Personal Habits</b>                   |     |      |
|     | None                                     | 176 | 88   |
|     | Tobacco chewing                          | 17  | 8.5  |
|     | Smoking                                  | 4   | 2    |
|     | Other                                    | 3   | 1.5  |
| 16. | <b>Mobile or internet usage duration</b> |     |      |
|     | One hour                                 | 22  | 11   |
|     | Two hour                                 | 38  | 19   |
|     | Three hour                               | 46  | 23   |
|     | Four hour                                | 40  | 20   |
|     | More than 4 hour                         | 54  | 27   |

|     |                                   |    |      |
|-----|-----------------------------------|----|------|
| 17. | <b>Time spend on social media</b> |    |      |
|     | Less than one hour                | 33 | 16.5 |
|     | One-two hour                      | 91 | 45.5 |
|     | Three-four hour                   | 40 | 20   |
|     | More than four hour               | 36 | 18   |

**Section B: description about the high-riskbehavior among adolescents**

**Table 2 Frequency and percentage of Alcohol use among Adolescents (N=200)**

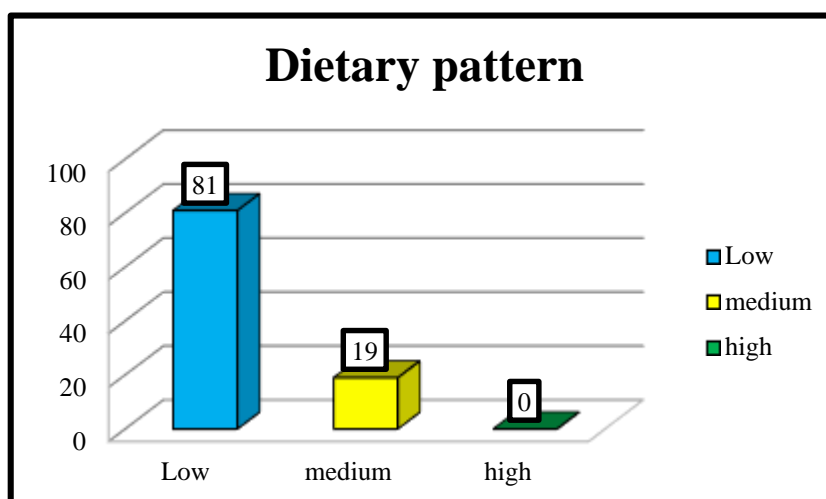
| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 200       | 100        |
| Medium | 0         | 0          |
| High   | 0         | 0          |

Table 2 shows the frequency and percentage distribution of alcohol use among adolescents. It was revealed that all of the adolescents were having low risk of alcohol use.

**Table 3 Frequency and percentage of Dietary behavior among Adolescents (N=200)**

| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 162       | 81         |
| Medium | 38        | 19         |
| High   | 0         | 0          |

Table 3 shows the frequency and percentage distribution of dietary behavior among adolescents. Regarding the dietary behavior majority 162 (81%) were at low risk of unhealthy dietary behavior and 38 (19%) were having medium risk of unhealthy dietary behavior. The same has been depicted in figure 1.



**Figure 1: Bar chart depicting percentage of dietary pattern among adolescents.**

**Table 4 Frequency and percentage of Drug use among Adolescents (N=200)**

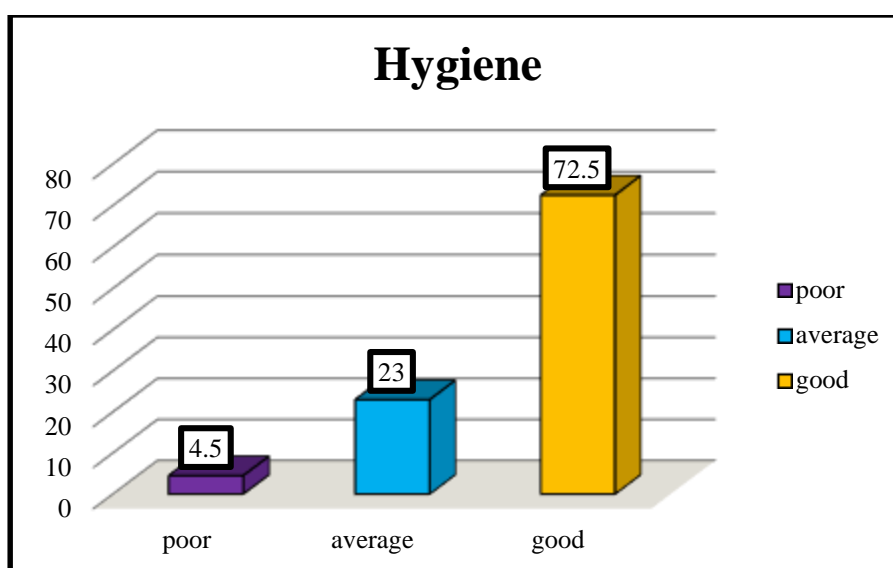
| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 200       | 100        |
| Medium | 0         | 0          |
| High   | 0         | 0          |

Table 4 shows the frequency and percentage distribution of drug use among adolescents. All of them were at low risk of drug use.

**Table 5 Frequency and percentage of Hygiene among Adolescents (N=200)**

| Risk    | Frequency | Percentage |
|---------|-----------|------------|
| Poor    | 9         | 4          |
| Average | 46        | 23         |
| Good    | 145       | 73         |

Table 5 shows the frequency and percentage distribution of Hygiene among adolescents. Majority 145 (73%) have good hygiene, 46 (23%) were having average hygiene and 9 (4%) were having poor hygiene. The same has been depicted in figure 2.



**Figure 2: - Bar diagram showing the Hygiene among adolescents.**

**Table 6 Frequency and percentage of Mental Health among Adolescents (N=200)**

| Risk    | Frequency | Percentage |
|---------|-----------|------------|
| Poor    | 155       | 77.5       |
| Average | 45        | 22.5       |
| Good    | 0         | 0          |

Table 6 shows the frequency and percentage distribution of mental health among adolescents. Majority 155 (77.5%) were having poor mental health and 45 (22.5%) were having average mental health. The same has been depicted in figure 3.



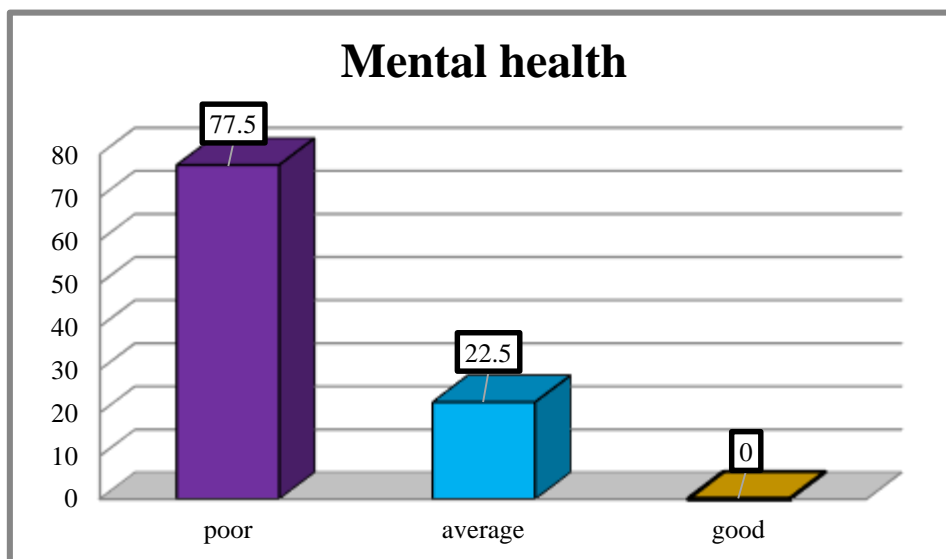


Figure 3: - Bar diagram depicting the mental health of the adolescents.

Table 7 Frequency and percentage of Physical Activity among Adolescents (N=200)

| Risk     | Frequency | Percentage |
|----------|-----------|------------|
| Low      | 177       | 88.5       |
| Moderate | 23        | 11.5       |
| High     | 0         | 0          |

Table 7 shows the frequency and percentage distribution of physical activity among adolescents. Majority 177 (88.5%) were having low risk of physical activity and 23 (11.5%) were having moderate risk of physical activity. The same has been depicted in figure 4.

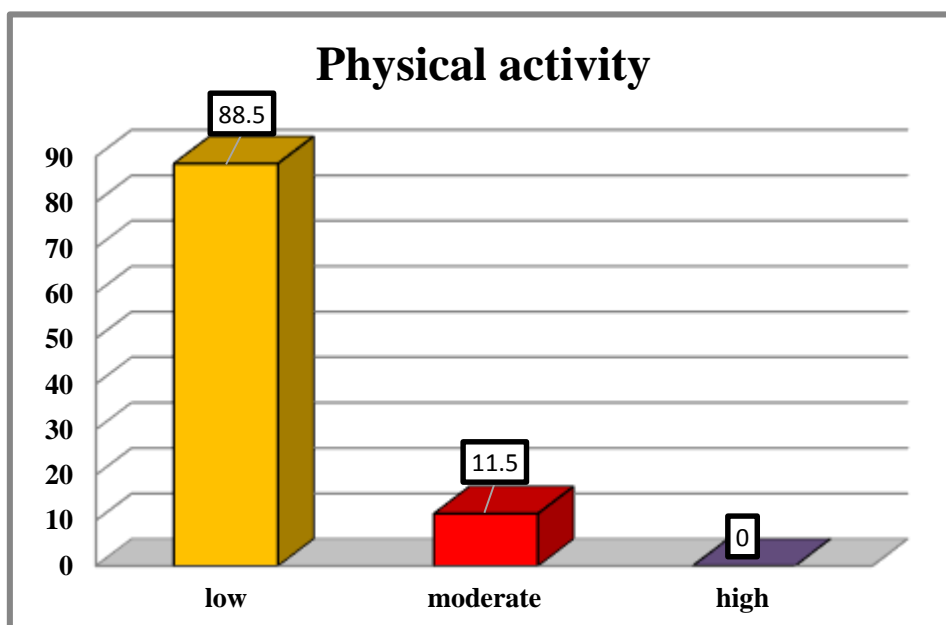
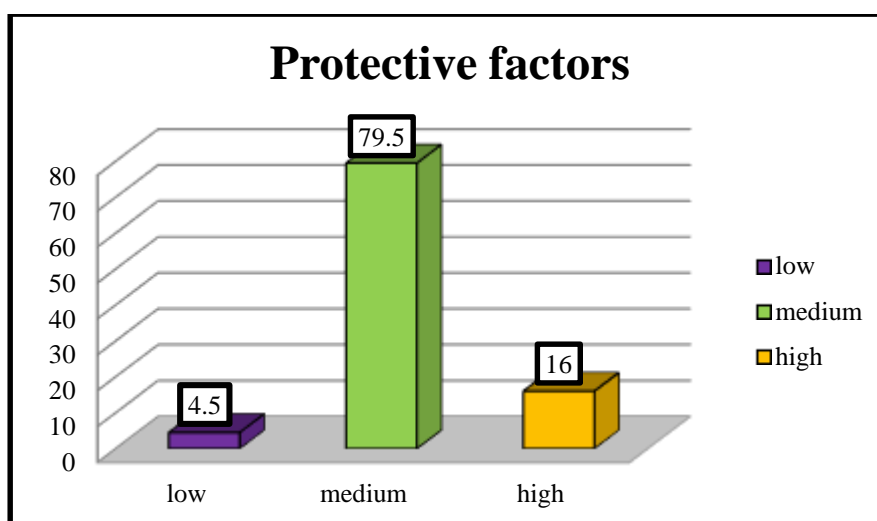


Figure 4: - Bar diagram shows the Physical activity of Adolescents.

**Table 8 Frequency and percentage of Protective factors among Adolescents (N=200)**

| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 9         | 4.5        |
| Medium | 159       | 79.5       |
| High   | 32        | 16         |

Table 8 shows the frequency and percentage distribution of protective factors among adolescents. Majority of the adolescents 159 (79.5%) were having medium protective factors, 32 (16%) were having high protective factors, and only 9 (4.5%) have low protective factors. The same has been depicted in figure 5.



**Figure 5: - Bar diagram showing the Protective factors among adolescents.**

**Table 9 Frequency and percentage of Sexual behavior among Adolescents (N=200)**

| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 187       | 93.5       |
| Medium | 13        | 6.5        |
| High   | 0         | 0          |

Table 9 shows the frequency and percentage distribution of sexual behavior among adolescents. Majority of the adolescents 187 (93.5%) were having low risk sexual behavior, and 13 (6.5%) have medium risk. The same has been depicted in figure 6.

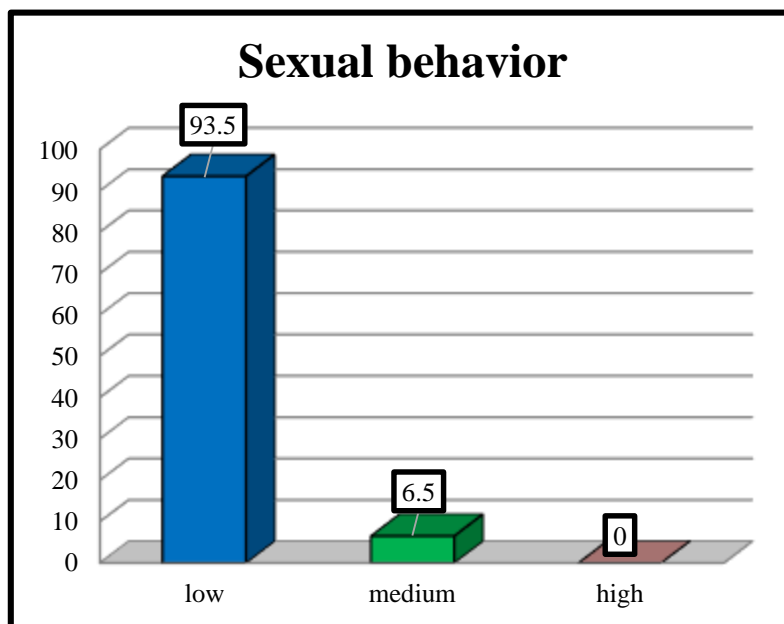


Figure 6: - Bar diagram showing the sexual behavior among adolescents.

Table 10 Frequency and percentage of Tobacco use among Adolescents (N=200)

| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 200       | 100        |
| Medium | 0         | 0          |
| High   | 0         | 0          |

Table 10 shows the frequency and percentage distribution of tobacco use among adolescents. All the adolescents were at low risk of tobacco use.

Table 11 Frequency and percentage of Violence and Unintentional Injury among Adolescents (N=200)

| Risk   | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 200       | 100        |
| Medium | 0         | 0          |
| High   | 0         | 0          |

Table 11 shows the frequency and percentage distribution of violence and unintentional Injury among adolescents. All the adolescents were at low risk of violence and unintentional Injury.

#### 4. Discussion

##### SECTION A: DESCRIPTION OF SOCIO-DEMOGRAPHIC VARIABLES OF ADOLESCENTS

In present research study most of the adolescents 133 (66.5%) were belongs to the age group of 18-19 years, followed by 67 (33.5%) were from age group of 15-17 years. Which emphasis that our study is mainly focused on older adults as compared to younger

adults which is significantly different from other studies age groups that is (12-18) with the mean age of  $(16.8 \pm 1.2)^{16}$ , (13-16) with the mean age of  $(14.45 \pm 0.95)^{17}$ , (10-19)<sup>18</sup>

In the present study mostly 113 (56.5%) were studying in 12<sup>th</sup> standard, 83 (41.5%) were studying in 11<sup>th</sup> standard and remaining 4 (2%) in 10<sup>th</sup> standard. Which means our research is mainly concern with adults those passed their matriculation exam and take their

higher education which is different as compared to others study i.e. out of 559 participants 32.4% belonged to 8<sup>th</sup> standard, 29.9% to 9<sup>th</sup> standard and remaining 37.7% to 10 standard<sup>17</sup>,

According to types of school around 160 (80%) of the adolescents were studying in government school and the rest about 40 (20%) of them were studying private school.

In terms of gender the participant in the present study was 113 (56.5%) were female's and 87 (43.5%) were males. Which is approx. Similar to other studies in terms of gender distribution among the participants that is out of 727 subjects 53% are boys and remaining 47% are girls<sup>16</sup>, out of 559 participants 270 are males and 289 are females<sup>17</sup>,

With respect to the religion all of them belongs to Hindu religion. Which is somehow similar with a study whose sample size is 376 and out of this 82.18% are hindu<sup>20</sup>.

In terms of father's occupation 78 (39%) were employed in private sectors and 75 (37.5%) in government jobs, and 44 (22%) were having their own business and remaining 3 (1.5%) were working in other fields.

In terms of mother's occupation, majority 142 (71%) were housewife and 58 (29%) were employed in private sectors.

Regarding the area of residence, 86 (43%) were residing in urban areas, 82 (41%) from rural areas, and rest 32 (16%) were residing in semi-urban area. The result residence of sample is somehow similar to a study in which (438, 410)<sup>19</sup> adolescents were selected from urban and rural area respectively.

In terms of number of siblings, majority of the adolescents 87 (43.5%) were having one sibling following 62 (31%) have two siblings, 48 (24%) don't have any sibling and only 3 (1.5%) were having more than two siblings.

With respect to the birth order of the adolescent's majority 92 (46%) of them were second birth order, 85 (42.5%) first birth order and remaining 23 (11.5%) belongs to third birth order.

Regarding the type of family, majority of the adolescents 115 (57.5%) belongs to nuclear family and 85 (42.5%) were from joint family.

According to dietary pattern of adolescents, 77 (38.5%) were non-vegetarian, 63 (31.5%) were vegetarian and 60 (30%) were having mixed dietary pattern.

In reference to the monthly family income, 54 (27%) have family monthly income in between 20,001 – 30,000 Rs, 52 (26%) between 10,001 – 20,000 Rs, 51 (25.5%) having monthly family income in between 30,001-40,000 Rs and rest of 43 (21.5%) having family monthly income more than 40,000 Rs.

Regarding the per day money spending by the adolescents, 57 (28.5%) spends 10-100 Rs per day, 55 (27.5%) 101-200 Rs per day, 45 (22.5%) spends more than 300 Rs per day, 22 (11%) of them spends 201 to 300 Rs per day and remaining 21 (10.5%) doesn't spend any money daily.

In terms of personal habits majority of adolescents 176 (88%) do not have any personal habit 17 (8.5%) chew tobacco, 4 (2%) were smokers and 3 (1.5%) were having other personal habit.

In terms of mobile or internet usage, 54 (27%) of the adolescents spent more than 4 hours daily, 46 (23%) spent 3 hours, 40 (20%) spent 4 hours, 38 (19%) spent 2 hours, and 22 (11%) spent 1 hour daily on mobile or internet.

In reference to time spend on social media, majority 91 (45.5%) spent one to two hours on social media, 40 (20%) spent three to four hours on social media, 36 (18%) spent more than four hours on social media and remaining 33 (16.5%) spent less than one hour on social media.

## **SECTION B: DESCRIPTION ABOUT THE HIGH RISK BEHAVIOR AMONG ADOLESCENTS**

### **Alcohol use**

Regarding the alcohol use among the adolescents, it was revealed that all of the adolescents were having low risk of alcohol use and these findings conclude that there is no prevalence of alcohol use among the adolescents of selected geographical area which is good as compared to studies conducted in different geographical areas i.e. 5.4% out of 559 subjects<sup>17</sup>, in urban 2.08% and 1.25% out of 480 in Shivamogga<sup>18</sup>, (4.45%) in Malaysia<sup>23</sup>.

### **Dietary behaviour**

In the present study, with respect to the dietary behaviour among adolescents, majority 162 (81%) were at low risk of unhealthy dietary behaviour and 38 (19%) were having medium risk of unhealthy dietary behaviour. Which implicit good statistical results as compared to similar research study in which 39% and 37.6% students consumes fruit and vegetables respectively and 72.5% of students take fast food<sup>17</sup> in past 7 days.

### **Drug use**

In term of drug use among adolescents, all of them were at low risk of drug use. Which concludes that all the selected students residing in rural and urban area for our research study adopts positive behaviour regarding drug use which may be due to healthy environment around them and family or social fear. The finding of our research study reflects low drug use behaviour as compared to a study in which 6.8%<sup>33</sup> use drug, in another study 12% and 20% of urban and rural adolescents were in active use of cannabis, 11 and 4 adolescents in urban and rural area engaged towards use of opioids<sup>19</sup>.

### **Hygiene**

In reference to the hygiene among adolescents, majority 145 (73%) have good hygiene, 46 (23%) were having average hygiene and 9 (4%) were having poor hygiene. According to our present research's reading mostly students perform good hand and oral hygiene by performing hand washing prior to eating and after using restroom, majority of the students brush twice a day, few percentages of students have average and poor hygiene level which requires interventions in the form of health education, seminars, and health camps for early prevention and management of high risk behaviour.

### **Mental health**

With respect to the mental health among adolescents, majority 155 (77.5%) were having poor mental health and 45 (22.5%) were having average mental health. As per percentage of mental health majority of students have poor mental health in reference to they have less friend and feels lonely, they cannot able to sleep properly due to ongoing worries in their daily life. Which is more in reference to other study in which 16% of school and 20% of college students are suffer from disturbed mental health<sup>28</sup>.

### **Physical activity**

Regarding the physical activity among adolescents, majority 177 (88.5%) were having low risk of physical activity and 23 (11.5%) were having moderate risk of physical activity. That means majority of students in our research study are physically active and perform regular physical activity that is good enough as compared to others research studies which have 39.5%<sup>17</sup>, and 35.97%<sup>23</sup> prevalence of physical inactivity high risk behaviour.

### **Protective Factor**

In terms of the protective factors among adolescents, majority of the adolescents 159 (79.5%) were having medium protective factors, 32 (16%) were

having high protective factors, and only 9 (4.5%) have low protective factors. Which is due to least number of close ones to whom they will express their feeling and thoughts, and less expression of their feelings due to generation gap between them, and few percent have high protective factor because of good and healthy interaction with friends and family.

### **Sexual Behaviour**

Regarding the sexual behaviour among adolescents, majority of the adolescents 187 (93.5%) were having low risk sexual behaviour, and 13 (6.5%) have medium risk. Most of the students in our study didn't engage in sexual activity but 6.5% were at medium risk and some of them have engaged towards unprotected sex and have sex with more than one person, and the reading of sexual high risk behaviour is significantly less as compared to a study in which (56% out of 356)<sup>27</sup>, (16%,16% in both rural and urban)<sup>28</sup>, (377 out of 723)<sup>29</sup> adolescents have perceived sexual activity as high risk behaviour.

### **Tobacco use**

In this study with respect to tobacco use among adolescents, all of the adolescents were at low risk of tobacco use. That means prevalence of smoking and tobacco use among adolescents of selected geographical area is negligible or absent that is significantly good as in comparison to other studies i.e. in Raichur district 5.5% out of 559<sup>17</sup>, in Shivamogga 2.92% in urban and 2.50% in rural out of 480 samples<sup>18</sup>, 13.27% in Malaysia<sup>23</sup>.

### **Violence and Unintentional injuries**

Regarding the violence and unintentional Injury among adolescents, all of the adolescents were at low risk of violence and unintentional Injury. Which interprets that subjects of our study are less or not involved in fights, bullying respectively which is fair enough in reference with other prior

studies, according to a research 44% of boys and 38% of girls were engaged towards behaviour leads to unintentional injuries<sup>16</sup>.

### **Recommendations**

- A large, sizable study of this nature can be carried out.
- A cross sectional study can be carried out to compare the high-risk behaviour between adolescents of rural and urban schools.
- A same study can be conducted to assess the knowledge regarding high-risk behaviour.
- A comparative study can be done to assess normal and abnormal behaviour among adolescents.

### **Limitations:**

- Due to small sample size, the conclusion cannot be generalized.
- Due to limited resources some objective of our research cannot be examined.

## **5. Conclusion**

This study reveals that adolescents were vulnerable to high-risk behaviors. Hence health camps, seminars, workshop and health education programme can be organized on high risk behaviour and its impact on physical, emotional, social and academic activities by involving adolescents.

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