International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 24s, 2025
https://theaspd.com/index.php

Assessment Of Prevalence And Knowledge On High-Risk Behaviour Regarding Health And Protective Factors Among School Going Adolescents At Selected Schools, West Bengal

Ms. Piyali De[1*], Dr. Alka Rai[2], Prof Dr. Niyati kar[3]
[1*]Ph.D Scholar People's University Bhopal Madhyapradesh ,India
[2]Ph.D Guide, People's University Bhopal Madhyapradesh ,India
[3]Ph.D Co-Guide, People's University Bhopal Madhyapradesh ,India

Abstract
High-risk behaviours are those that can have adverse effects on the overall development and well-being of youth, or that might prevent them from future successes and development. A descriptive study conducted with the aim to assess the prevalence and knowledge on high-risk behaviours regarding health among 60 school going adolescents of class X & XII at selected schools of West Bengal with GSHS (Global School Based Student Health Survey) tool and Structured Knowledge questionnaire by convenience sampling technique. Among60 school going adolescents' maximum were male. Prevalence rate is high among male school going adolescents for feelings of depression and down and among female school going adolescents' prevalence rate is high at the feelings of nervousness, anxious and could not control worrying of something. High prevalence rate found on dietary module that most of the male and female school going adolescents were taking fat and fried foods many times in a week. Most of the students both male and female school going adolescents were having poor to moderate knowledge on high-risk behaviour regarding health at the mental health and diet. Strong and negative correlation found between the prevalence and knowledge on high-risk behaviour regarding health at mental health module and moderate and positive corelation found between the prevalence and knowledge on high-risk behaviour regarding health at dietary module.
Keywords: *High-risk behaviours, School going adolescents*

INTRODUCTION:

According to WHO (2015), adolescents comprise twenty per cent of the total world population, eighty-five of whom live in developing countries. young people's health problems (adolescent suicide, unsafe sexual behaviours, violence, substance misuse and abuse) have been ignored, with little understanding of the potential impact of generation at risk in the future. High-risk behaviours are those that can have adverse effects on the overall development and well-being of youth, or that might prevent them from future successes and development. This includes behaviours that cause immediate physical injury (e.g., fighting), as well as behaviours with cumulative negative effects (e.g., substance use). Risk behaviours also can affect youth by disrupting their normal development or preventing them from participating in typical experiences for their age group.

NEED FOR THE STUDY:

Systematic review done **Mohammad Aghajani,Axade Safa2,Elham Helli3,Mahbobeh Alizade** on High risk behaviours and their relationship with demographic characteristics in girl and boy adolescents. Adolescence is the most important period of life among the different periods of human life. This intermediate stage is transition from childhood to adulthood and the beginning of changes in the physical, psychological, and social which affects person's performance in adulthood. Adolescence is critical period in the life in which some of the main behavioural models of the man are formed. As a matter of fact, the health risk behaviours adopted in youth contribute to the leading causes of death, disability, and social problems in adulthood, specifically tobacco use; unhealthy eating; inadequate physical activity; alcohol and other drug use; sexual behaviours that may result in HIV infection, other sexually transmitted diseases (STDs), and unintended pregnancy; and behaviours that contribute to unintentional injury and violence. High risk behaviours are established during childhood and adolescence and can extend into adulthood. The transitional period between childhood and adulthood is called adolescence (10–19 years of age).

STATEMENT OF THE PROBLEM:

Assessment of prevalence and knowledge on high-risk behaviours regarding health and protective factors among school going adolescents at selected schools, West Bengal.

OBJECTIVES OF STUDY:

1.To assess the knowledge of high-risk behaviours regarding health among school going adolescents.

2.To identify the relationship between the prevalence and knowledge of high-risk behaviours regarding health among school going adolescents.

HYPOTHESIS:

H_1: There is significant relationship between the prevalence and knowledge of high-risk behaviours regarding health among school going adolescents at 0.05 level.

REVIEW OF LITERATURE:

Based on the objectives review of literature is divided into two sections:

Section A-Studies related to prevalence and knowledge of high-risk behaviours regarding health and protective factors

Section B-Studies related to relation with high-risk behaviours regarding health and protective factors.

Section A-Studies related to prevalence and knowledge of high-risk behaviours regarding health and protective factors

A cross-sectional study conducted by **A. Aparna 1, R. Vinod kumar 2, CH. Vijay Kumar** on prevalence of high-risk behaviour among adolescents in Hyderabad, conducted among 250 Students (150 boys and 100 girls) in the age group of 10-19years attending 5 schools and 2 colleges at Hyderabad. Schools and colleges were selected by draw method.On an Average, 25 students were taken in each age group.Study result showed that substance abuse in government and private schools is 28% and government and private colleges is also 28%, i.e., both schools and college group of adolescents showed same prevalence of substance abuse. In this study as tobacco and alcohol usage is mostly seen. In the Present study high risk sexual behaviour at government and private schools is 16 % and government and private colleges is also 16 %, showing that both school and college adolescents have same behaviours. Results related to mental health in schools is 16% where as in colleges it is 20% showing that college going adolescents are suffering more from depression, anxiety etc. Gender differences between adolescents who attempt suicide and those who complete suicide were like that of the international literature.

A descriptive study was conducted by **Omoto Babatude 1, Ndu Anne C1,Agwu-Umahi Olanikw R 1,Ezeoke Uchechuhwu E1,Idoko Chinedu A1 &Umeobieri Ancilla K1**on assessment of health risk behaviours among secondary school students in Enugu, South East, Nigeria. The cross-sectional study was conducted among 348 school students. The study result showed that majority of the students lived with their parents (73.9%). Among all participants 50.6% were female.44.4% had taken alcohol,13.5% and 40.8% had smoked and had sex.59.8% had experienced one form violence while 37.6% of them preferred junk food.

A descriptive study was conducted by **Zabihi A, Amiri SR, Hosseini SR, Padehban V** on the association of high-risk behaviours and their relationship with identity styles in adolescents. In the present study, among the 400 qualified people, 384 students were studied. The mean age of adolescents was 17.21 ± 48.4 years (aged 16–19 years). The result showed that the aggression (23.4%), relationship with the opposite gender (14.5%), smoking cigarettes and hookah (10.9%), consuming alcohol (9.3%), suicidal thoughts and attempts (5.7%), running away from home (3.9%), and consuming psychotropic substances (1.8%) were among the most common high-risk behaviours observed in the adolescents. The scores of high-risk behaviours were negatively correlated with the identity scores of informational style (4.56 ± 3.107), normative style (4.45 ± 2.581), and identity commitment style (4.15 ± 2.245) and positively correlated with the scores of diffuse-avoidant style (4.15 ± 3.089). Regression analysis showed that only the informational style had a negative and significant correlation with high-risk behaviors.

A cross sectional study was conducted by **Md. Estiar Rahman** on, Co-occurrence of health risk behaviours and associated factors among adolescent students: Findings from a cross-sectional study in Bangladesh. The findings of this study revealed that college students were more likely than high school students to have co-occurring health risk behaviours. This study further revealed significant association between father's education level and participant's co-occurring of health risk behaviours. It is expected that educated parents would be more conscious of their sons/ daughters and thus will track them. So that they would not be able to take health risk behaviours. In this study, participants who lived apart from their families were more likely than those who lived with their families to have cooccurring health risk behaviours. It could be due to a lack of parental supervision. The findings of this study revealed a significant link between academic performance and co-occurring health risk behaviour,

as well as a link between truancy and co-occurring health risk behaviour. Collaboration between teachers and public health educators could help students achieve better educational and health outcomes.

A descriptive study was conducted by **Faculty of Education**; Kogi on Gender Based Prevalence of Health Risk Behaviours among Adolescents in Ofu Local Government Area, Kogi Stat A self-structured questionnaire was used for data collection among 1920 students from 960 households. Findings revealed that substance abuse was prevalent in the study area. Physical inactivity and unsafe sexual behaviour were not prevalent among adolescents.

An article published of Maria Rosario **T. de Guzman, Lyndsey A. Pohlmeier** on high-risk behaviours in Youth stated that only 54% of youth use seatbelt,38% are the physical fighter,16% students are having thought of suicide,45% tried for smoking and 18% smoked.13% adolescents are obese,14% are reported not to engage in physical activity up to 60 minutes. Adolescent period gives the maturity that leads to the high-risk behaviour.

Section B-Studies related to relation with high-risk behaviours regarding health and protective factors.

A cross-sectional study was done by **Rivu Basu, Suchetana Bhattacharyya, Sayeli Mitra** to assess the prevalence of health behaviours and protective factors among schoolchildren in a rural area in West Bengal. This study is conducted with the aim of assessing the magnitude of health behaviour and protection factor among school children in the study area and to compare the same between boys and girls. The study result showed that among the protective factors, more than three fourth of the students have been found to have good dietary practice, good hygiene maintenance, having knowledge about HIV/AIDS. But more than half of the students do not seek or get parental support and also, they don't have close friends. This is quiet disturbing for those students mental and emotional health.

A systematic review done on Factors associated with risk behaviours in adolescence by **Ana Beatriz Bozzini, Andreas Bauer, Jessica Maruyama, Ricardo Simões, Alicia Matijasevich**. Systematic review showed that Protective factors mediate or moderate the effect of exposure to risk factors, resulting in a reduced incidence of the problem behavior.There is a consensus that during early childhood, having good affective experiences and bonds, as well as growing in a stable and safe environment, improves emotional development and, consequently, has a positive impact on mental health and behaviour during adolescence and adulthood, protective factors are considered independent variables that can have their own effects on behaviour but can also moderate the relation between risk factors and behaviours. Hence, protective factors could play a key role when exposure to risk is unavoidable and essentially constant.

In this review, proximal protective factors for risk behaviours were poorly reported. Furthermore, most of the reported proximal protective factors were either "extrafamilial circumstances" (e.g., non-smoking policies, peer acceptance, better school performance, religious activity) or "family attributes" (e.g. parental warmth and parental style).

It has become evident that adolescents whose parents are highly knowledgeable about their activities are less likely to engage in problem behaviour, including sexual risk behaviour.[2]

METHODOLOGY:

Research Design-Descriptive survey research design is considered for this study.

Instrument Scale-

- Prevalence of high-risk behaviours regarding health assessed by GSHS (Global School Based student health survey)
- Knowledge on high-risk behaviours regarding health assessed by semi structured knowledge questionnaire.

Research variables: Prevalence and Knowledge

Settings: The study was conducted at selected higher secondary schools in W.B

Causes for the selection of the schools are: -

- Familiar to investigator.
- Easy to access.
- Co – operation from others.
- Availability of sample.

Data Collection Sampling Method-Convenient sampling technique is adopted.

Population: -Adolescents

Sample: Class X to XII School going adolescents' students

SAMPLING CRITERIA:

Inclusion criteria:

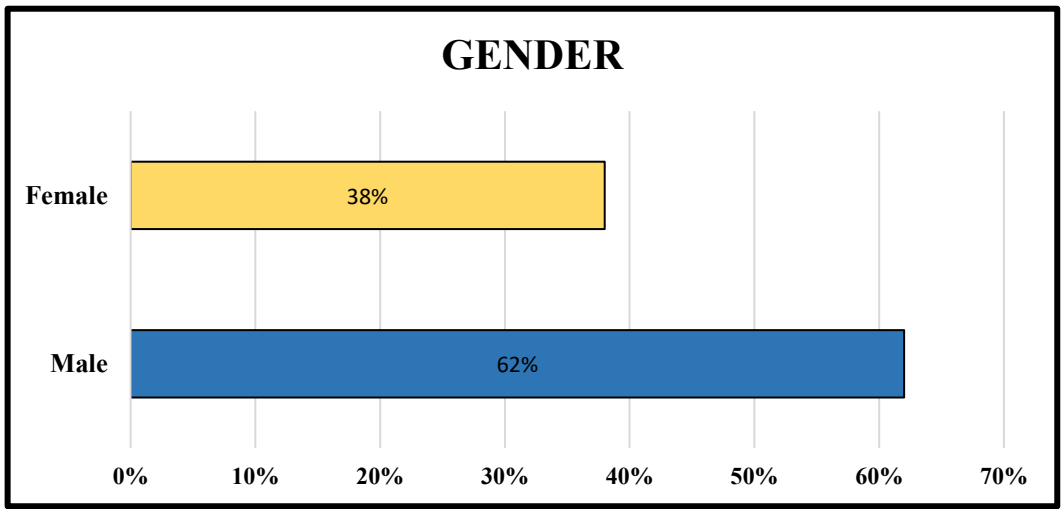
- School going adolescents who were present at the time of data collection
- School going adolescents those who can understand Bengali, and English

Sampling size-60 school going adolescents.

DATA ANALYSIS:

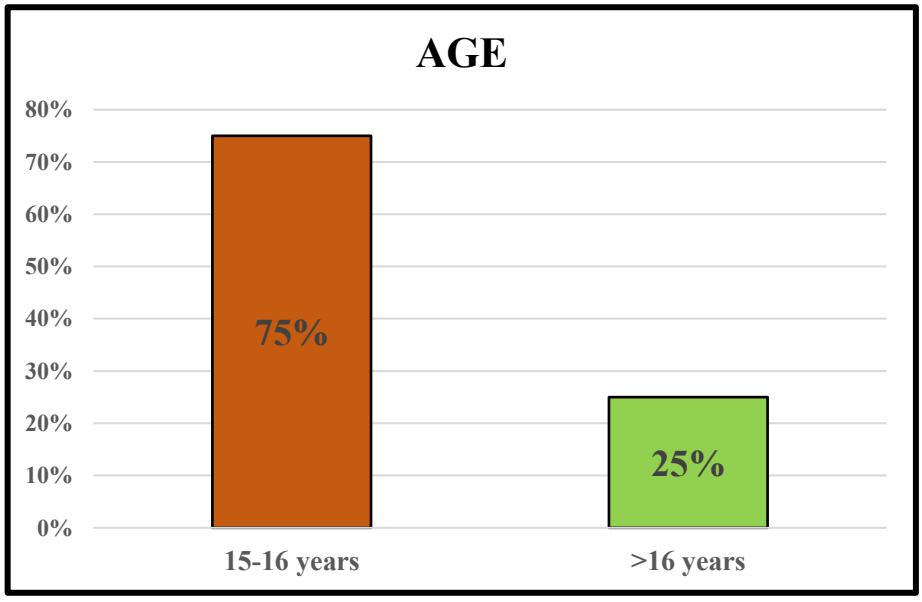
Section-I: Frequency and percentage distribution for demographic variables.
Section- II: Prevalence of high-risk behaviour regarding health.
Section- III: Frequency and percentage for assessment of knowledge on high-risk behaviour regarding health.
Section- IV: Corelation between the prevalence and knowledge on high-risk behaviours regarding health.
Section-I: Frequency and percentage distribution for demographic variables.

Figure:1Frequency and percentage distribution for demographic variables on Gender of the participants N=60



The bar diagram in figure 1 shows that among 60 school going adolescents 38% (23) were female and 62% (37) were male students.

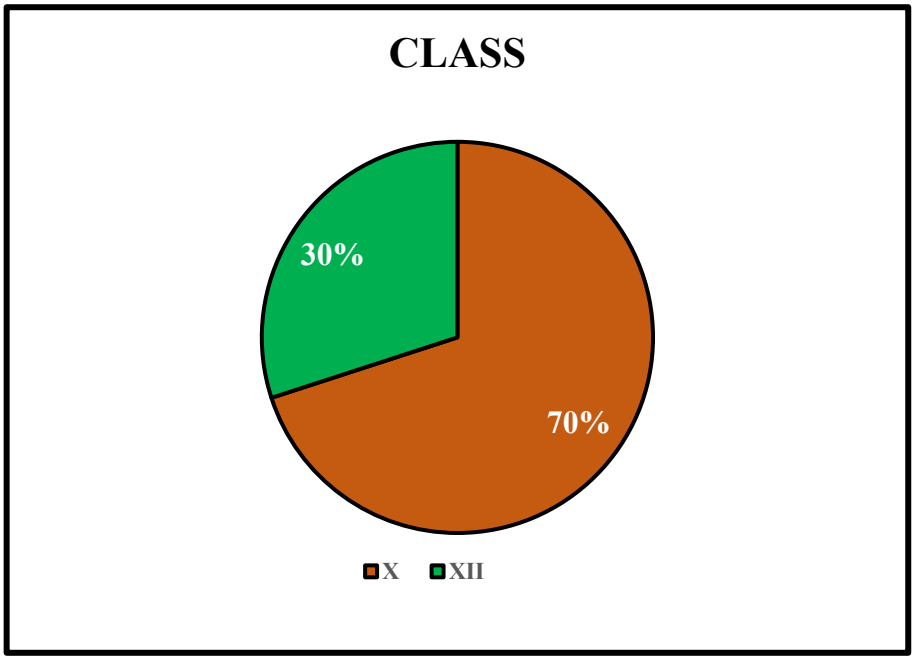
Figure:2 Frequency and percentage distribution for demographic variables on Age of the participants N=60



The above bar diagram in figure 2 shows that among 60 school going adolescents 75% (45) were in age group of 15-16 years and 25% (15) were in age group of more than 16 years.

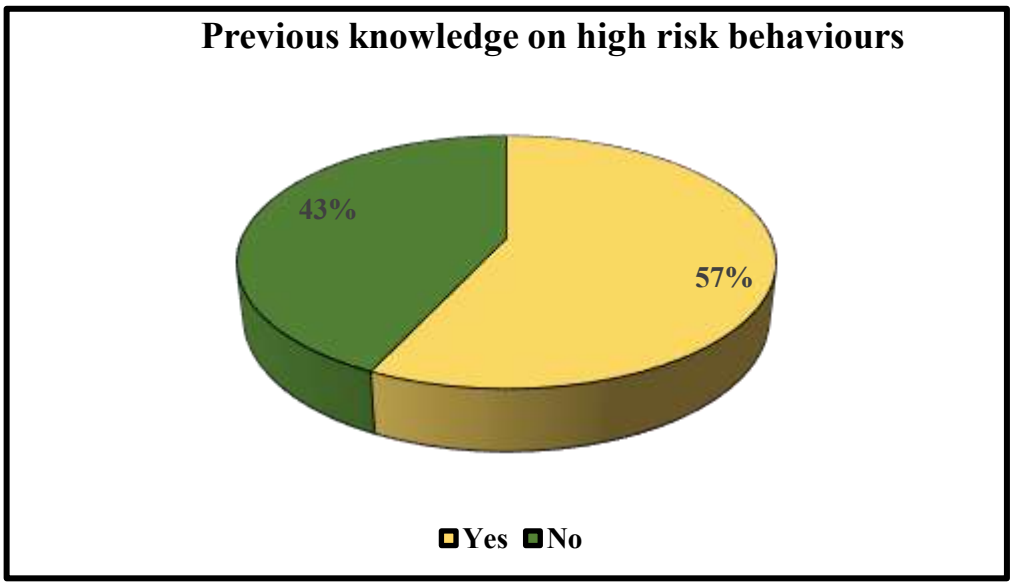
International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 24s, 2025
https://theaspd.com/index.php

Figure:3 Frequency and percentage distribution for demographic variables on Class of the participants N=60



The pie diagram in figure 3 shows that among 60 school going adolescents 70% (42) were in class X and 30% (18) were in class XII.

Figure:4 Frequency and percentage distribution for demographic variables on previous knowledge on high-risk behaviours N=60



The pie diagram in figure 4 shows that among 60 school going adolescents 57% (34) were having previous knowledge on high-risk behaviours and 43% (26) were not having previous knowledge on high-risk behaviours.

Section- II: Prevalence of high-risk behaviour regarding health.

Table 1: Prevalence of high-risk behaviour regarding health on Mental Health Module

Mental Health Module N=60		
Variables	Male (n1=37)	Female (n2=23)

During the past 12 months, worried about something that you could not eat, did not feel hungry, or ate too much	16%	35%
During the past 12 months, feel down, depressed, or hopeless or have little interest in or get much pleasure from doing things.	35%	43%
During the past 12 months, have a hard time staying focused on your homework or other tasks you had to do	27%	43%
During the past 12 months, feel nervous or anxious or not able to stop or control worrying	27%	65%
During the past 12 months, do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?	11%	No Response

The above table shows that among female school going adolescents most of them (65%) and (27%) male students remained nervous, anxious and unable to control their worry. (43%) female students and (27%) male students faced hard time to stay focused on their tasks. Both male (35%) and female (43%) female felt down, depressed, hopeless or had little interest or get less pleasure in doing things. Among female (35%) and in male (16%) worried about something then could not eat, did not feel hungry, or ate too much. (11%) male students responded that they wanting to die, such as cutting or burning yourself on purpose, no female students responded in this matter.

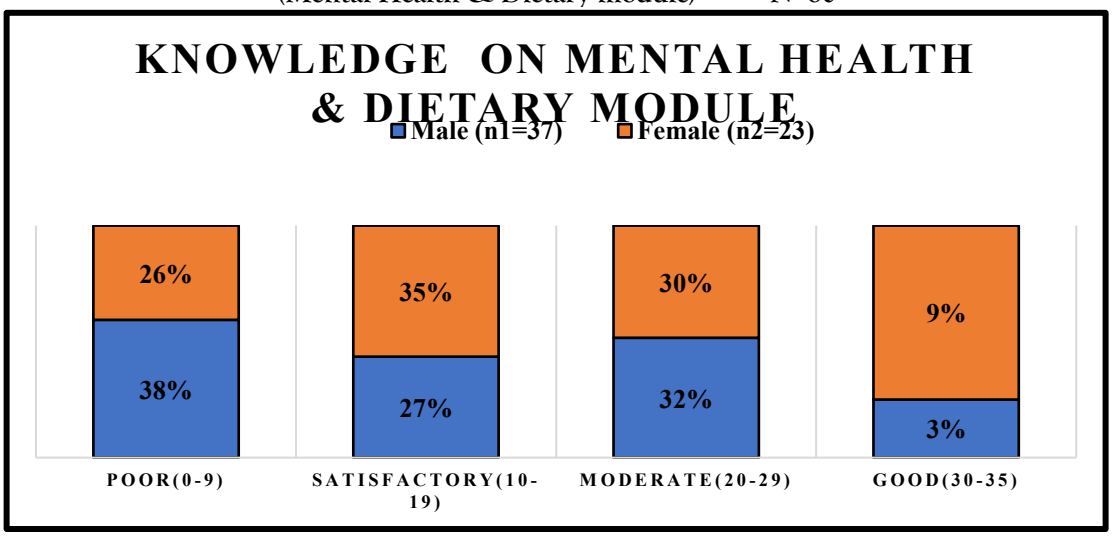
Dietary Module	**N=60**	
Variables	**Male (n1=37)**	**Female (n2=23)**
During the past 7 days, drink milk or eat milk products	5%	4.3%
During the past 7 days, eat foods high in fat, such as fried foods	41%	43.4%
During the past 7 days, eat foods high in sugar, such as cookies, cakes, pastries	27%	30.4%
During the past 7 days, eat whole grains, beans, and other foods high in fibre	11%	8.6%
Buy sugar-sweetened drinks or get them for free at school	16%	13%

Table 2: Prevalence of high-risk behaviour regarding health on Dietary Module

The above table shows that most of students in female (43.4%) and in male (41%) eat foods high in fat, such as fried foods,(30.4%)female and(27%) male students eat foods high in sugar, such as cookies, cakes, pastries,(16%) male and (13%)female students buy sugar-sweetened drinks,(11%) male and (8.6%) female students eat whole grains, beans, and other foods high in fibre, (5%)male and (4.3%) female students drink milk or eat milk products.

Section- III: Frequency and percentage for assessment of knowledge on high-risk behaviour regarding health.

Figure: 5 Frequency and percentage for assessment of knowledge on high-risk behaviour regarding health on (Mental Health & Dietary module) N=60



The above bar diagram shows that the knowledge on Mental health & Dietary module among 37 male school going adolescents (38%) had poor knowledge, (27%) had satisfactory knowledge, (32%) had moderate knowledge and (3%) had good knowledge and among 23 female school going adolescents (26%) had poor knowledge, (35%) had satisfactory knowledge, (30%) had moderate knowledge and (9%) had good knowledge.

Section- IV: Corelation between the prevalence and knowledge on high-risk behaviours regarding health.

Table 3: Corelation between the prevalence and knowledge on high-risk behaviours regarding health(Mental Health Module) N=60

Variables	r Value	Level of significance
Knowledge		
Prevalence	-0.7001	<0.05

The above table shows that the Strong and negative corelation found between the knowledge and prevalence on high-risk behaviours regarding health on Mental Health Module .

Table 4: Corelation between the prevalence and knowledge on high-risk behaviours regarding health (Dietary Module N=60

Variables	r Value	Level of significance
Knowledge		
Prevalence	0.4466	<0.05

The above table shows that the Moderate and Positive corelation found between the knowledge and prevalence on high-risk behaviours regarding health on Dietary Module.

DISCUSSION:

At the present study it is found that in gender 62% male and 38% female school going adolescents in the age group 15 to 16 years school going adolescents were 75% and more than 16 years were 25%. From class X where 70% and from class XII 30%. 57% School going School going adolescents were having previous knowledge on high-risk behaviours 43% School going adolescents were not having previous knowledge on high-risk behaviours. Findings of prevalences rate for mental health module it was found that during the past 12 months 16% male student and 35% females students were worried about something, could not eat and did not feel hungry 35% male and 43% females students during the past 12 months feel down depressed and 27% male and 43% females students have a hard time on staying focus on homework and 27% male and 65% were not able to stop or controlling worry. 11% male students only purposefully heart themselves without wanting to die. Prevalence of directly module found that 5% male and 4.3% female drank milk during the past 7 days, 41% male and 43.4% female eat foods high in fat, such as fried foods during last 7 days, and 30.4% females 27% male school going adolescents had taken cookies cake, pastries within 7 days. During last 7 days 11% male and 8.6% female student ate grains, beans and other fibres. Bought sugar-sweetened drinks or get them for free at school by 13% females and 16% male school going adolescents. Percentage distribution of knowledge level 38% male and 26% female students had poor knowledge ,27% male and 35% female students had satisfactory knowledge, 30% male and 30% female school going adolescents have moderate knowledge, 3% male and 9% female students had good knowledge. In the calculation of correlation between the knowledge and prevalence for mental health module found r= -0.7001 which is strong and negative correlation and in dietary module the r=value found 0.446 between knowledge and prevalence moderate and positive correlation.

CONCLUSION:

The study is concluded that both male and female school going adolescents had high-risk behaviours regarding health. Monitoring and parental care may create change on the high-risk behaviours on health among school going adolescents.

IMPLICATION:

This study must have the implication on nursing service both in academics and administration at the level of community by increasing the awareness among the people and school going adolescents.

REFERENCE:

1. Elham H Tawfik1, Shehata Farag2, Relationships between health risk behaviours and protective factors among adolescent school students by adopting the Structural Equation Model, Year :2017 |Volume :14 |Issue :2 |Page : 109-123
2. Ulla-Kaarina Petäjä, Anja Terkamo-Moisio, Suyen Karki & Arja Häggman-Laitila The Prevalence of High-Risk Behavior Among Adolescents in Aftercare Services and Transitioning from Out-of-home Care: A Systematic Review Adolescent Research Review (2022)Cite this article, Published: 25 November 2022
3. Mohammad Aghajani,Axade Safa2,Elham Helli3,Mahbobeh Alizade 36High risk behaviors and their relationship with demographic characterisrics in girl and boy adolescents.Journal of Research &Health,Vol-6,No.5,Nov& Dec 2016 Pages-471-478
4. Gender Based Prevalence of Health Risk Behaviours among Adolescents in Ofu Local Government Area, Kogi State, *Benjamin Mudi Idache, Moses Folusayo Adeola and David AdamsDepartment of Human Kinetics and Health Education Faculty of Education; Kogi State University, Anyigba
5. High-Risk Behaviors in Youth Maria Rosario T. de Guzman, Associate Professor and Extension Specialis tLyndsey A. Pohlmeier, Extension Educator G1715, Revised August 2014
6. United Nations. 2010. Department of economic and social affairs population division. World population prospects.
7. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Lancet. 2002;360:1083–8. [PubMed]
8. Adolescents in India:a desk review of existing evidence and behaviours, programs and policies. New Delhi: Population council and UNICEF; 2013.
9. World Health Organization. The world health report 2001-Mental Health: New Understanding, New Hope. Who.int. 2017. [Last accessed on 2017 Apr 15]. Available from:/http://www.who.int/whr/2001
10. Neinstein L, Gordon C, Katzman D. Handbook of Adolescent Health Care. Philadelphia: Wolters Kluwer Health; 2011.
11. Manor I, Vincent M, Tyano S. The wish to die and the wish to commit suicide in the adolescent:Two different matters? Adolescence. 2004;39:279–93. [PubMed]
12.Gore SL, Aseltine RH., Jr Stress, coping resources, and gender:An ecology of protective processes in adolescence. Am J Community Psychol. 1995;23:301–27. [PubMed]