

The Prevalence and Risk Factors of Non-Communicable Diseases Among Adolescents.

Prof. Niyati Das, Prof. Amrita Lenka,
Kins, Kiit University, Bhubaneswar.

I. Introduction

The rapid rise of non communicable diseases represents one of the major challenges to global development in the coming century .Globally death from non communicable diseases are expected to climb to 49.7 million in 2020, increase of 77% in adolescent members . The World Health report identifies five important risk factors for non communicable diseases in the top ten leading risks to health. They are hypertension, raised cholesterol, tobacco use, alcohol consumption and obesity. These risk factors are common in adolescents which constitute 22.8% of the total population in India. Nearly 68% of the children of 12 to 19 years have at least one metabolic abnormality which increased significantly in the presence of overweight. A global school based student health survey conducted by the ministry of education among adolescents in the grades 8 to 10 *revealed that health issues such as* alcoholism, tobacco use and unhealthy dietary behaviors are prevalent among adolescent age school children. Habits and behaviours picked up during adolescence have lifelong impact.

II. Objectives

1. To find out the prevalence and risk factor of non-communicable diseases among adolescents in selected schools.
2. To associate the prevalence and risk factor of non-communicable diseases with selected socio demographic variables.
3. To find out the correlation between the prevalence and risk factor among adolescents in selected school.

III. Methodology

Research design-Descriptive

Setting of the study- Prabhujee English Medium School at Bhubaneswar, Odisha.

Sample & sampling technique- sample size consisted of 60 adolescent age school children. Stratified random sampling was used to collect accessible samples from 8th & 9th class students

Data collection method- using self structured rating scale to identifying the risk factors of non communicable diseases and to assess prevalence by checking the height, weight and blood pressure of each student with Criteria of BMI & blood pressure .

IV. Results

The findings of the study depicts that most of the adolescents were underweight 44(73.34%), 14(23.34%) were normal weight and 02(3.34%) were overweight & the risk factor of non communicable disease among adolescents were In dietary behavior majority of the adolescents 30(50%) moderate and low risk for non communicable diseases. In physical activities most of the adolescents 31(51.67%) are at low risk, 29(48.34%) are at moderate risk for non communicable diseases. With regard to substance abuse maximum adolescents 39(65%) are at moderate risk, 20(33.34%) are at low risk and only 01(1.67%) are at high risk for non communicable diseases. The association of risk factors of non communicable diseases with selected socio demographic variable. There is significant association of family monthly income with risk factors of non communicable diseases as calculated chi-square 11.57 is greater than the table value 7.82 however no association with other variables such as age, education of father, education of mother, type of food intake at home, residential area. . There is a low degree positive correlation between prevalence and risk factors of non communicable diseases among adolescents which is not significant.

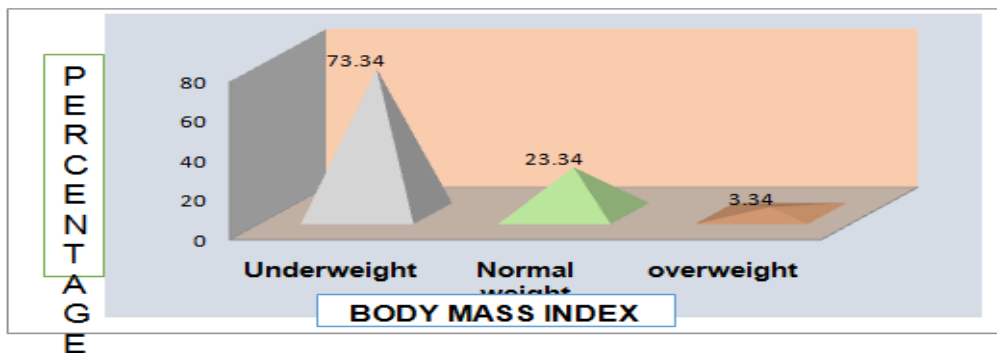


Fig.1.pyramidal diagram shows the distribution of subject according to prevalence of non communicable disease (Body mass index).

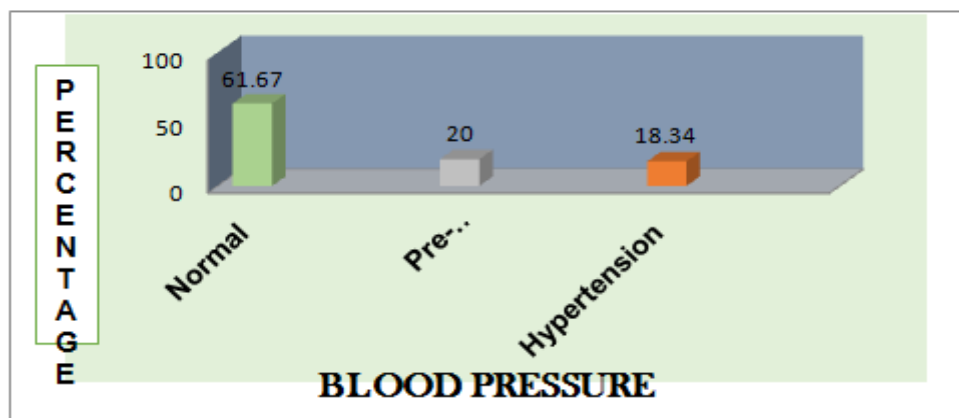


Fig -2- Bar diagram shows the distribution of subject according to prevalence of non communicable disease (Blood pressure).

Table-1: Distribution of subject according to risk factors for non communicable disease among adolescents and area wise risk factor for non communicable disease among adolescents. N

Risk factor of non-communicable disease	Dietary behaviour		Physical activities		Substance abuse	
	Frequency (f)	Percentage %	Frequency (f)	Percentage %	Frequency (f)	Percentage %
High risk	-	-	-	-	-01	1.67
Moderate risk	30	50	29	48.34	39	65
Low risk	30	50	31	51.67	20	33.34
Total	60	100	60	100	60	100

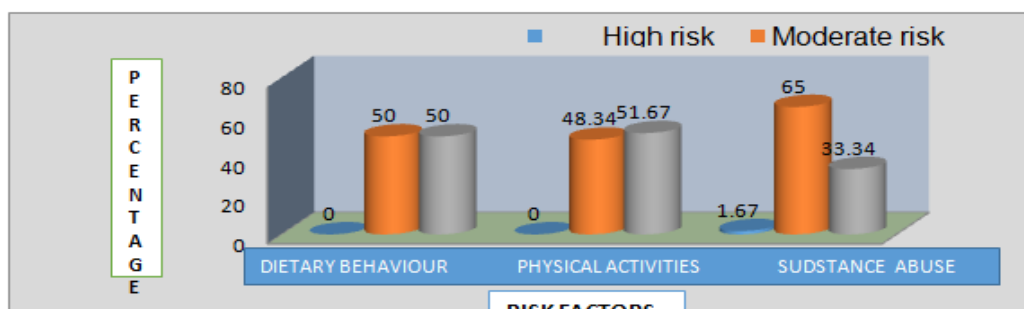


Fig3-cylindrical diagram shows distribution of subject according to area wise risk factor of non communicable disease

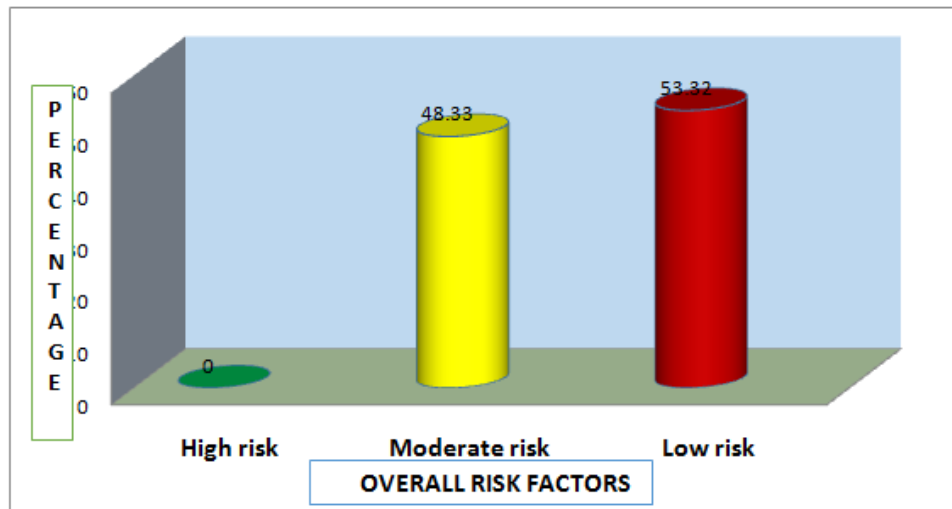


Fig-4. Pyramidal diagram shows distribution of subject according to overall risk factor of non communicable disease

Table-2: Correlation between the prevalence and risk factor of non communicable disease

Correlation between risk factor and prevalence	Mean	Mean score%	SD	CV	Coefficient of Correlation	Significance
Risk factor	60.23	66.92	5.62	9.33	0.171 Low degree positive correlation	P<0.005 level of Significance
Prevalence	16.56	47.34	3.32	20.4		

V. Conclusion

The present study shows that there is low degree positive correlation ($r= 0.17, p<0.05$) between prevalence and risk factor of non-communicable diseases among adolescents in selected school.

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