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ASSOCIATION BETWEEN BMI, PARENTAL KNOWLEDGE AND LIFESTYLE PRACTICES WITH SELECTED DEMOGRAPHIC VARIABLES AMONG OVERWEIGHT AND OBESE CHILDREN IN SELECTED SCHOOLS AT LUCKNOW, UTTAR PRADESH

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ABSTRACT:

Childhood obesity has become a worldwide phenomenon cutting across regional and economic barriers and affecting all socio-economic groups, irrespective of age, sex or ethnicity. This study is undertaken to assess the association between pre-test level of BMI, parental knowledge and lifestyle practices and selected demographic variables among overweight and obese children in selected schools at Lucknow, Uttar Pradesh. The objective for the study was to find out the association between pre-test level of BMI, parental knowledge and lifestyle practices and selected demographic variables among overweight and obese children in experimental group and control group. The study was conducted in in selected schools at Lucknow, Uttar Pradesh. A quasi experimental with control design was adopted for the study. Totally 500 school children were participated in the study on the basis of inclusion criteria. Each group consisted of 248 and 252 school children and selected by purposive sampling technique. The feasibility of the study was found out through pilot study. The data was analyzed by using descriptive and inferential statistics. The study findings revealed that, there was a significant association between pre-test level of BMI, parental Knowledge, lifestyles practices with selected demographic variables among overweight and obese children in experimental group and control group.

Keywords: *Overweigh, Obesity, BMI, lifestyle, Uttar Pradesh, Obese Children.*

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INTRODUCTION

In worldwide, 1 billion peoples affected with obesity among 650 billion adults, 340 million adolescence and 39 million children. Childhood obesity is a serious problem in developing countries, but developed country also it estimated children and adolescence were suffer with obesity.

Childhood obesity is due to imbalance between caloric intake of the child and the calories utilized. Factors causing childhood obesity are genetic, psychological factors includes depression, anxiety, self-esteem, body dissatisfaction, dieting or unhealthy weight control practices, dietary restraints suggest eating disorder symptoms like I in sugar, energy rich food and emotional problem behavioral, environmental, lifestyle like children spend most of the time in front of the television, video games and computer.

OBJECTIVE OF THE STUDY

To find out the association between pre-test level of BMI, parental knowledge and lifestyle practices and selected demographic variables among overweight and obese children in experimental group and control group.

REVIEW OF LITERATURE

The reviews were collected from various sources like books, journal, and periodicals and also electronic sources such as Medline, CINHAL, Science direct, Research gate. Nagendra.et.al conducted a cross-sectional study was carried out on prevalence of obesity among urban population of Shivamogga, Karnataka. Data was collected from house hold members aged 15 - 64 years. The calculated sample size was 2000. Subjects were interviewed using a pre-structured and pre-testedquestionnaire adopted from WHO STEPS I and II, approaches for non-communicable diseases risk factors surveillance, after modifying to suit the local requirements. The prevalence of high BMI among study subjects was nearly fifty percent (45.6%). The prevalence of obesity in the study subjects was 31.6%, the prevalence was more in females 34.9% compared to males 28. 4%. The prevalence of central/ abdominal type of obesity was 41.2%. They reported that community-based study demonstrated high prevalence of obesity and overweight among the productive population of urban Shivamogga.

Anteneh et.al conducted a study on Risk Factors of overweight and obesity among high school students in Bahir Dar City, Ethiopia was conducted by among 431 school adolescents. Results showed the magnitudes of overweight and obesity were 12.3% and 4.4% respectively, and the combined prevalence of overweight and obesity together was 16.7%. Three-fourths of the respondents (74.7%) had healthy body mass index; however, 8.6% were underweight. Sex, frequency of eating food out of home, school type, family monthly income, family having vehicle, vigorous physical activity, and frequency of vigorous physical activity were statistically significant predictors of overweight and obesity. The study concluded that several factors were correlated with overweight and obesity.

To find out the association between pre-test level of BMI, parental knowledge and lifestyle practices and selected demographic variables among overweight and obese children in experimental group.

Table – 1: Association between Pre-test BMI Level and Selected Demographic Variables among Overweight and Obese Children in Experimental Group. N = 248

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	50.706	0.00001*
2.	Sex of the Child	0.0782	0.7798
3.	Birth Order of Child	11.9116	0.0029*
4.	Number of Siblings	28.1593	0.00001*
5.	Religion	27.0012	0.00001*
6.	Father's Education	47.4598	0.00001*
7.	Mother's Education	36.8993	0.00001*
8.	Father's Occupation	32.8568	0.00001*
9.	Mother's Occupation	22.9594	0.000041*
10.	Family Monthly Income	83.7775	0.00001*
11.	Area of Living	22.6007	0.00001*
12.	Type of Family	11.3556	0.0034*

***P<0.05 level of significance**

The above Table – 1 summarized that, there was a significant association between pre-test score of BMI and selected demographic variables such as age of the child in years (χ^2=50.706), birth order of child (χ^2=11.9116),

number of siblings (χ^2=28.1593), religion (χ^2=27.0012), father's education (χ^2=247.4598), mother's education (χ^2=36.8993), father's occupation (χ^2=32.8568), mother's occupation (χ^2=22.9594), family monthly income (χ^2=83.7775), area of living (χ^2=22.6007) and type of family (χ^2=11.3556**)** except sex of the child (χ^2=0.0782) at p<0.05 level of significant in experimental group.

Table – 2: Association between Pre-test Parental Knowledge Levels and Selected Demographic Variables among Parents of Overweight and Obese Children in Experimental Group. N = 248

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	3.6264	0.3047*
2.	Sex of the Child	0.1541	0.6946
3.	Birth Order of Child	0.0499	0.9753
4.	Number of Siblings	10.3784	0.0156*
5.	Religion	5.7855	0.1225*
6.	Father's Education	0.4031	0.9396
7.	Mother's Education	1.1433	0.7666*
8.	Father's Occupation	0.3002	0.9599
9.	Mother's Occupation	0.7887	0.8521
10.	Family Monthly Income	0.1389	0.9976
11.	Area of Living	1.8575	0.3950*
12.	Type of Family	0.01	0.9950

***P<0.05 level of significance**

The above Table – 2 depicted that, there was a significant association between pre-test score of pre-test parental knowledge level and selected demographic variables such as age of the child in years (χ^2=3.6264), number of siblings (χ^2=10.3784), religion (χ^2=5.7855), mother's education (χ^2=1.1433) and area of living (χ^2=1.8575). The other demographic variables did not show in significant association between pre-test parental knowledge level and selected demographic variables at p<0.05 level of significant in experimental group.

Table – 3: Association between Pre-test Level of Lifestyle Practices and Selected Demographic Variables among Overweight and Obesity Children in Experimental Group. N = 248

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	1.2547	0.7399*
2.	Sex of the Child	1.9366	0.1640*
3.	Birth Order of Child	2.2182	0.3298*
4.	Number of Siblings	0.1009	0.9466
5.	Religion	3.4576	0.3263*
6.	Father's Education	0.5359	0.9109
7.	Mother's Education	0.2937	0.9312
8.	Father's Occupation	0.848	0.8379*
9.	Mother's Occupation	1.3108	0.7265*
10.	Family Monthly Income	1.7388	0.7836*
11.	Area of Living	0.2334	0.8898
12.	Type of Family	0.2042	0.9029

***P<0.05 level of significance**

The above Table – 3 described that, there was a significant association between pre-test score of lifestyle practices and selected demographic variables such as age of the child in years (χ^2=1.2547), sex of the child (χ^2=1.9366), birth order of child (χ^2=2.2182), religion (χ^2=3.4576), father's occupation (χ^2=0.848), mother's occupation (χ^2=1.3108), family monthly income (χ^2=1.7388) except number of siblings (χ^2=0.1009), father's education (χ^2=0.5359), mother's education (χ^2=0.2937), area of living (χ^2=0.2334) and type of family (χ^2=0.2042**)** at p<0.05 level of significant in experimental group.

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Table – 4: Association between Pre-test Level of BMI and Selected Demographic Variables among Overweight and Obesity Children in Control Group N = 252.

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	1.6378	0.6508*
2.	Sex of the Child	0.72	0.3961*
3.	Birth Order of Child	0.0004	0.9998
4.	Number of Siblings	0.0839	0.9589
5.	Religion	0.0216	0.9991
6.	Father's Education	0.9573	0.8115*
7.	Mother's Education	0.4825	0.9227
8.	Father's Occupation	0.0432	0.9976
9.	Mother's Occupation	0.1347	0.9873
10.	Family Monthly Income	0.1146	0.9984
11.	Area of Living	0.2782	0.8701
12.	Type of Family	0.6493	0.7227

***P<0.05 level of significance**

The above Table – 4 revealed that, there was a significant association between pre-test score of BMI and selected demographic variables such as age of the child in years (χ^2=1.6378), sex of the child (χ^2=0.72) and father's education (χ^2=0.9573) except birth order of child (χ^2=0.0004), number of siblings (χ^2=0.0839), religion (χ^2=0.0216), mother's education (χ^2=0.4825), father's occupation (χ^2=0.0432), mother's occupation (χ^2=0.1347), family monthly income (χ^2=0.1146), area of living (χ^2=0.2782) and type of family (χ^2=0.6493**)** at p<0.05 level of significant in control group.

Table – 5: Association between Pre-test Parental Knowledge Level and Selected Demographic Variables among Parents of Overweight and Obesity Children in Control Group. N = 252

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	0.258	0.9677
2.	Sex of the Child	0.0153	0.9016
3.	Birth Order of Child	1.215	0.5447*
4.	Number of Siblings	0.4132	0.8133
5.	Religion	0.1179	0.9896
6.	Father's Education	0.8757	0.9945
7.	Mother's Education	0.3772	0.9449
8.	Father's Occupation	0.1855	0.9798
9.	Mother's Occupation	0.1291	0.9881
10.	Family Monthly Income	0.1737	0.9881
11.	Area of Living	0.0157	0.9921
12.	Type of Family	0.1548	0.9255

***P<0.05 level of significance**

The above Table - 5 depicted that, there was no significant association between parental knowledge level and selected demographic variables among parents of overweight and obesity children such as age of the child in years (χ^2=0.258), sex of the child (χ^2=0.0153), number of siblings (χ^2=0.4132), religion (χ^2=0.1179), father's education (χ^2=0.8757) mother's education (χ^2=0.3772), father's occupation (χ^2=0.1855), mother's occupation (χ^2=0.1291), family monthly income (χ^2=0.1737), area of living (χ^2=0.0157) and type of family (χ^2=0.1548**)** except birth order of child (χ^2=1.215) at p<0.05 level of significant in control group.

Table – 6: Association between Pre-test Level of Lifestyle Practices and Selected Demographic Variables among Overweight and Obesity Children in Control Group. N = 252

S. No	Demographic variables	χ^2	P Value
1.	Age of the Child in Years	0.089	0.9931
2.	Sex of the Child	0.0206	0.8857
3.	Birth Order of Child	0.0078	0.9960
4.	Number of Siblings	0.0246	0.9877
5.	Religion	0.0949	0.9924
6.	Father's Education	0.0584	0.9963
7.	Mother's Education	0.2737	0.9649
8.	Father's Occupation	0.1897	0.9792
9.	Mother's Occupation	0.0713	0.9950
10.	Family Monthly Income	0.4094	0.9817
11.	Area of Living	0.0823	0.9596
12.	Type of Family	0.0217	0.9892

The above Table – 6 inferred that, there was no significant association between pre-test level of lifestyle practices and selected demographic variables among overweight and obesity children such as age of the child in years (χ^2=0.089), sex of the child (χ^2=0.0206), birth order of child (χ^2=0.0078), number of siblings (χ^2=0.0246), religion (χ^2=0.0949), father's education (χ^2=0.0584), mother's education (χ^2=0.2737), father's occupation (χ^2=0.1897), mother's occupation (χ^2=0.0713), family monthly income (χ^2=0.4094), area of living (χ^2=0.0823) and type of family (χ^2=0.0217**)** at p<0.05 level of significant in control group.

CONCLUSION:

The study findings revealed that, there was a significant association between pre-test level of BMI, parental Knowledge, lifestyles practices with selected demographic variables among overweight and obese children in experimental group and control group.

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