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# A study to assess the knowledge and practice of lifestyle modification in the high school children during COVID 19 pandemic in selected high schools of Bhubaneswar, Odisha

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### Abstract

**Background:** The sudden outbreak of covid 19 pandemic affected the whole world, among which the most vulnerable were the children, specifically the school going children aged from 12 to 18. It is very necessary for the students to adapt the situation and gain adequate knowledge to apply all the required practices that are needed for avoiding the corona virus effect. The main motif of the research is to assess the awareness regarding the covid 19 pandemic and its effects on the lifestyle of the students.

**Methodology:** A total of 300 students from different high schools of Bhubaneswar aged from 12 to 18 were selected for this Quantitative, Non-experimental research study. It was a descriptive survey design. The sample technique used was Purposive sampling technique. The tools used in this study are Demographic questionnaires, Knowledge of lifestyle modification questionnaire, Practice of lifestyle modification questionnaires.

**Result:** In our study of 300 study samples aged from 12 to 18 years children 92.6% had good knowledge, 6.6% had average knowledge and 0.66% had poor knowledge regarding the lifestyle Modification adopted during covid-19. In the study sample of 300 children of the specific age group given above, 93% had adopted good practice and 7% had average practice regarding the lifestyle modification during covid-19 pandemic. There is no association between knowledge and practice with socio demographic variables.

**Conclusion:** The findings of the present study implies that the knowledge of the high school children is good as well as the practice related to lifestyle modification is also very good and shows a positive sign towards the prevention of covid 19.

Keywords: Knowledge, practice, lifestyle modification, high school children, covid 19 pandemic

### Introduction

COVID-19 is a recently discovered infectious corona virus that spreads from one person to another through droplets. Due to crisis of COVID 19 students all over the country have to disconnect from their education for a longer span of time. To prepare school students, the education system must relate to the theory with skill labs. The goal of the current study is to assess the awareness the students have regarding the covid 19 pandemic and its effects on the lifestyle of the students. This lifestyle modification effects on various socio demographic variables, the knowledge and the practice based on the knowledge.

# **Background of the study**

Lifestyle of a school going child was very much normal, School has always been a challenging period for the children where they are always mentally and physically active and enthusiastic to learn new things and gain knowledge from various sources, dietary pattern and living environments that a child chooses and manifests in their daily life of children are exposed to new ideas but as the outbreak. Due to COVID-19, a pandemic of acute respiratory syndrome in humans (SARS-CoV-2) led to the social isolation globally for a loner span of time as a precautionary step to save humans schools were closed as a result they were captivated into their homes (Castagnoli R &Votto M). It made a massive change in their lifestyle.

There is a study in adolescents have shown that sleep duration, screen time, and physical activity level affected the health-related quality of life, and those with lower screen time and moderate physical activity /sedentary behaviour had the greatest health related quality of life (Ulrika R. Seiberer and Anne K.) There is concern regarding the impact of COVID-19 pandemic and the lockdown on dietary habits, physical activity, sleep duration of young children and adolescents aged from (12 to 18years).

# Need of the study

In India the majority of governments first decided to temporarily close the schools order to mitigate the consequences of Covid-19. After being closed again, it was later reopened for a few grades, which increased the infection rates. Students are still attending classes despite the fact that schools are closed, thanks to initiatives like radio broadcasts and online courses. Teachers are actually new to this digital teaching. It's crucial to recognize that the literacy rate of most if the Indian parents are very low and they feel powerless. It's vital to convince them to encourage their children's education. There are students in India who only go to school to get food. The outstanding midday meal programme has helped many children who were unable to carry food from home to be nourished. Due to the closure of the schools, many pupils were suffering from a lack of access to enough food for their survival as written by Natasha D.in TOI. The Director of National Health Mission (NHM) in Odisha has suggested a plan to allow social welfare workers to go door-to-door and test people for COVID-19 symptoms in order to place more emphasis on testing. The plan would be put into action in both rural and urban slum regions.

# Objectives of the study

- 1. To assess the knowledge and practice of lifestyle modification in school going children.
- To find out the association between knowledge and practice of lifestyle modifications with selected demographic variables.

# Methodology

Quantitative research approach was adopted nonexperimental descriptive survey research design was used. Sample size comprised of 300 High school students of selected schools of Bhubaneswar city. Purposive sampling technique was adopted. Reliability of the tool was 0.7 using Cronbach's alpha method. A Self-Structured questionnaire regarding Demographic Questionnaires, knowledge and practice-based questionnaires was used. The tool comprised of III sections. Section one encompassed of demographic characteristics of the sample which included following parameters like age, gender, religion, education, type of family, Class, Religion, Residence, Number of siblings family income, Mothers occupation, Fathers occupation, Body type etc. Section II is of self-structured questionnaire on knowledge based lifestyle modification among the school going children. In this questionnaire 30questions are there which have 4 options A, B, C, D. The scores are 1 for correct answer and 0 for wrong answers accordingly. The maximum score of the tool was 30.

# The Knowledge levels are divided into 3 categories

- 1. >10 Poor knowledge
- 2. 11-20 Average knowledge
- 3. 21-30 Good knowledge

Section III was of structured questionnaire on practice based lifestyle modification among the school children. In this questionnaire 20 questions are there which have two options "Yes" or "No". YES scored with 1 marks and NO scored with 0 marks.

# The practice levels are divided into 3 categories

- 1. <6 Poor practice
- 2. 7 -14 Morderate practice
- 3. 15 -20 Good practice

# Result

### Section I: Distribution of demographic variables

**Table 1:** Frequency and percentage distribution of socio-demographic variables N=300

Sl. No.	Demographic Variable	Frequency	Percentage		
	Age group of students				
1.	a) 12-13	90	30		
	b) 14-15	123	41		
1.	c) 16-17	70	23.3		
	d) 7-18	17	5.6		
	Gender				
2.	a) Male	39	42.3		
	b) Female	195	57.6		
	Class in which you study				
2	a) 7-8	100	33.3		
3.	b) 9-10	116	38.6		
	c) 11-12	82	27.3		
	Family Type				
4.	a) Nuclear	180	60		
4.	b) joint	108	36		
	c) Extended	12	4		
	Religion				
5.	a) Hindu	244	81.3		
	b) Muslim	25	8.3		
	c) Christian	19	6.3		
	d) Others	12	4		
6.	Residential location				

	a) Urban	156	52			
	b) Rural	144	48			
	Number of siblings					
7.	a) 0	70	23.3			
	b) 1	140	46.6			
	c) 2	66	22			
	d) 3 or more	24	8			
	Father's Occupation					
8.	a) Unemployed	28	9.3			
	b) Private Job	85	28.3			
	c) Govt. Job	74	24.6			
	d) Business	113	37.6			
	Mother's Occupation					
	a) Housewife	201	67			
9.	b) Private Job	56	18.6			
	c) Govt. Job	21	7			
	d) Business	22	7.3			
	Family Income/Month					
	a) 10,000-15,000	46	15.3			
10.	b) 16,000-20,000	54	18			
	c) 21,000-25,000	80	26.6			
	d) Above 25,000	120	40			
	Type of body					
	a) Thin	88	29.3			
11.	b) Average	148	49.3			
	c) Fat	48	16			
	d) Obese	16	5.3			

Section-B: Description of the study samples according to the Knowledge Level.

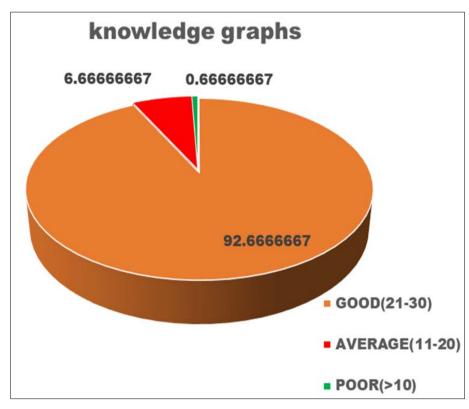


Fig 1: Distribution of knowledge regarding life style modification during covid 19. N=300

This pie diagram 5.2 shows that 92.6% of the study sample have good knowledge, 6.6% have average and 0.6% have

poor knowledge regarding the life style modifications during covid 19.

Section-C: Description of the study samples according to the Practice Score.



Fig 2: Distribution of the life style modifications in practice among high school children during covid. N=300

This bar diagram 1 shows that 93% of the study sample have good life style practices, 7% of the study sample have average life style practice during covid 19.

Section-D: Association between knowledge and practice regarding Lifestyle modification with selected sociodemographic variables.

**Table 2:** Knowledge with socio-demographic variables N=300

Demographic variables	Chi-square	DF	P-value
Age	4.171	3	0.244
Gender	0.15	2	0.928
Class	3.845	5	0.572
Family type	1.766	3	0.622
Religion	1.79	3	0.617
Residence	0.581	3	0.901
Siblings	4.115	3	0.249
Occupation of Father	2.391	3	0.495
Occupation of Mother	2.688	3	0.442
Family income	5.452	3	0.142
Body type	1.827	3	0.609

<sup>\*\*</sup> Association is significant to the 0.05 level.

This table reveals that age, gender, class, residence, siblings, religion, type of family, occupation of father, mother, body type and family income are not statistically significant with the level of knowledge.

**Table 3:** Practice with socio-demographic variable N=300

Demographic variables	Chi-square	DF	P-value
Age	5.547	3	0.136
Gender	0.29	2	0.865
Class	6.214	5	0.286
Family type	1.353	3	0.717
Religion	0.52	3	0.915
Residence	1.091	3	0.779
Siblings	5.719	3	0.126
Occupation of Father	4.079	3	0.253
Occupation of Mother	3.557	3	0.313
Family income	2.594	3	0.459
Body type	1.593	3	0.661

<sup>\*\*</sup> Association is significant at the 0.05 level.

This table reveals that age, gender, class, residence, siblings,

religion, type of family, occupation of father, mother, body type and family income are not statistically significant with the level of practice.

### Discussion

The present study was conducted to assess the knowledge and practice of lifestyle modification in the high school children during covid 19 pandemic in selected high schools of Bhubaneswar, Odisha. The findings of the study depicted that majority 92.6% students have good, 6.6% student have average, 0.6% students are poor knowledge episodically. As well as in the practice graph we can see the majority 93% have good, 7% have average snf 0% have poor lifestyle practice regarding the pandemic. Michael Amurtiya, Ariyo Oludare et al in (21 Dec. 2021) on Nigeria Conducted a research on Socio-demographic determinants of children home learning experiences during COVID 19 school closure. During the COVID 19, there were questions about how inclusive learning would be for kids living in nations with few technological resources. Participants' average ages only 10.6% of those in the survey were single parents, compared to married parents making up the majority (89.4%). Despite the fact that all of Nigeria's geopolitical areas were represented, the participants were distributed unevenly among them. Few research participants came from the other four regions of the country, with the majority of participants coming from the south west (40.11%) and north east (33.5%). The study's findings indicate that while 42.1% of participants engaged their kids in several learning activities, 14.7% of study participants' kids didn't participate in any. Only 29.7% of the participants, however, claimed that their kids completed or attended to all of the required schoolwork or assignments that were sent to them during the lock down. This is due to the fact that 49.5% of study participants said their kids' only activity at home was using the Whatsapp learning package.

Katherine Campbell, Rachel Weingart, Jasleen Ashta *et al.*, Georgia (March 2020) COVID-19 Knowledge and Behavior Change among High School Students in Semi-Rural Georgia. As a result of the COVID-19 pandemic, several schools switched to an online curriculum to slow viral spread and encourage social isolation. Teenagers' health behaviors and coping mechanisms, such as less physical exercise and more screen time, may be impacted by remote

learning. The purpose of this study is to evaluate adolescents' knowledge of and information on COVID-19, to ascertain how students' behaviors have changed, and to pinpoint the sources that students use to learn about the pandemic. Peers (80%) and social media (58%) were frequently used sources for COVID-19 news. A small percentage of teenagers (3%) said that COVID-19 increased the risk of severe illness in teenagers. Teenagers understand social distance, according to responses, and many of them engage in preventative activities, such as handwashing (87%) and remaining at home as much as feasible (87%). Eighty-two percent of respondents said their screen time outside of class has increased.

## Conclusion

The study concludes that the knowledge of the high school children is good as well as the practice related to lifestyle modification is also very good and shows a positive sign towards the prevention of covid 19. The finding of the present study implies that the knowledge and practice need to be modified because of the condition during covid-19.it is the only way to prevent the pandemic.

# **Conflict of Interest**

Not available

# **Financial Support**

Not available

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