



## Knowledge and Attitude Regarding Prevention of Covid-19 Among the Adolescents of Selected Areas in West Bengal, India

Divyanka<sup>1</sup>, S. Bhaktiswarupa<sup>2\*</sup>, Saheli Saha<sup>3</sup>, Smita Manna<sup>4</sup>, Nibedita Sau<sup>5</sup>, Pallavi Hazra<sup>6</sup>, Swarnaprava Samal<sup>7</sup>

<sup>1,3,4,5,6,7</sup>Kalinga Institute of Nursing Sciences, KIIT Deemed To Be University, Odisha, India

<sup>2</sup>Dept of Child Health Nursing, Kalinga Institute of Nursing Sciences, KIIT Deemed To Be University, Odisha, India

\*Corresponding Author: [sbswarupa@gmail.com](mailto:sbswarupa@gmail.com), Tel.: 919438785713

Available online at: [www.isroset.org](http://www.isroset.org)

Received: 24/Jul/2021, Accepted: 17/Aug/2021, Online: 31/Aug/2021

**Abstract**—A novel coronavirus (nCoV) is a new strain which was not been seen in humans. Extraordinary measures have been taken to control the rapid spread of the emerging pandemic COVID-19 in India. . People's cohesion towards preventive measures is contrived by their knowledge and attitudes which helps to change in behavior towards preventing COVID-19. In this study, we investigated Indian adolescents knowledge and attitude towards prevention of COVID-19 during the rapid rise period of the outbreak. An online study was successfully conducted among adolescents was by the authors' social media platform West Bengal, Kolkata, India. A self-constructed online questionnaires and attitude scale was being completed by the respondents. The knowledge questions were regarding the manifestations and preventive measures of COVID-19. Assessments on adolescents' attitudes towards COVID-19 included 6 questions on beliefs in overcoming the war against COVID-19 and wearing masks during outing. Among the respondents majority i.e. 80% of adolescents were the 16 – 19 years of age and most of the adolescents were male i.e. 56.7%, Maximum of the adolescents (66.6%) were studying in intermediate (11-12). Maximum (98.33%) of the adolescents belongs to the Hindu families. (78.3%) of the adolescents were lives in urban area Most of the adolescents are belongs to the nuclear family (71.7%) and source of health information 51.7% through mass media. The levels of knowledge among adolescents who were in the selected area of Kolkata shows that adequate knowledge is 83.3% and inadequate knowledge is 16.7% about the knowledge regarding the prevention of COVID-19. The findings revealed that positive attitude is 78.3% and negative attitude is 21.7% about the attitude regarding the prevention of COVID-19. In order to educate the adolescents in the pandemic outbreak time health education programs through various platforms enhance at development of knowledge on prevention of COVID-19 are helpful for adolescents to uphold optimistic attitudes which will make the appropriate practices

**Keywords**— Knowledge, Attitude, Adolescents, Prevention, COVID-19

### I. INTRODUCTION

The COVID-19 has overcome geographical barriers achieving a remarkable proliferation. A variety of reactions has raised among the population because of this critical condition, creating anguish, and massive fear<sup>1</sup>. In addition, it should be noted that the concern is mainly present in the unaffected population<sup>2</sup>. A novel coronavirus is a new coronavirus that has not been previously identified. The virus causing coronavirus disease 2019 (COVID-19), is not the same as the coronaviruses that commonly circulate among humans and cause mild illness, like the common cold.<sup>3</sup>

On 11 March 2020, WHO changed the status of the COVID-19 emergency from public health **INTERNATIONAL EMERGENCY** (30th January 2020) to a pandemic. In India, a confirmed case of COVID-19 was reported on 30<sup>th</sup> January 2020, who was a student traveled from Wuhan, China, and has successfully recovered from the infection on 14th February 2020.<sup>4</sup>A

study was conducted a quick online study on knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a cross-sectional survey one of the first studies analyzing attitudes and knowledge about COVID-19 concluded that attitudes towards government measures to contain the epidemic were highly associated with the level of knowledge about COVID-19. Perception of risk is also a key factor in commitment to prevention during outbreaks of global epidemics.<sup>5</sup> Therefore, we conducted a questionnaires and attitude based survey to scrutinize the knowledge and attitude of adolescents on prevention of COVID-19 during the outbreak of the COVID-19 in the selected area

The main aim of the study was

- ✓ To explore the knowledge and attitude of adolescents on prevention of COVID-19
- ✓ To find out the association between knowledge and selected demographic variables

## II. RELATED WORK

Saudi Arabia has taken unprecedented and stringent preventive and precautionary measures against COVID-19 to control its spread, safeguard citizens and ensure their well-being. This study investigated the knowledge, attitudes, and practices of the Saudi public toward COVID-19, during the pandemic. This is a cross-sectional study, using data collected via an online self-reported questionnaire, from 3388 participants. The majority of the study participants were knowledgeable about COVID-19. The mean COVID-19 knowledge score was 17.96, indicating a high level of knowledge. The mean score for attitude was 28.23, indicating optimistic attitudes. The mean score for practices was 4.34, indicating good practices. The results showed that men have less knowledge, less optimistic attitudes and less good practice towards COVID-19, than women. [4]

## III. METHODOLOGY

Quantitative approach with a cross sectional design was being adopted for the study.

Sample recruited for the study were adolescents of total 120 adolescents aged 12-19 years by using Convenience Sampling Technique at Hridaypur in North 24 Pargana, Kolkata West Bengal, India from May 3<sup>rd</sup> 2020 to May 10<sup>th</sup> 2020.

### Inclusion criteria-

Adolescent (both male & female) who were between the age 12 to 19 years old

Adolescent who could read, write and understand English,  
Adolescent whose parents had given the consent to participate in the study.

Children present during data collection period.

### Exclusion criteria--

Adolescents <12 and >19 years of selected areas and those who are critically ill & mentally retarded.

Self-developed online Questionnaires was designed through the Google survey tool and the generated link was shared on social media platforms were prepared for assessing the knowledge, attitude of adolescent regarding prevention of COVID-19. Section **A** consists of Socio demographic data, Section **B** comprises of knowledge section consisted of 8 items of a and each question was responded as "Yes", "No" and "Don't know". The correct answer was coded as 1, while the wrong answer was coded as 0. The total score ranged from 0-8, with an overall greater score indicates more accurate knowledge. A cut off level of  $\geq 6$  was set for more accurate knowledge. Section consist of attitude section having 6 items, and the response of each item was responded on a 3-point Likert scale as follows 0 ("Disagree"), 1 ("I don't know"), and 2 ("Agree").

## IV. RESULTS AND DISCUSSION

The majority i.e. 80% of adolescents were the 16 – 19 years of age and most of the adolescents were male

i.e. 56.7%, Maximum of the adolescents (66.6%) were studying in intermediate (11-12). Maximum (98.33%) of the adolescents belongs to the Hindu families. (78.3%) of the adolescents were lives in urban area Most of the adolescents are belongs to the nuclear family (71.7%) and source of health information 51.7% through mass media .

TABLE-1 Scoring about knowledge

Knowledge	Frequency	Percentage
Adequate	99.96	83.3%
Inadequate	20.04	16.7%

In table-1 reveals, the knowledge regarding the prevention of COVID-19 among adolescent that 83.3% of adolescents have adequate knowledge and 16.7% of adolescent have inadequate knowledge.

TABLE- 2 Scoring about attitude

Attitude	Frequency	Percentage
Positive Attitude	93.96	78.3%
Negative Attitude	26.04	21.7%

Table-2 describes the assessment of attitude regarding the prevention of COVID-19 among adolescent is 78.3% of adolescent have positive attitude which is the highest frequency 93.96, 21.7% of adolescent have negative attitude having lowest frequency 26.04

The levels of knowledge shows that adequate knowledge is 83.3% and inadequate knowledge is 16.7% about the knowledge regarding the prevention of COVID-19 with mean value 1.17 and SD 0.374. The findings revealed regarding attitude revealed that , positive attitude is 78.3% and negative attitude is 21.7% regarding the prevention of covid19 with mean value 1.22 and SD 0.414.

The findings of this study may be useful when planning health education programs about this emerging infectious disease in the near future.

Most of the responses addressed by the participants were: negligence about the severity of the disease, reluctance to use masks, not being able to stop going out of the house. However, the results of our study revealed different preventive measures were reported by participants.

## V. CONCLUSION and Future Scope

To improve the knowledge, attitudes, and practices of general populations are crucial during the rapid rise period of the COVID-19 outbreak. Therefore, health education programs aimed at improving COVID-19 knowledge are helpful for adolescents to hold optimistic attitudes and maintain appropriate practices. Nevertheless, other effective initiatives taken by the publics to protect their family members were: temporarily prohibit outside people coming inside the home, arrange for hand washing with soap inside or outside the home and wearing masks. The findings may help policymakers identify the target populations, for COVID-19 prevention and health education.

## REFERENCES

- [1]. Roy D, Tripathy S, Kar SK, Sharma N, Verma SK, Kaushal V. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian J Psychiatr.* **2020.**
- [2]. Ilesanmi O, Alele FO. Knowledge, Attitude and Perception of Ebola Virus Disease among Secondary School Students in Ondo State, Nigeria, **October, 2014.**
- [3]. <https://www.cdc.gov/coronavirus/2019-ncov/cdcreponse/about-COVID-19.html>
- [4]. Malik YS, Sircar S, Bhat S, Vinodhkumar OR, Tiwari R, Sah R, et al. Emerging coronavirus disease (COVID-19), a pandemic public health emergency with animal linkages: Current status update **2020.**
- [5]. B. S. Isaac, D. R. Bharathi, N. Priyanka and J. John, "A Study on Management of Stroke in a Tertiary Care Hospital," *International Journal of Scientific Research in Multidisciplinary Studies*, **vol. 5, no. 1, pp. 26-41, 2019.**

## AUTHORS PROFILE

Ms S. Bhaktiswarupa currently working as an Assistant professor in Department of Child Health Nursing, Kalinga Institute of Nursing Sciences, KIIT Deemed to Be University. She pursued MSc Nursing in Child Health Nursing from SOA University in 2014 and BSc Nursing from Utkal University 2009. She is a TNAI member since 2011, member of SOMI since 2013 and NRSI since 2018 and. She has published more than 7 research papers in reputed international journals and presented paper in conferences including IANN and various online platform. Her main research work focuses on neonatal and paediatric nursing. She has 8 years of teaching and research experience and 2 years of clinical experience.

