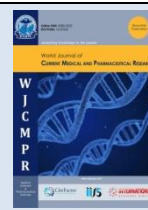




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KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING COVID-19 AMONG UNDER GRADUATES OF PASCHIM MEDINIPUR, WEST BENGAL

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Article History	Abstract
Received on: 24-10-2023 Revised on: 06-11-2023 Accepted on: 10-12-2023	<p>Background: Corona Virus Disease 2019 (Covid-19) is a communicable disease that can be fatal to those who contract with the disease. Lack of sufficient knowledge, negative attitude, and unsafe practises, all lead to spread the disease. Therefore, the researchers have aimed to measure the knowledge, attitude and practice regarding the Covid-19 among the undergraduates. Undergraduate students are the future concern of society; those who are able to aware whole community. So, they should be aware of the disease to prevent its transmission in society.</p> <p>Methods: A descriptive survey method was used for the study. Random sampling technique was preferred to draw out samples for the study from Undergraduates population of Paschim Medinipur district, West Bengal. A Knowledge, Attitude and Practice (KAP) tool regarding Covid-19 has administered for data collection among 615 participants of Paschim Medinipur.</p> <p>Results: The result showed that, overall mean score of Covid-19 knowledge, attitude and practice was 14.09, 50.79 and 8.74 respectively, that's indicating moderate level of knowledge, high level of attitude and good practice regarding Covid-19. There are significant differences between male and female, rural and urban in knowledge section. In case of attitude section, there are significant differences between rural and urban undergraduate students. There are also significant differences between male and female undergraduate students in practice section.</p> <p>Conclusion: This study concluded that UG students in Paschim Medinipur district have moderate knowledge, positive attitude and sound practice regarding Covid-19. Continuous awareness is more important to UG students, especially male students for the prevention of Covid-19.</p> <p>Keywords: Attitude, Covid-19, Knowledge, Practice.</p>



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Introduction

Health is wealth [1]. If our health is good, we can use this resource properly. We can maintain good health if we know about health education. Health education works to enhance knowledge, attitude and skills to positively influence health behaviours of individual and communities [2]. Health education is a process that aims to create awareness about health and various health issues. Coronavirus disease (Covid-19) is one of the health issues of the 21st century. This virus created a new pandemic situation all over the world [3]. Covid-

19 has caused serious illness and numerous deaths [4]. It (Covid-19) was first identified in Wuhan, China on December 31, 2019 [5]. Officially identified the novel coronavirus SARS-Cov-2 as the cause of the Covid-19 on January 9, 2020 [6], and the World Health Organisation (WHO) announced coronavirus disease as a pandemic on March 11, 2020 [7, 8]. Severe acute respiratory syndrome coronavirus is the cause of emerging respiratory novel coronavirus disease (Covid-19) [9]. More specifically, all of these symptoms are broken down into three groups: the most normal signs and symptoms (which include fever, cough that is dry, and tiredness), less prevalent signs and symptoms (such as aches and pains, conjunctivitis, sore throat, diarrhea, migraines, absence of taste or smell, a rash on the skin, and discoloration of fingers and toes), and the serious signs and symptoms (such as breathing problems or shortness of breath, chest pain or pressure, and loss of speech [10]. Symptoms can be realized within fourteen days after infection [11, 12]. The virus can also be transmitted asymptotically [13].

The disease is characterised by rapid transmission [6]. Covid-19 can be transmitted directly through human-to-human contact or directly with contaminated objects [13]. Several reports indicated that human transmission of Covid-19 has happened via a variety of channels, including the eyes, nose, and mouth, and mostly through person-to-person contact by sneezing, coughing, inhalation, and other means [10]. The coronavirus disease (Covid-19) has spread around the world at an unprecedented speed [14]. According to WHO, the total number of Covid-19 confirmed cases worldwide is 77 crore, of which death 69.5 lakhs people and nine thousand seven hundred eighty seven cases are active now up to 4th September, 2023 [8]. In India, a confirmed case of Covid-19 was reported on 30th January 2020, who was a student travelled from Wuhan, China [15]. On 4th September 2023, the Ministry of Health and Family Welfare confirmed a total cases are 4.49 crore, death five (5) lakhs and active cases are two hundred thirty one in India [16]. Whereas overall infected cases in West Bengal are 21 lakhs, death 21 thousand and active cases is six (6) up to January, 2023 according to Health and family welfare department of West Bengal [17]. The West Bengal Ministry of Health and Family Welfare on 5th march 2022 confirmed, in Paschim Medinipur district total number of Covid-19 cases are 62,678 and death are 530 [17].

The Paschim Medinipur district is the second largest district in the state in terms of geographical area [18] and Covid-19 is a communicable disease. Therefore, all individuals need to have proper knowledge, positive attitude, and good practices about Covid-19 for prevention. University students are a unique subsection of the student group that have greater liberty and urgent requirements to live independently but lack life experience [19]. University students' active participation on social media platforms could significantly influence the spread of a pandemic due to their perceptions and behaviours [20]. Students' poor understanding of Covid-19 can contribute to an increase in the number of Covid-19 cases [21]. Future concern of society is undergraduate students; those who are can be to aware whole society. In order to stop the spread of the disease in society, they need to be informed about it. Understanding the current level of knowledge, attitude and practice of a population would help provide a better insight to address gaps in preventive strategies and health promotion programs [22, 23]. For these reason, there is a requirement for developing proper knowledge, attitude and appropriate habit of practice among students [24]. Therefore, the purpose of this study is to assess undergraduate students' knowledge, attitudes and practice regarding Covid-19.

Objectives of the study

The following are the objectives of the study –

1. To find out the knowledge, attitude and practice of the undergraduate students regarding Covid-19 of Paschim Medinipur district, West Bengal.
2. To compare the mean of knowledge, attitudes and practices regarding Covid-19 between male undergraduates and female undergraduates.

Hypothesis

Following hypothesis was framed:

H₁- There is a significant difference between rural and urban undergraduate students', knowledge regarding Covid-19 in Paschim Medinipur, West Bengal.

H₂- There is a significant difference between male and female undergraduate students'

knowledge regarding Covid-19 in Paschim Medinipur, West Bengal.

H₃- There is a significant difference between rural and urban undergraduate students' attitude

towards Covid-19 in Paschim Medinipur, West Bengal.

H₄- There is a significant difference between male and female undergraduate students'

attitude towards Covid-19 in Paschim Medinipur, West Bengal.

H₅- There is a significant difference between rural and urban undergraduate students' practice

regarding Covid-19 in Paschim Medinipur, West Bengal.

H₆- There is a significant difference between male and female undergraduate students'

practice regarding Covid-19 in Paschim Medinipur, West Bengal.

Methodology

Design

A descriptive survey method was preferred for fulfil this study [25]. Descriptive or normative survey research is the research having a focus on exploring what exists normally in a particular situation by resorting to survey techniques and then describe it through research report [26].

Participants

The population for this study consisted of undergraduate from Paschim Medinipur District in West Bengal, India. Simple random sampling was used to obtain a diverse pool of respondents. Simple random sampling refers to that technique in which each and every unit of population has equal opportunity of being selected as a sample [27]. Data was collected from 615 undergraduate students who are selected as samples.

Data Collection Procedure

The researcher himself collected data from each participant over a time period of 19th September, 2022, to 13th April, 2023. Participants were given the questionnaire with instructions to thoroughly read it before inputting their responses in the boxes following each statement [28].

Instrument used

A standardized scale about knowledge, attitude and practice regarding Covid-19 was used for the present study [12]. Person's product movement method was used to find out the co-relation between two tests for reliability test [29]. The reliability of this scales are 0.89, 0.83, and 0.78 for knowledge, attitude and practice section respectively. The knowledge section have 19 items that divided into five dimension, viz. general concept, transmission, prognosis and indication, prevention and awareness, treatment. The knowledge items have a summative grade of three point Likert type scales [30]. Whereas, attitude section have 19 items that divided into four dimension, viz. transmission, prevention, treatment and

counselling, awareness. Each statement in the attitude section was scored using a three-point Likert-type summative rating scale [30]. In case of practice section, eleven (11) items retained without any dimension. In the practice scale there are two alternative options like 'yes' and 'no' [24].

Statistical analysis

Descriptive statistics like, mean and standard deviation (SD) was used for data presentation. Inferential statistics 't' test was used for hypothesis test.

Results

The knowledge section of the tool consists of 19 items. The total score on the entire knowledge test of 19 items describes the position of an individual's knowledge about Covid-19. Theoretically, the score may vary from 0 to 19. So, the cutting point of favourableness or unfavourableness is 9.5. In the present study, the overall mean score of undergraduate students' knowledge regarding Covid-19 is 14.09 (shown in table 1). That indicates undergraduate students have moderate level of knowledge regarding Covid-19. Similarly, the attitude section score may vary from 19 to 57. So, the cutting point of favourableness or unfavourableness is 38. The overall mean score for attitude was 50.79, indicating a high level of attitude (shown in table 1). The practice section of the tool had 11 items, and every individual's score may vary from 0 to 11. So, the cutting point of favourableness or unfavourableness is 5.5. The overall mean score of undergraduate students regarding practice was 8.74, indicating good practice regarding Covid-19 (shown in table 1).

Table-1: Overall mean score of undergraduate students of Paschim Medinipur district regarding knowledge, attitude and practice about Covid-19.

Variables	Mean	S.D
Knowledge	14.09	2.99
Attitude	50.79	5.49
Practice	8.74	1.72

No. of Sample= 615

Hypothesis H_1 and H_2 't' values regarding knowledge about Covid-19 on the basis of location and gender are $3.570 > 0.01$ and $5.494 > 0.01$ level respectively (shown in table 2), which indicates that there are significant differences between male and female, rural and urban, in the knowledge section regarding Covid-19.

Table 2 shows that H_3 and H_4 present the 't' value towards attitude about Covid-19 on the basis of location and gender. The H_3 and H_4 't' values are $2.58 > 0.01$ and $1.90 < 0.01$ levels, which indicate a significant difference between rural and urban undergraduate students, and there is no significant difference between male and female undergraduate students' attitudes towards Covid-19.

Table -2: Comparison between different groups of undergraduate students of Paschim Medinipur district regarding knowledge, attitude and practice about Covid-19.

Variables	Hypothesis	Categories	Samples	Mean	σ	df	t	p
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Knowledge	H_1	Rural	397	13.78	3.07	613	3.570*	0.000
		Urban	218	14.67	2.76			
	H_2	Male	294	14.77	2.29	613	5.494*	0.000
		Female	321	13.47	3.40			
Attitude	H_3	Rural	397	50.41	5.53	613	2.58**	0.011
		Urban	218	51.47	5.35			
	H_4	Male	294	50.35	5.39	613	1.900	0.020
		Female	321	51.19	5.55			
Practice	H_5	Rural	397	8.71	1.86	613	0.634	0.263
		Urban	218	8.80	1.46			
	H_6	Male	294	8.45	1.86	613	4.139*	0.000
		Female	321	9.02	1.55			

**Significant at 0.01 level; * Significant at 0.05 level

Hypothesis H_5 and H_6 (shown in Table 2) 't' values regarding the practice of Covid-19 on the basis of location and gender are $0.634 < 0.01$ and $4.139 > 0.01$ respectively, which indicates that there is no significant difference between rural and urban undergraduate student practice regarding Covid-19. However, with gender variation, there is a significant difference between male and female undergraduate students' practices regarding Covid-19

Discussion

Location variations of the undergraduate students affect their knowledge about Covid-19. The rural group of undergraduate students have lower level of knowledge on Covid-19 than urban group of undergraduate student's level of knowledge on Covid-19 (Shows in table 2). Rural residents and older persons with unskilled employment have poor knowledge due to limited access of internet and proper health related resources [31]. Gender variation of undergraduate students affects their knowledge about Covid-19. The male group of undergraduate students have knowledge better than female group of undergraduate students (Shows in table 2). The odd of poor knowledge regarding Covid-19 was 2.9- times more likely in

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females than male participants [8], that supports with our result. Females may have less time to read and expand their knowledge due to their daily activities like cooking, washing, and home preparation [32].

In hypothesis H₃ in table 2 showing difference attitude between rural and urban group of undergraduate students of Paschim Medinipur district. It was determined that the comparison of the attitude score means across all location (Rural and Urban) was statistically significant. Most of the demographic characteristics showed significant difference in the treatment-seeking attitude score expect by residency status [33] that is similar with the present study. Gender variation (Male and Female) of undergraduate have no difference their attitude towards Covid-19.

Location variation of undergraduate students no affects their practice regarding Covid-19. People living in urban areas showed good practice score but were not statistically significant [33] that is support with our study. In hypothesis H₆ is (Shows in table 2) showing comparison between male and female group of undergraduate students about practice towards Covid-19. The male group of undergraduate students have poor practice towards Covid-19 then female group of undergraduate students and this result is similar to the studies of Maheshwari, *et. al.*, in 2022 [4]. Another studies reported that, a significantly high Covid-19 related practice score among the females [33].

This study has a few limitations. First, some colleges have given no permission for data collection from their students. Secondly, researchers can't collect data from some colleges in different parts of Paschim Medinipur district in West Bengal due to time limitations and labour.

Conclusion

Across the world, the coronavirus disease 2019 (Covid-19) is a major health concern in the 21st century. Accurate information regarding Covid-19 is essential to reduce the rapid spread, even a moderate level of knowledge would not be sufficient as sometimes it will be precarious [34]. The result of the present study indicates undergraduate students have moderate level of understanding, helpful attitude, and sound behaviour regarding Covid-19. Knowledge of the disease is recognized to be the initial phase in implementing any health education program [35]. Therefore, undergraduate students need to know more about Covid-19 and be aware them. Continuous awareness of preventative behaviours should be disseminated regularly in emergencies [36].

Implications

Based on the result of the present study, all educational institutions and governments should be more aware of Covid-19. The implication suggesting various approaches to enhance KAP to moderate the spread of Covid-19 among the student were recommended to aid the higher educational institutions [34]. This research will be helpful for educational planner, administrator, academic counsellor, etc. for providing proper guidance to the adolescence students [37]. All educational institutions and governments should emphasise health education to raise health awareness and address various health-related issues.

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