

Knowledge, attitude and practice regarding prevention of Covid 19 among school team

Asmaa Mohamed Badawy¹, Aziza Mahmood², & Amel Abd Elaziem³

¹Bachelor of Nursing, Faculty of Nursing, Sohag University

²Assistant Professor of Community Health Nursing, Faculty of Nursing, Beni-Suef University

³Assistant Professor of Community Health Nursing, Faculty of Nursing, Beni-Suef University

Corresponding author email Email: drhanaa1989@yahoo.com

Phone number: 002-01022237657

Abstract

Background: The public's ignorance of a newly discovered disease during an epidemic might lead to chaos and fear. Not only can appropriate information dissemination help society navigate these kinds of situations, but it can also improve readiness for potential future epidemics. **Aim:** The aim of this study was to assessing knowledge, attitude and practice regarding prevention of Covid 19 among school team. **Design:** descriptive design was used to conduct this study. **Setting:** This study was conducted at the schools in Beni-Suef city as Ahmed Zewail School, El-Shorouk school, El-Awael school and El Tawfik School. Sample: A convenience sample of one hundred of school team. **Tools:** **Tool (I)** part (1): Personal data, part (2): school team knowledge. **Tool (II):** Knowledge regarding prevention of COVID 19 **Tool (III):** school team attitude toward coronavirus disease and **Tool (IV):** Checklist practice regarding prevention of COVID 19. **Results:** Illustrated that 69% of school team were had satisfactory level of knowledge, 72 % had positive attitude toward Coronavirus disease 2019 and 81% of them were had satisfactory practices. **Conclusion:** School team participates had good level of knowledge, positive attitude about COVID-19 infection and, satisfactory level of practice regarding prevention of COVID-19 **Recommendation:** Teachers in schools should be the focus of educational and training initiatives regarding the coronavirus sickness.

Keywords: Attitude, Covid 19, knowledge, practice, school team.

Introduction

The coronavirus disease The 2019 new coronavirus is another name for COVID-19. The potentially fatal (Severe Acute Respiratory Syndrome Coronavirus) is linked to the COVID-19 virus. In just a few minutes, this novel virus can spread by droplets, contact with tainted metal objects, or other items contaminated by respiratory disease sufferers. Everyone is susceptible to the devastating effects of this new infectious disease once it has entered the body, even though the elderly and very young children are most at risk (Toquero, 2020).

The COVID-19 is having a devastating effect on health systems around the globe and has an impact on all facets of life, including schooling. At present, every nation on the planet is exerting great effort to protect and preserve its citizens against the Covid-19 pandemic. The Covid-19 attack was deemed a global epidemic by the World Health Organization (WHO) on March 11, 2020 (Atmojo, et al., 2020).

As a non-pharmaceutical intervention to stop the COVID-19 pandemic from spreading, nearly all educational systems in the globe, including those based on schools, colleges, and private centers, were required to discontinue in-person classes in the first half of 2020 (Giovannella et al., 2020). The urgent necessity to maintain the safety of

educators, staff, students, and the general public in the face of a public health emergency led to the policy reaction of moving classes from in-person to online (UNESCO, 2020).

To prevent sickness, social and public health initiatives including respiratory and personal hygiene are necessary. This entails minimizing social interactions, isolating sick residents, quarantining anyone who has come into touch with an affected person, and washing hands with soap for at least 20 seconds. Government and public knowledge of social issues is necessary for such initiatives. To address situations such as this in a timely and secure manner, authorities and the general public must have a broad understanding of social issues (Kakemam et al., 2020).

Furthermore, unfavorable behaviors and attitudes around emerging infectious diseases have the potential to intensify epidemics or possibly cause new ones. Research has been done on awareness, attitude, and practice during a number of prior outbreaks, including dengue fever, swine flu, and Middle East respiratory disease (MERS). It has been demonstrated that raising knowledge of these illnesses and promoting good attitudes and behaviors toward them can help stop the spread of harmful infections. (Alhafiz et al., 2020).

Children should be able to learn in an atmosphere that is accepting, courteous, inclusive, and supportive of everyone as individuals everywhere take steps to safeguard themselves, their families, and their communities against COVID-19. In this, schools and instructors are essential. Students' worries and anxieties about getting sick will be lessened by providing them with factual knowledge and data backed by science concerning COVID-19. This will also help them cope with any long-term consequences that may arise. (Kraft et al., 2021).

Significance of the Study

According to WHO statistics, there have been over 179 million confirmed COVID-19 cases worldwide, and 3,895,661 deaths. 19309 fatalities and 341188 cases in Egypt. The COVID-19 pandemic has significant effects on frontline educators who work closely with the most vulnerable members of the community, such as students who make up a sizable portion of the community and attend schools that are culturally and geographically diverse (WHO, 2020). The majority of earlier studies have mostly concentrated on medical practitioners. Schools pose a significant danger for the spread of new COVID-19 because of the social connections between students, the density of people in institutional settings, and extracurricular activities that raise the risk of infection. Nonetheless, in addition to carrying out their regular duties in classrooms, teachers are crucial in containing a viral outbreak (Bonell et al., 2020).

Despite their critical role in slowing the pandemic's spread, school instructors have not received much attention in Egypt's research literature. For this reason, the goal of the present study was to assess the knowledge, attitudes, and practices of the school team about COVID 19.

Aim of the study

This study aimed to assessing knowledge, attitude and practice regarding prevention of Covid 19 among school team through:

- 1- Assessing level of knowledge regarding prevention of Covid 19 among school team.
- 2- Assessing level of attitude regarding prevention of Covid 19 among school team.
- 3- Assessing practice regarding prevention of Covid 19 among school team.

Research questions

1. What is the level of knowledge of the school team about the prevention of COVID-19?

2. What is the level of attitude of the school team toward the prevention of COVID-19?
3. What is the level of practice of the school team regarding Subjects and Methods

Research design

To accomplish the study's objectives and respond to the research questions, a descriptive research design was used. It facilitates the researcher's ability to characterize and record the details of a scenario as they naturally arise. Additionally, this design aids in creating a database for upcoming studies.

Study setting

This research was performed at the schools in Beni-Suef city, such as Ahmed Zewail School, El-Shorouk School, El-Awael School, and El Tawfik School. Ahmed Zewail School is a school located in the East of the Nile in Beni Suef, where the primary and preparatory stages are taught. It consists of four floors and isthe prevention of COVID-19?

Subjects and Methods

Research design

To accomplish the study's objectives and respond to the research questions, a descriptive research design was used. It facilitates the researcher's ability to characterize and record details of a scenario as it naturally arises. Additionally, this design aids in creating a database for upcoming studies.

Study setting

This study was conducted at the schools in Beni-Suef city as Ahmed Zewail school, El-Shorouk school , El-Awael school and El Tawfik school.

1.Ahmed Zewail School is an school located in the east of the Nile in Beni Suef, where the primary and preparatory stages are taught. It consists of 4 floors and is staffed by a school general director, 17 teachers, 2 social and psychological workers and 10 administrative employees.

2. El-Shorouk school is an school located in the Beni Suef City , where the primary and preparatory stages are taught. It consists of 3 floors and is staffed by a school general director, 14 teachers, 2 social and psychological workers and 13 administrative employees.

3. El-Awael school is an school located in the Beni Suef City , where the primary and preparatory and

secondary stages are taught. It consists of 4 floors and is staffed by a school general director, 19 teachers, 2 social and psychological workers and 16 administrative employees.

Subject

The convenient sample was chosen as the number of available school team and the school team of the present study were 100 individual who meet the following criteria:-

- School team from both sex.
- School team free from any chronic disease.

Tools of data collection

Tool (1): A structured interviewing questionnaire was developed by the investigator to collect the necessary data, it was designed on the basis of guidelines for COVID19 prevention and control issued by the WHO, 2020 after reviewing the relevant literature; sheet was designed in Arabic form and included three tools as the following:

Part (1): school team data such as: Age, gender, educational level, marital status and residence.

Part (2): Included questions to assess school team knowledge about COVID 19, it was included 6 items such as: Definition, mode of transmission, clinical symptoms, risk groups, vaccine and treatment.

Tool (2): Knowledge regarding prevention of COVID 19 scale

This scale was adapted from (Zhong et al., 2020) included 20 items to assess school team knowledge regarding prevention of COVID 19. The investigator edited and rephrasing items of tool to meet the aim of the study after reviewing literature in this field.

Scoring system of the tool:

Composed of 20 items one grade was given for each correct answer and zero was given for each incorrect. Total score was calculated by summing up and converted into percent score as the following: unsatisfactory knowledge = < 60 %, and satisfactory knowledge = >60% (Khalaf et al., 2015).

Tool (3): Attitude toward COVID19 scale

This scale was adapted from Akalu et al., (2020) the scale composed of one to two points (agree and disagree); it contained 8 statements expressing points of views of the school team toward protective measures of COVID19.

Attitude scoring system: The responses were scored (0 and 1) respectively and the scoring was reversed

for the negative statements. Total score calculated by summing up and converted into percent score. School team' attitude considered positive if the score was $\geq 60\%$ and negative attitude if the score was < 60% (Solliman et al., 2013).

Tool (4): Checklist practice regarding prevention of COVID 19

It was developed according to the guidelines published by WHO, (2020) regarding COVID 19 preventive practices. The practice section included 5 point Likert regarding hand washing include 7 items, doing sterile gloves include 6 items, removing sterile gloves include 7 items, wearing mask include 6 items and removing mask include 3 items.

Practice scoring system: The total practice contains a 29-items checklist. Each item was responded as done (1-point), not done (0-point). Total score calculated by summing up and converted into percent score. School team' practice considered satisfactory if the score was $\geq 60\%$ and unsatisfactory practice if the score was < 60% (Ahmed et al., 2016).

Validity

The study's data collection instruments were subjected to testing and content validity evaluation in order to meet the necessary standards of reliability. Five specialists in the fields of psychiatric mental health nursing and medicine evaluated the content validity. They belonged to different academic ranks at Beni-Suef University, such as assistant professor and professor. In order to evaluate the tools' completeness, relevance, and clarity, experts asked questions that resulted in either an agreed or disagree response for the content reliability.

Additionally, the tool contained the items that were agreed upon by at least 93% of the experts. Minor changes, such rephrasing and rearranging some sentences, had been made in response to expert opinions and recommendations.

Reliability

To evaluate the internal consistency of the questionnaire, Cronbach's alpha scores were calculated. The values of Cronbach's alpha for the different tools were as follows: 0.87 for the Knowledge scale, 0.85 for practice scale, and 0.88 for attitude. These alpha values indicate strong internal consistency, suggesting that the questions within each domain of the questionnaires were reliably measuring the intended constructs.

Procedures

This study was carried out in multiple stages, including fieldwork, a pilot study, ethical concerns, and preparation.

Preparatory phase

It involved using books, papers, periodicals, and other online resources to search for relevant past, present, local, and international literature as well as theoretical understanding on different study-related topics. The instruments for gathering data were created and developed by the researchers. Language specialists then translated the standardized tools into English, noting any differences between the back translation. A formal letter was sent to the director of El Abbassia Psychiatric and Mental Health Hospital by the Ain Shams University nursing department.

Pilot study

Prior to beginning data collecting and following tool adaptation, a pilot study was conducted. It was done on the fifth team from the school. Testing the tools' applicability, viability, and clarity was the aim of the pilot study. It also functioned as a rough estimate of the amount of time needed to interview the school team and to identify any issues that would prevent data collection. Following the pilot study's results, the required tool modifications—such as removing, adding, and revising questions—were made, and supervisors assisted in developing the final format. The school team that took part in the pilot study was not included in the larger study sample.

Ethical considerations

The following are some ethical research considerations for this study:

1. The Beni-Suef University faculty of nursing's research ethical committee provided formal first clearance.
2. After outlining the purpose and advantages of the study, each participating school team gave their individual oral consent.
3. The researcher explained the study's goals and purpose to the participating school team.
4. The researcher protected the participating school team's identity and privacy.
5. The school team that took part in the study was given the freedom to decide whether or not to participate, as well as the option to leave the study at any moment and without explanation.

Fieldwork

-The process of gathering data took roughly six months, starting in March 2023 and ending in August 2024.

- The investigator spent two days a week, on Saturday and Monday, from 9:00 am to 1:00 pm.
- After giving oral consent to participate in the study, each school team was interviewed separately in accordance with ethical concerns.
- Before conducting each interview, the investigator gave a brief description of the purpose and scope of the study to each school team in the school.
- The investigator's job in filling out the questionnaire was to help the school team grasp any unclear or challenging questions.
- It took roughly thirty minutes to complete one questionnaire.
- Three to four questionnaires were sent out each day on average.

Statistical Analysis

The gathered information was arranged and subjected to the relevant statistical significance tests for analysis. The Computer Statistical Package for Social Science (SPSS), version 20, was utilized for data collection, coding, and statistical analysis. Descriptive statistics were used to show the data as percentages and frequencies. The study variables' frequencies and correlations were compared using chi-square testing. Results' levels of significance were ranked as follows:

- p-value > 0.05 Not significant (NS)
- p-value ≤ 0.05 Significant (S)
- p-value ≤ 0.01 Highly Significant (HS)

Results

Table (1) shows that, Illustrates that, 40% of school team had ages ranging from 34-44 years, with the mean age ± SD 34.33±8.45. 56% of them were male while 44% of them were female and 70% of them were married. As regards level of education, 80% of them had University education. Regarding monthly income, it was observed that 85.0 % of school team reported enough income, comparable with 13.8% of them at third academic year. Concerning place of residence, 66% of school team were living in rural area while 34% of them were living in urban area.

Figure (1): Illustrates that the total satisfactory level of school teams' knowledge about prevention and COVID-19 was 69%, and unsatisfactory was 31%.

Figure (2): Reveals that 81% of school team had total satisfactory practices and 19% had total unsatisfactory practices toward COVID-19 prevention and precautionary measures.

Figure (3): Demonstrates that the total positive attitude of school teams' regarding prevention of COVID-19 was 72%, and negative attitude was 28%.

Table (2) represents that, there were highly statistical significant relations were observed between school team total knowledge score and their age, gender, level of education and residence ($P \leq 0.001$). While, there were no statistical significant relations were found regarding their marital status and family income ($p \geq 0.05$).

Table (3) represents that, there were highly statistical significant relations were observed between school team total practice score and their age, gender, level of education, family income and residence ($P \leq 0.001$). While, there were no statistical significant relations were found regarding their marital status ($p \geq 0.05$).

Table (4) represents that, there were highly statistical significant relations were observed between school team total attitude score and their age, gender, level of education, family income and residence ($P \leq 0.001$). While, there were no statistical significant relations were found regarding their marital status ($p \geq 0.05$).

Table (5): Shows a highly statistically significant correlation between school team' knowledge, and attitude; knowledge and practice; attitude and practice regarding COVID-19 and total practices with p-value was $<0.001^{**}$

Results

Table (1): Distribution of school team demographic characteristics (n = 100).

Items	N	%
Age		
24 - 34 years	25	25.0
34 < 44 years	40	40.0
44-54 years	35	35.0
Mean \pm SD	34.33 \pm 8.45	
Gender		
Male	56	56.0
Female	44	44.0
Marital status		
Married	70	70.0
Single	30	30.0
level of education		
Diploma	20	20.0
University	80	80.0
Monthly income		
Enough	85	85.0
Not enough	15	15.0
Residence		
Rural	66	66.0
Urban	34	34.0

Figure (1): Total knowledge of school team about prevention of COVID-19.

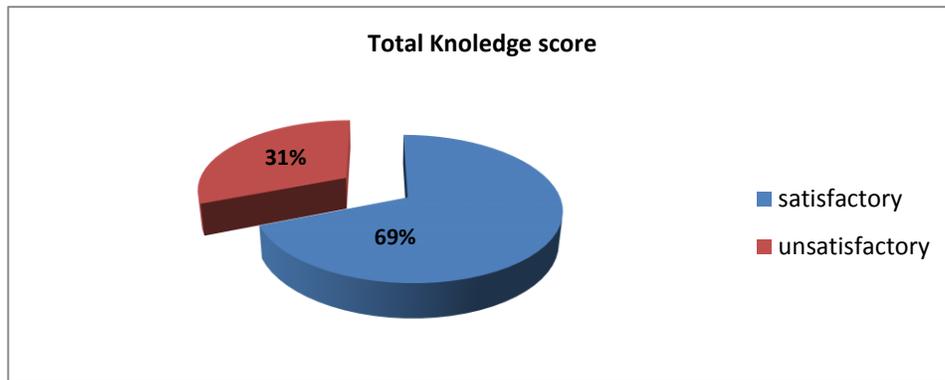


Figure (2): Total practices of school team



Figure (3): Total attitude score about prevention of COVID-19 (n=100)

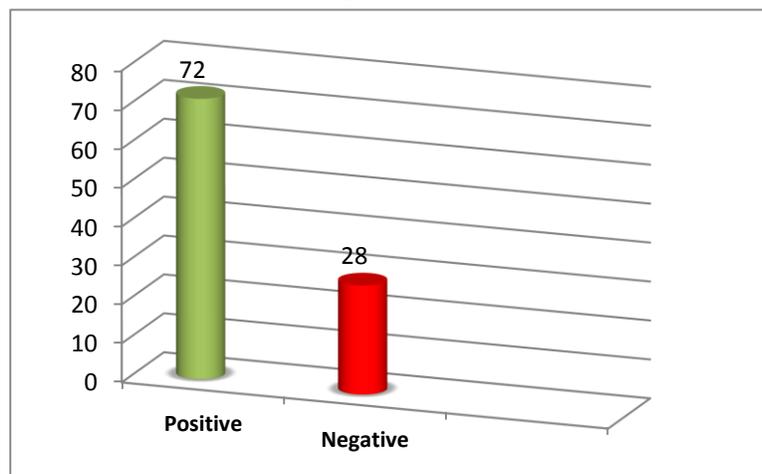


Table (2): Relations between socio-demographic characteristics of the school team with total score of knowledge (n=100).

Demographic items		Total knowledge score				X2	P value
		Satisfactory		Unsatisfactory			
		N	%	N	%		
Age	24 < 34 years	45	45.0	6	6.0	20.6	< 0.001
	34-44 years	15	15.0	9	9.0		
	44-54 years	9	9.0	16	16.0		
Gender	Male	25	25.0	18	18.0	21.3	< 0.001
	Female	44	44.0	13	13.0		
Marital status	Single	31	31.0	15	15.0	4.7	.9
	Married	38	38.0	16	16.0		
level of education	Diploma	18	18.0	22	22.0	27.2	< 0.001
	University	51	51.0	9	9.0		
Family income	Enough	37	37.0	18	18.0	6.4	.7
	Not enough	32	32.0	13	13.0		
Residence	Rural	16	16.0	20	20.0	29.4	< 0.001
	Urban	53	53.0	11	11.0		

- Highly statistical significant difference $P \leq 0.001$
- No statistical significant difference $P \geq 0.05$

Table (3): Relations between socio-demographic characteristics of the school team with total score of practice (n=100).

Demographic items		Total practice score				X2	P value
		Satisfactory		Unsatisfactory			
		N	%	N	%		
Age	24 < 34 years	47	47.0	9	9.0	29.4	< 0.001
	34-44 years	13	13.0	7	7.0		
	44-54 years	9	9.0	15	15.0		
Gender	Male	23	23.0	20	20.0	25.9	< 0.001
	Female	46	46.0	11	11.0		
Marital status	Single	37	37.0	17	17.0	3.6	.7
	Married	32	32.0	14	14.0		
level of education	Diploma	20	20.0	25	25.0	33.4	< 0.001
	University	49	49.0	6	6.0		
Family income	Enough	42	42.0	10	10.0	26.6	< 0.001
	Not enough	27	27.0	21	21.0		
Residence	Rural	20	20.0	23	23.0	28.7	< 0.001
	Urban	49	49.0	8	8.0		

- Highly statistical significant difference $P \leq 0.001$
- No statistical significant difference $P \geq 0.05$

Table (4): Relations between socio-demographic characteristics of the school team with total score of attitude (n=100).

Demographic items		Total attitude score				X2	P value
		Satisfactory		Unsatisfactory			
		N	%	N	%		
Age	24 < 34 years	49	49.0	11	11.0	27.8	< 0.001
	34-44 years	12	12.0	5	5.0		
	44-54 years	8	8.0	15	15.0		
Gender	Male	26	26.0	18	18.0	37.5	< 0.001
	Female	43	43.0	13	13.0		
Marital status	Single	35	35.0	15	15.0	7.3	.6
	Married	34	34.0	16	16.0		
level of education	Diploma	23	23.0	20	20.0	29.9	< 0.001
	University	46	46.0	11	11.0		
Family income	Enough	46	46.0	12	12.0	28.7	< 0.001
	Not enough	23	23.0	19	19.0		
Residence	Rural	24	24.0	26	26.0	32.9	< 0.001
	Urban	45	45.0	5	5.0		

- Highly statistical significant difference $P \leq 0.001$
- No statistical significant difference $P \geq 0.05$

Table (5): Correlation between knowledge and attitude; practice among the studied school team regarding COVID-19

Items	r value* (95% CI)	P –value
Knowledge – Attitude	0.883	<0.001
Knowledge – Practice	0.657	<0.001
Attitude – Practice	0.668	<0.001

*. Correlation is significant at the 0.05 level

Discussion

The World Health Organization (WHO) requested worldwide cooperation from all nations to stop the rapid spread of COVID-19 and proclaimed a public health emergency by the end of January 2020. On March 12, the WHO proclaimed COVID-19 to be a worldwide pandemic. Since then, it has quickly and widely spread from Wuhan, China, to other regions of the world, endangering the lives of numerous people (WHO, 2020).

By encouraging adherence, which is impacted by the school team's knowledge, attitudes, and practices about COVID-19, and by offering health education on COVID-19 prevention and control, the nurse plays a significant role in stopping the disease's spread. Research demonstrates the value of school team knowledge in pandemic management. Assessing the school team's knowledge about coronaviruses can yield a wealth of information regarding students' attitudes and practices, as well as characteristics that influence the team's adoption of responsive behavior and healthy practices (Toquero, 2019).

A variety of sources, including preconceived notions about related viral diseases, official data, social media and the Internet, past personal experiences, and medical sources, influence attitudes and behaviors towards COVID-19. The population's attitudes and practices regarding prevention may alter depending on how accurate they are. 2020; Zhong et al.

The current study's findings regarding the sociodemographic features of the school team showed that, with a mean age \pm SD of 34.33 ± 8.45 , approximately half of the team was between the ages of 34 and 44. This was in line with a prior study conducted in Yemen by Al-Hanawi et al. (2020), which examined public knowledge, attitudes, and practices about COVID-19 in the Kingdom of Saudi Arabia. The study's findings revealed that almost half of the sample was between the ages of 32 and 49.

The results of the current investigation regarding the gender and marital status of the school team showed that less than 75% of the team was married and that over half of the team was male. This conclusion was in line with Chen et al.'s study from 2021, which

looked at Chinese teachers' knowledge, attitudes, and practices with COVID-19 in Shenzhen through an online cross-sectional study. According to the study, during the COVID-19 global outbreak, less than 75% of the school team's members were married and more than half of them were men.

In terms of education and monthly income, the current study made it clear that the majority of students reported having enough money, and almost four quadrants of the school had university degrees. This outcome was consistent with research on the protective role of teacher working conducted by Kraft et al. (2021).

Conditions during the COVID-19 Pandemic, they reported, showed that the majority of the investigated population reported having enough income and that over two thirds had a university education. In terms of school team knowledge regarding COVID-19 prevention, the current study finds that nearly half of the sample under study had satisfactory knowledge regarding the clinical symptoms of COVID-19, three quarters of the team had satisfactory knowledge regarding the definition of COVID-19, and over half of the team had satisfactory knowledge regarding the mood of transmission.

Additionally, roughly three quadrants of respondents felt they knew enough about Covid 19's high-risk groups. Furthermore, every member of the school team have adequate understanding about managing COVID-19.

The current study's findings might be explained by the fact that the majority of the school team has a university degree, which enables them to continuously read and learn about everything related to the corona virus, including its symptoms, causes, and various forms of therapy. The results of this study are consistent with a study conducted by Ali et al. (2020), which evaluated Iraqi people's knowledge, attitudes, and practices regarding COVID-19. The study found that over 75% of the population had good knowledge of the disease's definition, mode of transmission, and treatment options.

Additionally, the current findings corroborated those of Chen et al. (2021), who evaluated instructors in Shenzhen, China, for COVID-19 knowledge, attitudes, and practices. Their study revealed that over three-fifths of the sample had good knowledge scores. However, the results of this study differed from those of a study conducted in Assiut City by Sabry et al., (2019) regarding the knowledge, attitudes, and practices of primary school teachers. The survey indicated that, with reference to COVID-19, 75% of teachers scored poorly on knowledge of the virus. The lack of COVID-19-related health education campaigns among the teachers in the study may be the cause of the discrepancy between the results of the current investigation and these studies.

The current study discovered that, with regard to the overall level of practice of the school team regarding COVID-19 prevention, more than three quadrants of the team had overall satisfactory practices toward COVID-19 preventive and precautionary measures. This outcome might be explained by the fact that, in place of more established media outlets like newspapers, newer channels like social media and the internet served as the primary information sources about the need to employ constructive measures. In Egypt, Facebook is the most popular social media network. In 2016, there were 33 million members on the platform; by 2019, there were over 40 million.

The results of this study are consistent with a study by Adesegun et al. (2020), which examined public understanding, attitudes, and practices of COVID-19 among Nigerians and found that over 75% of respondents had good habits. Furthermore, these results are consistent with those of Geldsetze (2020), who carried out a cross-sectional online survey to learn more about general public knowledge and perceptions of the coronavirus disease 2019 in the United States and the United Kingdom. The majority of respondents (85.6%) agreed that these measures contribute to a reduction in COVID-19 transmission.

However, this finding conflicts with a study by Cirrincione et al. (2020) that evaluated workplace prevention and protection measures against the COVID-19 pandemic. The study found that most of the sample under investigation had inadequate COVID-19 protective measures in place. The lack of health intervention programs related preventive behaviors to decrease the infection and the studied sample's ignorance of appropriate COVID 19 practices were the main causes of the suggested studied sample's inadequate practices.

The current study found that, with regard to the level of attitude for COVID-19 prevention, around three quadrants of the analyzed sample had positive attitudes. This was brought about by the coordinated preventive and control measures that were put in place throughout Egypt. These measures also gave the school team more confidence in their ability to contain the epidemic, which may have raised their confidence in their ability to prevail in the crisis. Many student teams in healthcare professions volunteered to work in immunization efforts and on the front lines during the COVID-19 epidemic.

Positive opinions and high trust in COVID-19 management can also be explained by the government's extraordinary measures and quick reaction in putting in place strict controls and preventative measures against the virus to safeguard inhabitants and protect their well-being.

This study's findings are consistent with a study by Chen et al. (2021) titled "Knowledge, Attitudes, and Practices Toward COVID-19 Among Chinese

Teachers, Shenzhen: An Online Cross-sectional Study During the Global Outbreak of COVID-19," which found that most of the sample under investigation had a positive outlook.

However, this finding contradicted that of Azlan et al. (2020), who conducted research on public understanding, attitudes, and practices on COVID-19: A cross-sectional study conducted in Malaysia revealed that most of the sample had a favorable opinion of COVID-19.

However, this result conflicts with a study by Singh & Ahuja (2020), which evaluated the general public's knowledge, attitude, and practice regarding COVID-19 in India and discovered that more than three quarters of the sample had a negative opinion.

Furthermore, more than three-quarters of the respondents to a survey by Adesegun et al. (2020) on public knowledge, attitudes, and practices related to COVID-19 had positive practices. The discrepancy between the results of the current study and these studies may be because the majority of the teachers were afraid of the epidemic and adopted a negative attitude as a result of widespread false information about it that needs to be corrected in addition to their lack of awareness of it.

Regarding the relationships between the sociodemographic traits of the school team and their total knowledge score, the current study shows that there were highly statistically significant relationships found between the total knowledge score of the school team and the members' age, gender, educational attainment, and place of residence ($P \leq 0.001$). Regarding their marital status and family income, however, no statistically significant relationships were discovered ($p > 0.05$). This conclusion may result from the fact that people's levels of education and age have an impact on their level of knowledge. The rate of information acquisition might increase with age and educational attainment. Urban residents also benefit from a high rate of information since they utilize social media more frequently than people in rural areas.

The results of the present study were consistent with those of Ngwewondo et al. (2020), who conducted a study in Cameroon to evaluate the knowledge, attitudes, and practices of COVID-19 preventive measures. They reported that there were significant statistical correlations between the school team's total knowledge score and the members' age, gender, and educational attainment.

The current study indicates that there were highly statistically significant relationships found between the school team's total attitude score and their age, gender, family income, level of education, and place of residence ($P \leq 0.001$). This relationship also applies to other personal data that the team studied. Regarding their marital status, however, no statistically

significant relationships were discovered ($p > 0.05$). This conclusion might be explained by the fact that older people and those with higher education levels are more likely to understand the virus and that there is no stigma associated with their infection, which will lead to positive behavior.

The results of this study are consistent with research conducted by Al-Hanawi et al. (2020), who examined public knowledge, attitudes, and practices regarding COVID-19 in the Kingdom of Saudi Arabia and discovered a significant relationship between attitude scores and factors such as age, gender, family income, and educational attainment.

Regarding the relationship between a few personal characteristics of the team under study and their overall practice score, it was discovered that there were highly statistically significant relationships between the team's total practice score and its members' age, gender, educational attainment, family income, and place of residence ($P \leq 0.001$). Regarding their marital status, however, no statistically significant relationships were discovered ($p > 0.05$). The reason for this finding may be that an individual's age and educational attainment have an impact on how well they practice preventive measures against the corona virus. The greater an individual's age and educational attainment, the more effective and capable they are at practising health practices. These activities are also influenced by family income. The more money a person makes, the more opportunities he has to perform these operations correctly.

This current finding was consistent with Kasemy et al.'s (2020) study on Knowledge, Attitude, and Practice toward COVID-19 among Egyptians, which found no statistically significant relationships between the school team's total practice score and the subjects' age, family income, or level of education. Regarding the relationship between the investigated school team's overall knowledge, attitude, and practice with COVID-19. According to the current study, there was a favorable, highly statistically significant relationship between the investigated school team's knowledge, attitude, and practice about COVID-19. This resulted from the fact that suitable knowledge always influences good practices.

Furthermore, these results unequivocally show how important it is to raise public awareness of COVID-19 through health education, as doing so may lead to changes in COVID-19-related behaviors and attitudes. Moreover, in line with the "KAP theory." The "KAP theory" is a health behavior change theory that breaks down how people change their behavior into three stages: acquiring correct knowledge, developing attitudes, and adopting a habit or practice. The results of the present study were consistent with those of Chen et al. (2021), who evaluated teachers' knowledge, attitudes, and practices on COVID-19 in

Shenzhen, China, and reported a substantial positive correlation between knowledge, attitudes, and practices. The results of this study also align with research conducted by Abdelhafiz et al. (2020), who investigated Egyptians' knowledge, attitudes, and perceptions of the novel coronavirus disease (COVID-19). Their findings demonstrated a significant direct correlation between the total knowledge score and the total practice and attitude score.

Furthermore, the present findings corroborate the research conducted by Reuben et al. (2021) concerning knowledge, attitudes, and practices regarding COVID-19: an epidemiological survey in North-Central Nigeria. Their cross-sectional study revealed that higher levels of knowledge and attitude were positively associated with higher rates of COVID-19 practice.

However, this finding contradicts a study by Supriyanto et al. (2020) about teacher professional quality: technology-assisted counseling services during the pandemic Covid-19. In that study, the authors demonstrated that there was no significant correlation between the total knowledge and the total practice score. These could be explained by the fact that, according to this study, a sizable portion of adults had sufficient information of the pandemic and had an optimistic outlook, but they were indifferent to the necessary precautions, which is concerning.

Conclusion

The members of the school team demonstrated a reasonable level of practice in COVID-19 prevention as well as a good level of knowledge and a positive attitude regarding COVID-19 infection.

Recommendations

Based on the results of the current investigation, it was suggested that:

- Community education on preventive measures remains the best control measure to reduce the disease burden and spread.
- Teachers in schools should be the focus of educational and training initiatives regarding the coronavirus sickness.
- Students should be given access to health education materials, such as images and pamphlets, so they can disseminate the information on COVID-19 preventive actions.
- Programs for education and training should inform students about COVID-19 safety precautions.
- More research with a bigger sample size is necessary to ensure that the study's conclusions can be applied generally. The most effective control strategy to lessen the burden and spread of disease is still community education about preventive measures.

- The government ought to take steps to improve preventative methods and lower obstacles.
- Priority should be devoted to primary prevention of infectious diseases like the COVID-19 pandemic, and education about it should be implemented in schools.
- It is advised that educators use telehealth nursing to implement instructional programs. Simple teaching recommendations for COVID-19 should be given to teachers so they can engage their pupils in conversation about the coronavirus disease.
- Raising general public knowledge of the COVID-19-related social stigma.

References

- 1- **Abdelhafiz, S., Mohammed, Z., Ibrahim, M. E., Ziady, H., Alorabi, M., Ayyad, M., & Sultan, E. (2020).** Knowledge, perceptions, and attitude of Egyptians towards the novel coronavirus disease (COVID-19). *Journal of Community Health*, 45(5), 881-890.
- 2- **Adesegun O., Binuyo T., Adeyemi O., Ehioghae O., & Rabor D., (2020):** The COVID-19 Crisis in Sub-Saharan Africa: Knowledge, Attitudes and Practices of the Nigerian Public, *Am. J. Trop. Med. Hyg.*, 103(5), 2020, pp. 1997–2004, doi:10.4269/ajtmh.20-0461.
- 3- **Al-Hanawi M., Angawi K., Qattan A., Helmy H., Abudawood Y., & Alqurashi M., (2020):** Knowledge, Attitude and Practice Toward COVID-19 Among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study, *Frontiers in Public Health*, Vol. 8, Article 217.
- 4- **Ali S., Alhuseiny A., Yaseen S., Mustafa M., Al-Rawi R., & Ahmed K., (2020):** Knowledge, attitude and practice toward COVID-19 among Iraqi people: a web-based cross-sectional study, *Vo 13. IssSpecial 2.59 Journal of Ideas in Health* 2020; 3(Special 2): 258-265.
- 5- **Atmojo, E., Muhtarom, T., & Lukitoaji, D. (2020).** The level of self-regulated learning and self-awareness in science learning in the covid-19 pandemic era. *Jurnal Pendidikan IPA Indonesia*, 9(4), 512-520.
- 6- **Azlan A, Hamzah MR, Sern T, Ayub S, Mohamad E. (2020)** Public knowledge, attitudes and practices towards COVID-19: A crosssectional study in Malaysia. *PLoS One.* 2020; 15(5):e0233668.
- 7- **Bonell C., Torres M., Viner R., & Rogers B., (2020):** An evidence-based theory of change for reducing SARS-CoV-2 transmission in reopened schools. *Health & Place*; Volume 64.
- 8- **Chen H., Zhang M., Su L., Cao H., Zhou X., Gu Z., Liu H., Wu F., Li Q., Xian J., Chen Q., & Lin Q., (2021):** Knowledge, Attitudes and

Practices Toward COVID-19 Among Teachers in Shenzhen, original research published: *Frontiers in Public Health*, Volume 9.

- 9- **Cirrincione L., Plescia F., Ledda C., Rapisarda V., Martorana D., & Moldovan R., (2020):** COVID19 pandemic: prevention and protection measures to be adopted at the workplace. *Sustainability* 2020, 12(9):3603 <https://doi.org/10.3390/su12093603>.
- 10- **Geldsetzer P. (2020)** Knowledge and perceptions of coronavirus disease 2019 among the general public in the United States and the United Kingdom: a cross sectional on line survey. *MedRxiv*. 2020. <https://doi.org/10.1101/2020.03.13.20035568>. Accessed at <https://medrxiv.org/cgi/content/short/2020.03.13.20035568v1> on 17 March 2020.
- 11- **Giovannella, C., Marcello, P., & Donatella, P. (2020).** The effects of the Covid-19 pandemic on Italian learning ecosystems: The school teachers' Perspective at the steady state.
- 12- **Kakemam, E., Ghoddoosi-Nejad, D., Chegini, Z., Momeni, K., Salehiniya, H., Hassanipour, S., ...& Arab-Zozani, M. (2020).** Knowledge, Attitudes, and Practices Among the General Population During COVID-19 Outbreak in Iran: A National Cross-Sectional Online Survey. *Frontiers in Public Health*, 8.
- 13- **Kasemy Z., Bahbah W., Zewain S., Haggag M., Alkalash S., Zahran E. & Desouky D., (2020):** Knowledge, Attitude and Practice toward COVID-19 among Egyptians, *Journal of Epidemiology and Global Health* 10(4): 378–385.
- 14- **Kraft, M. A., Simon, N. S., & Lyon, M. A. (2021).** Sustaining a Sense of Success: The Protective Role of Teacher Working Conditions during the COVID-19 Pandemic. *Journal of Research on Educational Effectiveness*, 1-43.
- 15- **Ngwewondo A., Nkengazong L., Ambe L., Ebogo J., Mba F. & Goni H., (2020):** Knowledge, attitudes, practices of/towards COVID 19 preventive measures and symptoms: A cross sectional study during the exponential rise of the outbreak in Cameroon14 (9).
- 16- **Reuben, R. C., Danladi, M. M., Saleh, D. A., & Ejemi, P. E. (2021).** Knowledge, attitudes and practices towards COVID-19: an epidemiological survey in North-Central Nigeria. *Journal of community health*, 46(3), 457-470.
- 17- **Singh A. & Ahuja R., (2020):** Knowledge, Attitude, and Practice of General Public Towards COVID-19 in India: An Online Cross-Sectional Study, *International Journal of Innovative Research in Science, Engineering and Technology*;9(6).5005:5012, available at DOI:10.15680/IJRSET.2020.0906009.
- 18- **Supriyanto, A., Hartini, S., Irdasari, W. N., Miftahul, A., Oktapiana, S., & Mumpuni, S. D. (2020).** Teacher professional quality: Counselling services with technology in Pandemic Covid-19. *Counsellia: Jurnal Bimbingan dan Konseling*, 10 (2), 176-189.
- 19- **Toquero, C. M. (2020).** Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 5(4).
- 20- **UNESCO,(2020).**<https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures> Accessed 2020/07/15
- 21- **World Health Organization(2020):** Basic protective measures against the new coronavirus <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>.
- 22- **Zhong, B. L., Luo, W., Li, H. M., Zhang, Q. Q., Liu, X. G., Li, W. T., & Li, Y. (2020).** Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. *International journal of biological sciences*, 16(10), 1745.