



“A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTIVE MEASURES OF COVID-19 AMONG WOMEN RESIDING IN SELECTED RURAL AREA.”

1Dr.(Mrs)Rupali Milind Salvi,2Dr.(Mrs)Nisha Sandeep Naik3(Ms)Surekha Madhukar
Kasab,4(Mrs).Jayshri Jaypurkar,5Ms.Priti Rajendra Khaire

1PhD,Professor and Principal,2PhD,Professor,3MSc.Nursing,Clinical

Instructor,4MSc.Nursing,Clinical Instructor,5GROUP“A”(GNM)Student

1Dr.D.Y.Patil Vidyapeeth,Dr.D.Y.Patil College of Nursing,Pimpri-Pune-411018,

2Dr.D.Y.Patil Vidyapeeth,Dr.D.Y.Patil College of Nursing,Pimpri-Pune-411018,

3Dr.D.Y.Patil Vidyapeeth,Dr.D.Y.Patil Institute of Nursing Education Pimpri,Pune-411018,

4Dr.D.Y.Patil Vidyapeeth,Dr.D.Y.Patil Institute of Nursing Education Pimpri,Pune-411018,

5Dr.D.Y.Patil Vidyapeeth,Dr.D.Y.Patil Institute of Nursing Education Pimpri,Pune-411018

INTRODUCTION

In late 2019,a novel corona virus,now designated SARS-CoV-2,was identified as the cause of an outbreak of acute respiratory illness in Wuhan,a city in the Hubei province of China.In February 2020,World Health Organization(WHO)designated the disease COVID-19,which stands for corona virus disease 2019.The clinical presentation of 2019 Co-infection ranges job from asymptomatic to very severe pneumonia with acute respiratory distress syndrome,septic shock and multi-organ failure,which may result in death.

On January30,2020,WHO declared the COVID-19outbreak a public health emergency of international concern and,in March 2020,began to characterize it as a pandemic in order to emphasize the gravity of the situation and urge all countries totake action in detecting infection and preventing spread.³

The most important strategy for the population to undertake is to frequently wash their handsand use portable hand sanitizer and avoid contact with their face and mouth after interacting with a possibly contaminated environment.To reduce the risk of transmission in the community,individuals should be advised to wash hands diligently,practice respiratory hygiene(i.e.,cover their cough),and avoid crowds and close contact with ill individuals,if possible.⁴

The corona virus disease (COVID-19) outbreak has caused over 7.15 million infections and more than 408 000 deaths during 31 December 2019–11 June 2020 (1). The pandemic has stretched health systems globally, affecting high- and low-income countries. An almost global consensus confirms that tackling COVID-19 would require a multisectoral response, well beyond health systems, that requires

engagement not only from other sectors but also from communities and the public at large (2). While much has been published on the nature and extent of the health system response (3,4), there is relatively limited understanding of how communities perceive COVID-19, especially in low- and middle-income countries (LMICs).⁶

NEED FOR THE STUDY

December 31, 2019, the China Health Authority alerted the World Health Organization (WHO) to several cases of pneumonia of unknown etiology in Wuhan City in Hubei Province in central China. The cases had been reported since December 8, 2019, and many patients worked at or lived around the local Hunan Seafood Wholesale Market although other early cases had no exposure to this market. On January 7, a novel corona virus, originally abbreviated as 2019-CoV by WHO, was identified from the throat swab sample of a patient. This pathogen was later renamed as severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) by the Corona virus Study Group and the disease was named corona virus disease 2019 (COVID-19) by the WHO. As of January 30, 7736 confirmed and 12,167 suspected cases had been reported in China and 82 confirmed cases had been detected in 18 other countries. In the same day, WHO declared the SARS-CoV-2 outbreak as a Public Health Emergency of International Concern (PHEIC).⁸

Due to continuous spread of corona virus disease 2019 (COVID-19) worldwide, long-term effective prevention and control measures should be adopted for public transport facilities, as they are increasing in popularity and serve as the principal modes for travel of many people. The human infection risk could be extremely high due to length of exposure time window, transmission routes and structural characteristics during travel or work. This can result in the rapid spread of the infection. Based on the transmission characteristics of Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2) and the nature of public transport sites, we identified comprehensive countermeasures toward the prevention and control of COVID-19, including the strengthening of personnel management, personal protection, environmental cleaning and disinfection, and health education. Multi-pronged strategies can enhance safety of public transportation. The prevention and control of the disease during the use of public transportation will be particularly important when all countries in the world resume production. The aim of this study is to introduce experience of the prevention and control measures for public transportation in China to promote the global response to COVID-19.⁹

Corona virus disease (COVID-19) has accentuated the need for speedy access to information. Digital divide and socio-demographic disparity create an information hiatus and therefore unhealthy practices with regard to dealing with COVID-19, particularly in low- and middle-income countries. We assessed knowledge, attitudes, practices and their determinants regarding COVID-19 in Pakistan during March–April 2020. 905 adults ≥ 18 years (males and females) participated: 403 from a web-based survey; 365 from an urban survey; and 137 from a rural survey. Frequency of adequate knowledge, attitudes and practices for the three populations was determined based on available global guidelines. Multivariable logistic regression analysis determined factors of adequacy of knowledge, attitudes, practices, and association of knowledge with attitudes and practices. Age of the participants was 33.5 (+ SD 11.1) years, 51% were females. More females and young adults (18–30 years) participated in the web-based

survey. The urban survey and web-based survey participants had significantly higher adequate knowledge (2–7 times) and practices (4–5 times) towards COVID-19. Adequate knowledge had a significant influence on healthy attitudes and practices for COVID-19, after adjustment for covariates. Overall two-thirds of the population had high levels of fear about COVID-19, which was highest among the rural survey population. Substantial gaps exist in adequate knowledge, attitudes and practices, particularly among rural populations, and underscore the variation in access to information according to level of education and access to the internet. Thus, a comprehensive, contextually congruent awareness raising strategy is urgently needed to confront COVID-19 among these populations.¹¹

Corona viruses are a large family of enveloped, no segmented positive-sense RNA virus belonging to *Nidovirales* order. A prominent feature of this virus is the club-shaped spike projections emanating from its surface, giving it the appearance of a solar corona. They are known mainly to cause a variety of diseases in animals, especially in mammals and birds. Sometimes they can cause infections in humans like severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and now the corona virus disease 2019 (COVID-19). In December, 2019, cases of pneumonia of unknown origin were reported from Wuhan city of China. These were later diagnosed to have been caused by a novel corona virus which was named as SARS-CoV-2 and the disease caused by it is called as COVID-19. The disease rapidly spread from China and as of 16th June, 2020 has spread to 216 countries worldwide. COVID-19 was declared a pandemic by WHO on 11th March, 2020. The disease has now a human-to-human spread with a very high rate of infectivity. First case was reported in India on 30th January, 2020 and since then the cases have been continuously increasing. Various efforts by the government like nationwide lockdown since 24th March, 2020, upgrading the necessary health care facility, etc. have kept a check on rapid spread of the disease. However, nation-wise lockdown cannot be extended beyond a particular period of time because of various reasons.¹³

OPERATIONAL DEFINITIONS

Assess-

According to Oxford dictionary ‘ assess’ means to evaluate the value or quality of something.⁷

In this study, assess means, to evaluate gathered the information of knowledge of preventive measures of Covid-19 among women residing in selected rural area.

Knowledge-

According to John Dewey ‘ knowledge’ is defined as the gain of facts , information and truth . In philosophy any principle, theory or concept which fits into this definition is considered as knowledge.⁸

In this study knowledge is range of information of sample with regard to awareness and understanding preventive measures of Covid- 19.

Preventive measures –

According to Encyclopaedia of Environmental Health 2011.

Preventive measures involves monitoring of vector population during and after the project in the modified and mitigation areas. Establishment of physical and chemical transitory barriers and implementation of antivector interventions in peridomestic habitual.

In this study, assess means, to evaluate gathered the information of knowledge of preventive measures of Covid-19 among women residing in selected rural area.

Covid-19-According to WHO(World Health Organization

Covid-19 means an infectious disease caused by newly discovered coronavirus. In this study knowledge is range of information of sample with regard to awareness and understanding preventive measures of Covid-19. ¹⁰

Women-According to Merriam' Women ' means is an adult female human being. ¹¹

In this study, Women means, to evaluate gathered the information of knowledge of preventive measures of Covid-19 among women residing in selected rural area.

Rural-

According to Oxford learners dictionaries ' rural ' means connected with or like the countryside. ⁷

In this study, rural means, to evaluate gathered the information of knowledge of preventive measures of Covid-19 among women residing in selected rural area.

ASSUMPTION

- Women may have some knowledge regarding preventive measures of Covid-19.
- Knowledge will differ with selected demographic variables.

ETHICAL CONSIDERATIONS

1. Prior permission was obtained from the institutional ethical committee. Permission from Gram Sevak of selected rural area was taken.

2. Informed written consent was taken prior to the study from the study subject.

CONCEPTUAL FRAMEWORK:

Conceptual framework represents the less formal attempt at organizing phenomenon. It deals with abstractions that are assembled by virtue of their relevance to common theme. ¹²

The study is based on modified Imogene King Goal attainment theory is applied. Concept is defined as complex mental formulation of an object, property or event that is derived from individual perception and experience.

Conceptual framework is interrelated concept or abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme.

Research Methodology

Research approach:

An Quantitative research approach for this study in order to accomplish the objectives was adopted for the study to assess the knowledge regarding preventive measures of Covid-19 among women residing in selected rural area.

Research design

Pre-experimental (pre-test) and (post- test) research design.

Setting

The present study was conducted in the setting for this study was Alandi,Pune which includes women's 18-60 years old.

Population

In this study,the population consists of Populations refers to total category of person or objective that meets the criteria for study establish by the researcher, any set of person,objects or measurements having an observable characteristics in common.

Sample

In the present study, the samples consist of women residing Alandi, of 18- 60 years old age group.

Sampling technique

Non probability purposive sampling technique

Sample size

The sample size for this study was 100 women's residing in Aalandi, Pune.

Sampling criteria

Inclusion criteria:

1. Who are willing to participate in the study
2. Women 18-60 years old age group.
3. Who can read Marathi.
4. Women who live in the rural area of Alandi.
5. Only one women per home will be included.

Exclusive criteria:

Sensory perception affected.

DESCRIPTION OF THE TOOL

The Structured Questionnaire consists of three sections:

SECTION I-

This section involves items searching the information on demographic profile of a sample such as age,educational status,occupation,family structure marital status,heard about Covid-19 and where you heard about Covid-19. It consists of total 07 items.

SECTION II –

Deals with total 15 items to assess the knowledge of preventive measures of Covid-19 among women. The answers are graded as into 2 categories i.e. Wrong/Right. It comprises the items such as knowledge regarding Covid-19, knowledge regarding causes of Covid-19, knowledge regarding sign and symptoms and knowledge regarding prevention of Covid-19.

Scoring:- 1. Score 1 was given to every correct answer.

2. Score 0 was given to every wrong answer.

VALIDITY

The valuable suggestions from the experts were used to receive a positive direction for the study. Certain items were modified as per their suggestions E.g. Initially in the tool family history was not included. Hence as per suggestion of expert the family history parameter was included in the tool. After the validation, the tool was translated from English to Marathi.

RELIABILITY

Person's Correlation Coefficient of the tool was 0.80, which was found to be reliable. Hence the tool is reliable.

PILOT STUDY

The pilot study was conducted in Muktainagar, Aalandi, Pune from 16th April 2021- 17th April 2021 on 10 selected women's to assess the feasibility of the study and to decide the plan for data analysis.

MAJOR FINDING OF THE STUDY :-

The findings of the study based on the objectives of the study. The substantive summary of the analysis are presented under the following headings.

Section I: Description of samples (women) based on their personal characteristics.

Section II: Analysis of data related to the knowledge regarding preventive measures of Covid-19 among women residing in selected rural area.

Section III (A): Analysis of data related to association between knowledge regarding preventing measures of Covid-19 among women with their demography.

PLAN FOR DATA ANALYSIS

The data analysis was planned to include descriptive and inferential statistics. The following plan for analysis was made with the opinion of experts. The analysis would be done based on the objectives to be tested.

- Items related to the background variables would be analyzed in terms of frequency and percentages.
- Scores would be graded in 2 categories i.e. Right/ Wrong
- Frequency distribution would be plotted to represent the final score.
- Mean, standard deviation of the test would be computed.
- The findings would be documented in tables, graphs and diagrams.

Tools and Techniques

In this study **Section A**-Demographic variables.

Section B- Anxiety among the mothers of school going children during COVID -19.

Results:Analysis and Interpretation of Data Under the following headings the analysis of data is organized and presented.

Section I: Description of samples (mothers of school going children) based on their personal characteristics.

Section II:Analysis of data related to the Anxiety among the mothers of school going children during COVID -19

Section III: Analysis of data related to the association of anxiety among mothers of school going children with their demographic variables.

Section IV: Analysis of data related to association of knowledge and practice with selected demographic variables.

Section I:-Description of samples (mothers of school going children) based on their personal characteristics.

Table 1:-Description of samples (mothers of school going children) based on their personal Characteristics in terms of frequency and percentages.

N=100

Demographic variable	Frequency (f)	Percentage (%)
Age		
20 – 30 years	55	55
31-40 years	26	26
41-50 years	15	15
Above 50 years	4	
Marital status		
Married	78	78
Unmarried	9	9
Divorced	7	7
Widow	6	6
Having child		
One	18	18
Two	52	52
3 and above	30	30
Type of family		
Joint	26	26

Nuclear	29	29
Extended	45	45
Educational qualification of mothers		
Illiterate	27	27
Till 12th	26	26
Till 10th	23	23
Graduate and above	24	24
Transportation		
Walking	32	32
Two-wheeler	33	33
Auto	22	22
Four-wheeler	13	13
Distance from school		
Less than 5 km	54	54
More than 5 km	46	46

Section II

Analysis of data related to the Anxiety among the mothers of school going children during COVID -19.

Figure -1: show that anxiety among the mothers of school going children during COVID -19

N=100

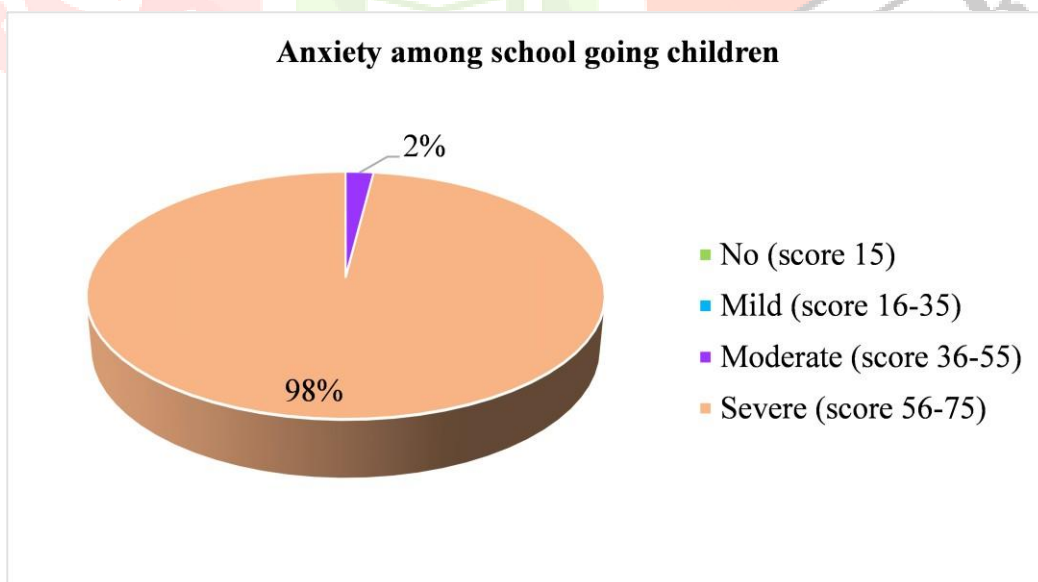


Figure -1: show that anxiety among the mothers of school going children during COVID -19

Figure -1: shows that while assessing the questionnaires for offline mode 98% of the mothers of school children had severe anxiety (Score 56-75) and 2% of them had moderate anxiety (Score 36-55) during COVID-19.

Section II

Description of samples (High risk women) based on their personal characteristics.

Analysis of data related to the association of anxiety among mothers of school going children with their demographic variables.

Table 2: shows that Fisher's exact test for association of anxiety among mothers of school going children with their demographic variables.

N=100

Demographic variable		Anxiety		p-value
		Moderate	Severe	
Age	20 – 30 years	2	53	1.000
	31-40 years	0	26	
	41-50 years	0	15	
	Above 50 years	0	4	
Marital status	Married	2	76	1.000
	Unmarried	0	9	
	Divorced	0	7	
	Widow	0	6	
Having child	One	0	18	0.685
	Two	2	50	
	3 and above	0	30	
Type of family	Joint	1	25	0.736
	Nuclear	0	29	
	Extended	1	44	
Educational qualification of mothers	Illiterate	1	26	0.858
	Till 12th	0	26	
	Till 10th	0	23	
	Graduate and above	1	23	
Transportation	Walking	0	32	0.787
	Two-wheeler	1	32	
	Auto	1	21	
	Four-wheeler	0	13	
Distance from school	Less than 5 km	1	53	1.000
	More than 5 km	1	45	

Since all the p-values were large (greater than 0.05), none of the demographic variables was found to have significant association with the anxiety among mothers of school going children during COVID-19.

Demographic data analysis

Demographic variable	Freq	%
Age		
20 – 30 years	55	55%
31-40 years	26	26%
41-50 years	15	15%
Above 50 years	4	4%
Marital status		
Married	78	78%
Unmarried	9	9%
Divorced	7	7%
Widow	6	6%
Having child		
One	18	18%
Two	52	52%
3 and above	30	30%
Type of family		
Joint	26	26%
Nuclear	29	29%
Extended	45	45%
Educational qualification of mothers		
Illiterate	27	27%
Till 12th	26	26%
Till 10th	23	23%
Graduate and above	24	24%
Transportation		
Walking	32	32%
Two-wheeler	33	33%
Auto	22	22%
Four-wheeler	13	13%
Distance from school		
Less than 5 km	54	54%
More than 5 km	46	46%

Discussion

The finding of the study have been discussed with reference to the objectives and hypothesis stated. A study was conducted to assess the effectiveness anxiety level of offline mode among mothers of school going children during COVID-19 in the selected area of Ajmera. Descriptive evaluation study approach was used in this study. Result of the study that was, in this study on “A study to assess anxiety level among mothers of school going children during covid-19 pandemic among mothers in selected areas” out of 100 participants 98% of the mothers of school going children had severe anxiety (56-75) and 2% of them had moderate anxiety (score 36-55) of them had mild anxiety during COVID -19.

Conclusion

The conclusion drawn from the finding of the study are as follows: While assessing the anxiety level of offline mode among mothers of school going children during covid-19 pandemic in selected area was done, a plethora of surveys and questionnaires were circulated. The demographic data of various aspects of anxiety were evaluated based on mothers' opinion. The responses were categorized in two different sections. Bifurcations based on variables like Age, Marital status, Number of children, type of family, education qualification, transportation, etc. determined the range and domain of the study. Conclusive evidence was inferred upon after reviewing the responses of mothers regarding Content of study delivered.

Limitations

1. Study limited to school going children.
2. Limited to mothers of school going children in Ajmera Pimpri, Pune
3. Sample size has only 100.
4. Data was collected only the anxiety level of offline mode among mothers of school going children during COVID-19.

Recommendations

1. It is suggested that the study may be replicated using a larger population of mothers of school going children.
2. A study can be carried out to assess the anxiety level of offline mode among mothers of school going children during COVID-19.
3. Similar study can be done to evaluate the effectiveness of planned teaching programme regarding anxiety of mothers of school going children in selected area.
4. A similar kind of study can be undertaken in different settings and different target population.
5. A study may be conducted to find out attitude towards anxiety level of mothers of school going children in COVID-19 pandemic.

Reference

1. Aradhara Nair, TIMES OF INDIA, PUNE NEWS, MAHARASHTRA, 8 FEB, 2021.
2. Ankit Yadav, "INDIA TODAY", News of Delhi, May 29, 2020 UPDATED: May 29, 2020 06:45 IST.
3. A Ragu Raman, TNN, times of India, Chennai, Updated: Nov 10 2020, 12:15 IST.
4. C. Jaisankar, the Hindu, 'Parents participate in meeting at government Syed Murduza Higher Secondary School in Tiruchi on Monday, TIRUCHI 10 NOVEMBER 2020 04:07 IST.
5. Faheem Hussain, TIMES OF INDIA, BENGULURU NEWS, May 29, 2020, 13:48 IST.
6. Gen. Psychiatry, Corresponding authored Jew Chen, Shanghai Mental Health Centre, Shanghai Jiao Tong University School of Medicine.
7. Iriam Sinkerud Johnson, PhD Oslo Metropolis University, Nora Paulsen Skjerdingsstad University of Bergen, "Mothers Stress During the COVID-19 Pandemic and its Association with Depression and Anxiety", April 7, 2020.
8. India.Com 'IANS': September 30, 2020 4:40 PM IST.

9. Katherine Sellegren, BBC NEWS 19th, January 2021.
10. Kritika Sharma and Prashant Shrivastava the Print. In FEB 20, 2021.
11. Martha Pelaez, College of Arts, Science and Education, Florida International University, Miami, FL, USA, "Returning to School: Separation Problem and Anxiety in the Age of Pandemics" 2020 Sep; 13(3): 521-526.
12. Manash Pratim Gohain, INDIA NEWS, NEW DELHI NEWS Jun 6, 2020, 15:44 IST..
13. Megan Leonard, CNBC, New York, Published Thu, Jul 16 2020 2:34 PM EDT.
14. P. Sujata Varma, THE HINDU, Andhra Pradesh, VIJAYWADA 14 SEP. 2020 23:39
15. Polit F. Denise and Hungler P. Bernadette. "Essential of Nursing Research" 2nd edition, Lippincott Publication: P885.
16. Severe Urnes Johnson, University of Oslo, "Parenting in a Pandemic: mother's Stress during the COVID-19 and Its Association with Depression and Anxiety" May 6, 2020.
17. Sukanya Nandy, Education world, Returning to School: Separation Problem and Anxiety in the Age of Pandemics January 8, 2021.
18. Virginia Commonwealth University, Department of Paediatrics, Children's Hospital of Richmond, VA, USA 2020 Dec 9. Doi: 10.21203/rs.3.rs-66730/v2.
19. TTN, Times of India, Hyderabad, May 11, 2020, 04:09 IST.
20. Oxford American dictionary, 3rd edition, edited; Angus Stevenson Oxford University press publication 2013.

