

Developing Communication Tools for Creating Awareness on COVID-19 Pandemic Among School Going Children (6-12 YEARS)

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Abstract: COVID-19 pandemic had severe impact among the lives of the people. Due to the lack of proper awareness and the passive attitude of the people, the number of cases increased rapidly in most of 2020. In this situation, creating consciousness among the people is vital. Hence the present study on "Developing communication tools for creating awareness of COVID-19 pandemic among school going children (6-12 years)" aims to create awareness about COVID-19 among children who are considered as a vulnerable population. Irrespective of the gender 75 respondents were selected for the study. The objectives of the study were to develop and design games for creating awareness about COVID-19 and to check the effectiveness of these games. Online questionnaire was carried out to collect the data regarding the sampling. Different games like puzzles, word search, Aksharamala, Bingo, etc. were introduced to the samples, along with many daily tasks. The responses were very encouraging. Significant difference was found in the level of awareness about the COVID-19 among children. The level of accuracy of the knowledge regarding the pandemic was also found to increase.

Index Terms: Communication tools, COVID-19, games, change, Kerala, school going children.

I. INTRODUCTION

Corona viruses are a huge family of viruses that cause many chronic diseases. A novel corona virus is an advanced strain of virus that has not been formerly identified in humans. Accepted recommendations to avert the spread of disease include regular hand washing, covering of mouth and nose when coughing and sneezing, avoid close contact (social distancing) with anyone showing symptoms, etc. Since majority of the people, especially children are sitting inside their home the use of digital platforms has increased dramatically.

COVID-19 and the associated lockdown in India, has made a significant impact on the life of the population, across boundaries. On 12th February 2021, globally 106,991,090 confirmed cases of COVID-19, including 2,347,015 deaths were reported to the World Health Organization. In India there have been 10,871,294 confirmed cases of COVID-19 with 155,360 deaths as on 12th February 2021 (WHO). Whereas in Kerala, 3952 deaths and 993,936 confirmed cases were reported on the same day. The only fluctuations are in the statistics, but the conditions are the same each day. Instead of giving mere advises and awareness, if the information can be given through effective communication aids people can retain and recall it. With this study, we aim to create awareness about COVID-19 among the school going children especially from the age of 6 years to 12 years, through interactive and fun oriented games (communication tools). This can help to make them aware about the severity of the pandemic and also improve their psychological health. Lack of awareness and the passive attitude of people are the major problems of this pandemic. Children are a community which is relatively accessible to disseminate information to and at the same time they are one of the most vulnerable groups to the corona virus. Games are activities usually undertaken for fun and enjoyment. Games also give information, education and entertainment. Games are an effective tool to disseminate information in an entertaining manner.

II. OBJECTIVES OF THE STUDY

1. To ascertain the socio-economic background of the samples.
2. To understand the existing knowledge of the population about the COVID-19.

3. To develop and disseminate games for providing awareness about COVID-19 among the sample of children.
4. To check the effectiveness of the games used in creating awareness among the sample.

III. SIGNIFICANCE OF THE STUDY

Wider acceptance of virtual services is one of the major changes happening during COVID-19 pandemic. Even though the digital technology can enhance public-health education and communication, many people are not using it properly. So, it is very important to make people conscious about the gravity of the pandemic since the number of affected people and death rates are increasing rapidly. This can be taught through the younger members of the family, the children. Through various social media platforms, television, newspaper, etc; various information regarding COVID-19 are being disseminated. But majority of people are not actually concentrating on it. With suitable interesting interventions like games, we can seek the attention of children, and can make them aware about the different aspects of COVID-19. Therefore, the study titled 'Developing Communication Tools for Creating Awareness On COVID-19 Pandemic Among School Going Children (6-12 Years)' is to check the existing knowledge of the population about COVID-19 and to disseminate games which are focusing on any of the aspect of COVID-19 in which the respondents have less knowledge and for checking its effectiveness.

IV. STUDY DESIGN

Thiruvananthapuram, the capital city of the State of Kerala was selected as the locale of the study. Considering the extend of vulnerability of the population, school going children (6-12 years of age) were identified as the sample for the study. A sample size of seventy-five was selected using purposive sampling method. An inclusion and exclusion criteria were also set for the study sample. Prior to the study the informed consent of participants was taken for making them understand the purpose of the study and to agree to become a part of the study. Consent was obtained from the parents of the children as well. The participation of the sample was purely voluntary, and they could withdraw from the study at any point. The socio-demographic background and the existing level of awareness about different areas of COVID-19 among the sample were collected using an online questionnaire. Questions were framed on the following aspects of COVID-19 symptoms, treatment, misconceptions, nutritional recommendations and post COVID-19 recovery.

Communication games like Aksharamala, COVID-19 Quiz, Jumbled words and Word puzzles were developed and Bingo was adapted and translated from the original versions developed by Aparna Khanna, her students and colleagues (2020). Aksharamala is a type of game in which English alphabets was

given and its COVID-19 related explanations were also given for some alphabets. The samples were asked to find the rest. Several questions related to the different aspects of COVID-19 were provided through the COVID-19 Quiz. Jumbled words is a type of word puzzle in which a set of words, which was jumbled by mixing its letters. The clues for solving the jumbled words were also provided. In Word puzzles a mix of letters was given and the samples were asked to find out the different words related to COVID-19. All these games were aimed to increase the level of knowledge of the sample about COVID-19. Daily challenges and tasks like Corona drawing, posting a video on proper handwashing, and post COVID-19 practices were also given to the sample in between the games to create interest, sustain curiosity and attention throughout the period. With the Corona virus drawing task, the children were asked to draw a picture of corona virus in their imagination. Hand wash video was a task in which the sample had to make a and washing video by explaining its different steps and in Post COVID-19 practices, the sample was asked to do make any type of communication about the post COVID-19 practices in their imagination. It could be a short description, a song, a drawing, an audio talk, a short video, etc.

A period of six weeks was set for the intervention. The content of the games was collected from the official websites of Arogyakeralam, WHO and UNICEF (from the period of September to November 2020) for better authenticity of the data. Those who joined the survey were further added to a WhatsApp group. Games, tasks, and instructions on how to proceed with the task and play the games were clearly provided in the group through both audio and video messages. The responses of each sample were collected and analysed further. All the games were field tested prior to the study. The effectiveness of the games was checked after the intervention programme using a checklist. An online questionnaire was given to the sample to fill with the help of their parents for evaluation.

V. MAJOR FINDINGS OF THE STUDY

A. Profile of the sample

Seventy-five school going children (6-12 years of age) were selected as the sample for the study. Figure 1 shows information regarding the socio-demographic profile of the sample such as age, gender and mode of play of the children.

The sample belonged to the age group of six to twelve was taken for the study in which 57.4 percent of them belonged to the age group of 6-9 years of age and 42.6 percent of them belonged to the age group of 10-12 years of age. 44 percent of the sample were males, and 56 percent were females. Regarding the mode of play adopted by the sample, 32 percent played with the help of their parents, 44 percent played alone, 20 percent played with their siblings and a mere 4 percent played with grandparents. An evaluation form was used for understanding the acceptance of the games played, the easiness, previous

experiences and the effectiveness of the developed games in enhancing the awareness level of the sample and to know about the suggestions regarding efficacy of the games.

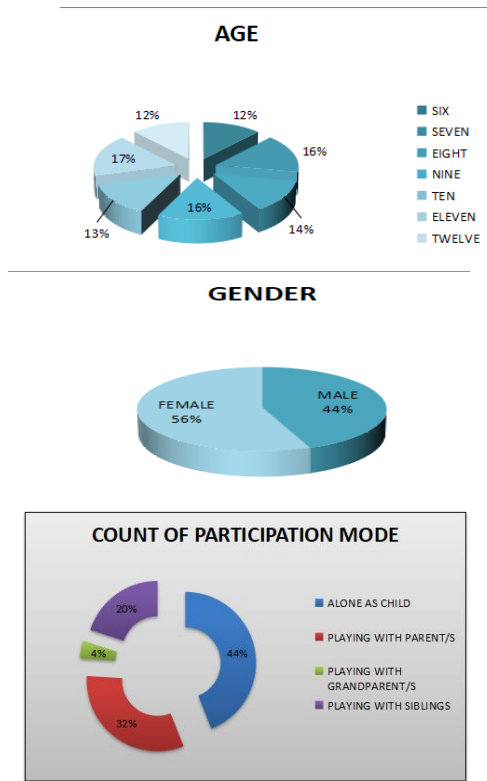


Fig 1. Socio- demographic profile of the sample

Table 1. Evaluation of the tools

Criteria	Category	Percentage (N=75)
Ease of playing the games	Excellent	67.5%
	Good	27.5%
	Fair	5
Ease of understanding the instructions	Excellent	70%
	Good	25%
	Fair	5%
Appeal of the games	Excellent	65%
	Good	30%
	Fair	2.5%
	Poor	2.5%
Previous experiences regarding playing similar games	Yes	12.5%
	No	87.5%
Extent of awareness on COVID-19 after playing the games	Increased	95%
	No change	5%

When asked for the ease of playing the games, majority of the sample (67.5 percent) responded as Excellent, 27.5 percent sample as Good and only 2.5 percent as Fair. The sample responded that they liked these tools a lot because of their ease of playing. This is because 57.4 percent of the samples were between the age group of 6-9 years. By analyzing the ease of understanding the instructions, 70 percent of the sample responded as Excellent, 25 percent as Good and 5 percent as Fair. There was a provision for clarifying their doubts in the WhatsApp group. 65 percent of the sample responded that the appeal of the games as Excellent, 30 percent as Good and 2.5 percent each for Fair. For 87.5 percent sample there were no previous experiences of COVID-19 games. For 95 percent of the sample, who actively participated in the games, opined that their awareness on COVID-19 has increased after playing the games and only 5 percent responded that there was no change in their overall knowledge.

B. Ranking of the games used for creating the awareness

The games were further ranked based on the responses shared by the samples.

Table 2. Ranking of the games and tasks

GAMES	1 st (N=75)	2 nd (N=75)	3 rd (N=75)
Corona Drawing	57.5%	22.5%	5%
COVID-19 Quiz	63.9%	16.7%	11.1%
Steps in hand washing (video)	41.7%	19.4%	13.9%
Word puzzle	38.9%	16.7%	8.3%
Aksharamala	30.6%	22.2%	11.1%
Post COVID-19 practices	38.9%	8.3%	13.9%
Peace Maker vs Peace Breaker (jumbled words)	38.9%	16.7%	8.3%
Lock down Bingo	38.9%	16.7%	5.6%

The first three rankings for each game and tasks were analysed from the responses of the sample. Corona drawing was the most liked task and COVID-19 quiz was the most liked game, followed by steps in hand washing, find the difference, jumbled words and lockdown Bingo, Post COVID-19 practices and finally Aksharamala. From this ranking of games and tasks, it was evident that children preferred more activity-oriented games. Most of the sample justified this ranking as the games

and tasks were fun and informative. Challenge was the most liked feature of the games (66.7 percent). Word puzzle was responded as the most difficult game and Corona drawing was the easiest one. 90 percent of the sample responded as they were interested to play different awareness games further. Figure 2 shows the images of the games and activities done by the sample.



Fig 2. Various games and tasks done by the sample

CONCLUSION

Games are an interesting medium for bringing behaviour change among the masses. They are a useful way to understand, co relate and improve the level of knowledge towards a particular aspect. It was noticed that the colour, easiness of the games, instructions given on how to play the games, and design have an overall impact on the samples towards the games. The tasks given in between were found to be interesting and they helped to sustain the level of interest among the sample. Being, the first attempt, the study needs further exploration on understanding the effectiveness of the games. A meta-analysis could not be conducted due to the limited time frame and the prevailing conditions.

ABBREVIATIONS

1. UNICEF- United Nations International Children's Emergency Fund

2. WHO - World Health Organization

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