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Effectiveness of Covid-19 Awareness Programme on the Understanding of the Covid-19 Disease among the Lay Population in Hoima, Kinubu Cell

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ABSTRACT

This study assessed the awareness and effectiveness of COVID-19 awareness programs among residents of Hoima, Kinubi Cell. All participants (100%) were aware of the COVID-19 outbreak, aligning with findings from previous studies that highlight the impact of mass media campaigns in disseminating public health information. Television and radio were identified as the primary sources of COVID-19 information by 30.1% of respondents, reinforcing the role of mass media in health communication. The study further revealed that 75.2% of respondents were aware of the cardinal symptoms of COVID-19, and 69.8% acknowledged that vaccination and social distancing help curb its spread. Additionally, 94% of respondents agreed that wearing face masks prevents infection, in agreement with existing literature on COVID-19 prevention strategies. Regarding COVID-19 transmission, 69.8% recognized it as an airborne disease, supporting scientific evidence on its mode of spread. Furthermore, 80.1% of participants believed that avoiding public transport and crowded areas reduces transmission, aligning with global recommendations on mitigation strategies. To improve the effectiveness of awareness programs, 60.1% of respondents suggested translating information into local languages, while 54.9% supported involving community leaders to enhance receptiveness. Additionally, 30.1% agreed that providing incentives increases community participation in sensitization programs. The use of pictorial flyers was also recommended to enhance understanding. In conclusion, COVID-19 awareness programs in Hoima, Kinubi Cell have been effective in educating the population. However, shorter and more precise television and radio programs, coupled with multilingual translations and visual aids, could further improve comprehension and engagement.

Keywords: COVID-19 Awareness, Mass Media Communication, Public Health Sensitization, Prevention Strategies, Community Engagement

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by the novel coronavirus (SARS-CoV-2), which spreads primarily through respiratory droplets from an infected person via coughing or sneezing [1]. The disease originated in Wuhan, China, in late December 2019 and quickly spread worldwide, prompting the World Health Organization (WHO) to declare it a public health emergency of international concern on January 30, 2020 [2]. According to the WHO [3], the COVID-19 pandemic is one of the deadliest respiratory illnesses since the Spanish flu of 1918. While historical records mention plagues in the Old Testament book of Exodus, the Spanish flu pandemic is the most documented viral outbreak with severe global consequences. By March 2020, WHO officially classified COVID-19 as a pandemic, signifying that the virus was spreading uncontrollably across multiple countries [4]. The symptoms of COVID-19 include fever, cough, fatigue, and difficulty breathing. Initially, many infected individuals exhibit mild symptoms, often mistaking them for common flu [5]. However, due to its airborne transmission through respiratory droplets and contaminated surfaces, the virus spreads rapidly within communities. COVID-19 has severely impacted social life, leading to widespread closures of schools, universities, restaurants, and

entertainment venues [6]. Many public events, including religious ceremonies and conferences, were either canceled or postponed. Notably, even a global conference on COVID-19 was canceled due to the virus itself [7]. The global impact of COVID-19 has been devastating, leading to significant loss of life and severe socio-economic consequences. As a result, health organizations have emphasized preventive measures such as frequent handwashing, the use of sanitizers, and maintaining social distance [8]. Despite extensive research, there was initially no definitive treatment or vaccine. However, multiple nations, including China, the United States, the United Kingdom, Japan, Canada, Germany, and France, undertook vaccine development efforts. By mid-2021, over 52 million Africans had received at least one dose of the vaccine, representing only 1.6% of the world's vaccinated population [9]. The virus's spread varied across regions. The first imported case of COVID-19 in Africa was reported in Egypt on February 14, 2020 [10]. Due to China's extensive commercial involvement in Africa, significant travel between the regions facilitated the virus's importation. In South Africa, as of April 5, 2020, the country had 1,655 confirmed cases and two deaths [11]. Ethiopia confirmed its first case in mid-March 2020, and by November 1, 2020, nearly 100,000 cases and 1,600 deaths were reported. Governments across Africa implemented stringent measures such as travel bans, border closures, lockdowns, and mandatory quarantines to mitigate the virus's impact. Uganda confirmed its first COVID-19 case on March 21, 2020. By mid-2021, Uganda had recorded over 123,572 cases and 3,156 deaths [12]. The government enforced strict lockdowns, including curfews, public transport bans, and social distancing protocols. Despite these measures, the pandemic significantly affected Ugandan communities, increasing poverty, unemployment, mortality rates, gender-based violence, and social unrest. Given these challenges, this study aims to examine the effectiveness of COVID-19 awareness programs in enhancing community understanding of the disease in Hoima, Kinubi Cell.

METHODOLOGY

Research Design

This study will use a cross-sectional design suitable for a well-defined subject. It will be based on a survey design to gather data from a sample of the study population at a particular time. Given the limited duration within which the study will be conducted, the researcher found the cross-sectional design more suitable. Both qualitative and quantitative data will be collected. The study will also adopt both quantitative and qualitative research methods. Qualitative techniques will help the researcher draw conclusions on variables that cannot be measured quantitatively, while quantitative techniques will facilitate establishing values attached to numerical variables.

Sample Size Determination

According to Mugenda and Mugenda [13], the target population refers to an entire group of individuals, elements, or objects having common observable characteristics. Population studies are more representative because everyone has an equal chance of being included in the final sample that shall be drawn. The study population will comprise both male and female respondents of Hoima, Kinubi Cell, taking into account age, education level, and other factors. Slovin's Formula was used to calculate the sample size. It provides the sample size (n) using the known population size (N) and the acceptable error value (e).

$$n = \frac{N}{1 + Ne^2}$$

Where n = Number of samples, N = Total population of hoima, kinubi cell's 12700

Using the slovens formula

and e = Error tolerance (CI95% = 0.05).

$$n = \frac{12700}{1 + 12700 * 0.05^2}$$

$$n = 387$$

Data Collection

Data Sources and Types

The researcher will use both primary and secondary data.

Primary Data

Primary data was obtained from respondents within Hoima, Kinubi Cell. Questionnaires and interview guides were used to collect primary data.

Secondary Data

Secondary data involves consulting existing sources to extract information required to support study findings. Different sources such as books, internet sources, and journals were used. This data was obtained by visiting reference centers such as Hoima, Kinubi Cell records, libraries, dissertations, and other materials like journals and newspapers.

Data Collection Methods and Instruments

The study used questionnaires and interviews to gather information on the impact of COVID-19 on the community in Hoima, Kinubi Cell.

Questionnaire Survey

The questionnaire method was used to collect data from respondents about the impact of COVID-19 on the community. Questionnaires will offer a high level of anonymity, be cost-effective, and allow respondents to complete them at their convenience, increasing the chances of obtaining valid information.

Key Informant Interviews (KIIs)

Interviews involved face-to-face encounters between the researcher and respondents to obtain accurate and reliable data [12]. The researcher interviewed selected resourceful personnel such as local leaders, health workers, police officers, and NGO staff. The interview guide helped to provide in-depth data and allowed respondents to discuss additional issues of interest.

Documentary Review

The researcher collected secondary data through documentary reviews, such as reading journals, dissertations, and textbooks. These assisted in reconstructing study variables and provided an in-depth comparison with the study area.

Data Collection Instruments

The study used three categories of research instruments: self-administered questionnaires, interview guides, and checklists.

Self-Administered Questionnaire

Self-administered questionnaires was used to collect data from respondents. The questionnaire contained both structured and semi-structured questions. A 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) was used to ensure consistency in responses.

Interview Guide

The interview guide was used for key resource persons such as local leaders, health workers, police officers, and NGO staff. Interviews will allow for probing, leading to deeper insights.

Research Procedure

The researcher obtained permission from Kampala International University in Uganda and the LC1 office of Hoima, Kinubi Cell. Copies of the questionnaire will be distributed to respondents at their workplaces, and the researcher will explain the purpose of the study to minimize suspicion and ensure independent responses. Completed questionnaires will be collected for analysis.

Quality Control

Validity

Validity was ensured by designing questionnaires in relation to the research topic. Descriptive, interpretative, and theoretical validity were considered through literature reviews and supported findings. Content validity focussed on the extent to which the instrument aligns with theoretical concepts.

Reliability

Reliability refers to the stability of the measure used to study the relationship between variables. The reliability of the instrument will be tested using Cronbach's Alpha method provided by SPSS. A pilot study with five questionnaires was conducted, and Cronbach's Alpha computed. A value above 0.7 was considered reliable.

Data Processing, Analysis, and Presentation

Data Processing

Qualitative data was coded first. A coding sheet was constructed, and each questionnaire answer assigned a corresponding number.

Data Analysis

Data from the questionnaires were analyzed using Excel. Descriptive analysis was applied, and findings explained and presented based on the study objectives. Data was analyzed using simple statistical percentages and frequencies and presented in tables.

Data Presentation

Data entered into Excel was presented using frequency tables. Data from interviews were presented in quotation form as emphasized by key informants.

Ethical Considerations

Permission to conduct the study was obtained from Kampala International University in Uganda and the LC1 office of Hoima, Kinubi Cell. Respondents' consent was sought, and confidentiality strictly observed. Names of study participants were recorded on questionnaires or interview guides. This research is purely for academic purposes, respecting copyrights and intellectual property rights to avoid plagiarism. All interviews were conducted ethically.

RESULTS

Out of the total 202 respondents residing in Hoima, Kinubi Cell, the majority (67.4%) were aged between 21 and 26 years, while only 8.9% were between 15 and 20 years, and 7.4% were above 33 years. This implies that most respondents were mature enough to provide valid responses to the questions. It also suggests that the majority were capable of understanding and accessing various media tools through which information about COVID-19 and its spread was communicated. Most of the respondents were female (52%) compared to male respondents (48%). Additionally, the majority were single (48.6%), while 25.7% were married, 17.8% were separated, and 8.9% were widowed. This indicates that the findings were predominantly derived from single respondents.

Regarding employment status, the majority of respondents were self-employed (51.4%), while 32.7% were unemployed, and only 15.9% were employed by the government. This suggests that most respondents had some source of income, which could have enabled them to afford the necessary measures required for implementing COVID-19 standard operating procedures as directed by various awareness programs. In terms of education level, 27.2% of respondents had at least a certificate qualification. Diploma holders constituted the largest proportion at 38.6%, while degree holders made up 34.2%. This indicates that the respondents were well-educated and able to comprehend most of the information conveyed by different COVID-19 awareness programs. Consequently, the majority of respondents were able to provide valid responses to the questions in this study.

Socio-Demographics of Respondents

Table 1: GENDER

GENDER	FREQUENCY	PERCENTAGE
MALE	97	48
FEMALE	105	52
TOTAL	202	

Table 2: MARITAL STATUS

MARITAL STATUS	FREQUENCY	PERCENTAGE
SINGLE	98	48.6
MARRIED	50	24.7
DIVORCED	0	0
SEPARATED	36	17.8
WIDOWED	18	8.9
TOTAL	202	

Table 3: EMPLOYMENT STATUS

EMPLOYMENT STATUS	FREQUENCY	PERCENTAGE
NOT EMPLOYED	66	32.7
SELF EMPLOYED	104	51.4
GOVERNMENT EMPLOYED	32	15.9
TOTAL	202	

Table 4: LEVEL OF EDUCATION

LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
DIPLOMA	78	38.6
DEGREE	69	34.2
CERTIFICATE	55	27.2
TOTAL	202	

Table 5: AGE (years)

AGE (years)	FREQUENCY	PERCENTAGE (%)
15-20	18	8.9
21-26	136	67.4
27-32	33	16.3
33 and above	15	7.4
Total	202	

Awareness of the COVID-19 Outbreak Among Respondents

Among the total of 202 respondents, 100% were aware of the COVID-19 outbreak. This implies that all participants in this study had access to information regarding the outbreak. It also suggests that the various sensitization strategies used to inform the community about the existence and spread of COVID-19 are highly effective in achieving their goal. The majority of respondents (30.1%) reported learning about the COVID-19 outbreak through TV and radio programs. Additionally, 24.7% received information from flyers, banners, and newspapers; 20.2% from community sensitization programs; 14.8% from smartphone devices; and 9.9% from other sources. This indicates that TV and radio are the most effective means of disseminating information about the COVID-19 outbreak to the people of Hoima. Regarding knowledge of COVID-19 symptoms, 75.2% of respondents were aware of the cardinal symptoms—fever, fatigue, dry cough, and body aches. Meanwhile, 19.8% were unsure about the symptoms, and only 4.9% disagreed with the given list. This suggests that the majority of the population in Hoima, including Kinubi Cell, is aware of COVID-19 symptoms, demonstrating that awareness programs are yielding positive results. Additionally, 69.8% of respondents knew that COVID-19 has no cure and that vaccination and social distancing only help prevent the spread of the disease. However, 20.2% were unsure about this information, while 9.9% believed it to be false. A significant majority (94%) of respondents agreed that wearing a face mask helps prevent COVID-19 infection. Only 0.9% disagreed, while 4.9% were uncertain. Furthermore, 80.1% agreed that COVID-19 transmission can be prevented by avoiding crowded places and public transportation, while 10% were unsure, and 9.9% disagreed. Regarding the nature of COVID-19 transmission, 69.8% of respondents agreed that it is an airborne disease, while 20.2% were unsure, and 9.9% disagreed. Finally, 85% of respondents supported isolating COVID-19 contacts for 14 days, while 7.4% disagreed, and 6.9% were uncertain.

Table 6: MODE OF COMMUNICATION

MODE OF COMMUNICATION	NUMBER OF RESPONDENTS	PERCENTAGE
TV AND RADIO PROGRAMMES	61	30.1
COMMUNITY SENSITIZATION PROGRAMMES	41	20.2
SMART PHONE DEVICES	30	14.8
FLYERS, BANNERS AND NEWSPAPERS	50	24.7
OTHERS	20	9.9

Table 7:QN3-QN8

	QN3	QN4	QN5	QN6	QN7	QN8
TRUE	152	141	190	162	141	173
FALSE	10	20	2	20	20	15
NOT SURE	40	41	10	20	41	14

Improving the Effectiveness of COVID-19 Awareness Programs

61.3% of the respondents strongly agreed that translating information about COVID-19 into local languages would improve the community’s understanding of it. This implies that the majority of respondents would better comprehend COVID-19-related information if it were presented in their local languages, such as Runyoro, which is commonly spoken in Hoima, or Kinubi, spoken in the Kinubi Cell area, among other appropriate local languages. Nevertheless, only 2.9% of respondents strongly disagreed with this. Additionally, 54.9% of respondents strongly agreed that involving community leaders in COVID-19 sensitization programs would make community members more receptive to the information. This suggests that if chairpersons and other local leaders play a significant role in community sensitization efforts regarding COVID-19, better results will be achieved. Most community members are more likely to listen to their own leaders than to outsiders. Only 4.9% of respondents disagreed with this statement. Furthermore, 30.1% of respondents strongly agreed that providing incentives could enhance community participation in COVID-19 sensitization meetings. Incentives in the form of money, snacks, or drinks could encourage higher attendance at these meetings by motivating people to participate. However, 14.8% of respondents disagreed, possibly due to concerns about the embezzlement or misuse of funds allocated for incentives. There was a general agreement that using simplified images improves the public’s understanding of COVID-19-related information, with 35.1% of respondents strongly agreeing and 33.6% agreeing. This implies that in Hoima, awareness measures could be effectively communicated through visual representations. For instance, a picture of a person coughing could be used to illustrate COVID-19 symptoms, such as a dry cough. A majority of respondents also agreed that placing COVID-19 flyers in commonly frequented locations increases readership, with 54.9% strongly agreeing and 37.6% agreeing. This suggests that if the government aims to enhance awareness through flyers, they should be placed in high-traffic areas such as markets (e.g., Hoima and Kinubi Cell Market), taxi parks, or near the entrances of shops and supermarkets. This would increase exposure and, consequently, the public’s awareness of COVID-19. Lastly, 43% of respondents strongly agreed that radio and TV programs discussing COVID-19 should be short, precise, and aired at consistent times. This relates to the general public’s attention span for non-entertainment topics such as COVID-19. Therefore, for these media programs to be effective, they should be as concise and clear as possible to ensure better engagement and comprehension by the audience.

Table 8:QN1-QN6

	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
QN1	61.3%	24.7%	4.9%	5.9%	2.9%
QN2	54.9%	35.1%	4.9%	4.9%	0%
QN3	30.1%	40%	9.4%	14.8%	5.4%
QN4	35.1%	33.6%	21.2%	5.9%	3.9%
QN5	54.9%	37.6%	2.5%	2.4%	2.4%
QN6	43%	28.7%	13.8%	5.4%	8.9%

DISCUSSION

Among the participants of this study, 100% were found to be aware of the COVID-19 outbreak. This concurs with the national cross-sectional survey by Olum et al. [14], which reported a high overall awareness. Mass media campaigns have long been a tool for promoting public health, as they are significantly used to expose large populations to important messages through routine use of existing media such as television, radio, and newspapers [15]. Communication is essential in promoting and sustaining healthy behavior, as it serves as the medium used to create awareness among individuals, groups, and communities on health-related issues [16]. The majority of respondents (61, representing 30.1%) identified television and radio as their primary sources of COVID-19 information. This implies that television and radio were the major channels through which coronavirus-related information was communicated to citizens. The findings of this study align with Wakefield [15], who observed that mass media campaigns have long been a key tool for promoting public health, significantly exposing large populations to messages through television, radio, and newspapers. During this global pandemic, information has become an educational, social, economic, political, and health necessity. A majority of respondents also reported that radio and television programs should be short and precise for easier understanding.

Knowledge of COVID-19 Symptoms and Prevention Measures

A total of 75.2% of respondents were aware of the cardinal symptoms of COVID-19. This finding aligns with a cross-sectional study that stated that the overall awareness, knowledge, attitude, and practices of Ugandans regarding COVID-19 are good [14]. This further solidifies the fact that different COVID-19 awareness strategies are effective in increasing awareness among the people of Hoima, particularly in Kinubi Cell. The general public appears to be more compliant with restrictions aimed at preventing the spread of COVID-19, such as social distancing [17]. The respondents demonstrated high awareness of COVID-19 facts, with 69.8% agreeing that vaccination and social distancing help curb the spread of the virus. Furthermore, 94% of respondents agreed that wearing a face mask helps prevent COVID-19 infection. This concurs with a cross-sectional study by Sikakulya et al., which found that the majority of the population (83.4%) believes that face masks protect against infection spread [18]. Additionally, 80.1% of respondents agreed that avoiding public transportation and crowded areas helps reduce COVID-19 transmission. Ayouni et al., reported a high correlation between COVID-19 spread and public transport, advising mitigation policies such as avoiding public transportation and crowded places [19]. This finding aligns with the results of our study, in which most respondents believed there was a higher risk of contracting COVID-19 in crowded places and public transport than in less crowded areas and private transport. Moreover, 69.8% of respondents agreed that COVID-19 is an airborne disease.

Improving the Effectiveness of COVID-19 Awareness Programs

The multilingual crisis has emerged as a global challenge during the COVID-19 outbreak. English-centric global mass communication has hindered the optimal sensitization of people who are not proficient in English. This is supported by the findings of this study, in which 60.1% of respondents agreed that translating COVID-19 information into local languages would enhance understanding among the local population. Additionally, 54.9% of respondents agreed that involving community leaders in COVID-19 sensitization programs improves community receptiveness to the information, thereby increasing the effectiveness of such programs. A study by Adebisi et al. on community engagement strategies for COVID-19 sensitization in African countries found that involving community

leaders or internal coordinators improved community participation, as it helped overcome cultural, social, and religious barriers [20]. Furthermore, 30.1% of participants agreed that providing incentives enhances community participation in COVID-19 prevention meetings. The majority of respondents also agreed that the use of pictures increases public understanding of COVID-19. This concurs with a study by Liu et al., which reported that pictorial post designs effectively persuaded viewers to comply with COVID-19 safety guidelines and policies [20]. The majority also agreed that these pictorial flyers should be placed in commonly frequented locations to maximize viewership.

CONCLUSION

The various COVID-19 awareness programs have proven to be highly effective in increasing awareness among the population of Hoima, particularly in Kinubi Cell. There is a good understanding of the existence of the COVID-19 outbreak, its common symptoms, and appropriate prevention measures. The most effective COVID-19 awareness method is television and radio, as the majority of respondents reported obtaining information through these channels. However, participants expressed a preference for shorter and more precise television and radio programs to enhance understanding.

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