Precautionary Measures Towards Coronavirus Outbreak Management: Situational Awareness, Readiness and Actual-Practice Among Technical Education Members in Universities

Efuwape B. Michael*[1], Efuwape O. Asake[2] and Akorede J. [3]
[1]Technical Education Department, Tai Solarin University of Education, Nigeria

[2]Guidance and Counselling Psychology Department, Tai Solarin University of Education, Nigeria

[3]Educational Technology Department, Tai Solarin University of Education, Nigeria

*** Corresponding author's email address:**
efuwapebm@tasued.edu.ng;efuwapeoluwabunmi@gmail.com

Abstract

Emergence of Corona Virus Pandemic in the global world has heralded a systemic and strategic education on the tragedies associated with the pandemic; giving rise to readiness to fight against the spread and effective practice of standard precautionary measures. This study explores the level of situational awareness, readiness and actual practice of corona virus 2019 pandemic precautions among university staff and students of technical education in Nigeria. The descriptive survey design was guided by 5 hypotheses. The population for the study comprised all staff (academics and technologists) and students in technical education departments across universities in the south-west, Nigeria. A sample of 214 participants comprising 36 academics, 21 technologists and 157 students were drawn through accidental (online survey) sampling technique. A validated questionnaire was used to collect data for the study. The instrument was validated by experts in health education, psychology, measurement and evaluation, and technical education. Data collected was analysed using descriptive statistics, Analysis of Variance, Peason Correlation and Regression Analysis. Findings shows that the influence of readiness ($p < .05$) is stronger on actual practice of COVID-19 precautionary measures than level of awareness ($p > .05$). Thus, readiness would play a more major role than awareness in predicting the actual practice of COVID-19 precautionary measures. Hence, awareness campaign should be strengthened with attitudinal or readiness measures to actually facilitate compliance with practice.

Keywords: Precautionary Measures; Situational Awareness; Readiness; Practice of Standard Precautions

INTRODUCTION

The entire globe is experiencing a very difficult time with virtual shutdown of the world economy, industrial activities, education sector, inter-country travel, massive health care services among many detrimental implications of the newly emerged corona virus pandemic. There has been previous emergence of different classes of coronavirus one of which was referred to as severe acute respiratory syndrome coronavirus (SARS-CoV) which was contacted from animals in 2003; a pandemic which claimed lives among other associated damages to humanity but was scientifically controlled within a short time (Cheng, Lau, Woo, & Yuen, 2007; Colson,

Rolain & Raoult, 2020). The new explosion of the virus denoted as COVID-19 is a respiratory disease which was first experienced in China in December 2019 (Zhong, Luo, Li, Zhang, Liu, Li & Li, 2020). European Centre for Disease Prevention and Control (ECDC, 2020) established that this new coronavirus has been detected in respiratory, faecal and blood specimens and in most cases is transmitted through large respiratory droplets from one individual to another and through inhalation or deposition on mucosal surfaces. This COVID-19 is novel and has been reported to be highly infectious with a wide range of symptoms including dry cough, difficulty in breathing, fever, dyspnea, myalgia and fatigue, progression from mild to severe disease, including pneumonia, respiratory failure and in some cases death; with no particular vaccine since its outbreak (Chen, Zhou, Dong, Qu, Gong, Han, et al., 2020; WHO, 2020). Meanwhile, ECDC (2020) recommended that those who perceive any of the symptoms of COVID-19 most especially those associated with respiratory difficulties should seek medical advice or contact healthcare services immediately. However, the rate of the spread of the virus across the globe including Nigeria is alarming which makes the world health organization (WHO) to declare the virus a pandemic (Zhong, et al., 2020; WHO, 2020).

The world health organization (WHO, 2020) indicated universal preventive practices which will prohibit the spread of the deadly virus among which include avoidance of close contact with people suffering from acute respiratory infections, regular hand washing, avoidance of unprotected contact with wild animals or farm, practice of cough etiquette such as maintaining distance, sneezing with disposable tissues or clothing, covering cough and hand washing after noticing symptoms of acute respiratory infection. The universal preventive practices are regarded as standard precautions. Infection Control Committee (2019) established that standard precautions are steps taken to prevent spread of any infection from person to person or from contaminated environmental surfaces among others as anticipated by experts. The standard precautions are usually designed to reduce the risk of transmission. Amidst the ravaging global pandemic, the world health organization (2020) also highlighted the health care practices for victims of COVID-19 (2019-nCoV) to include early recognition, immediate separation from other people (isolation), taking appropriate measures such as infection prevention and control (IPC) as well as provision of optimized supportive care.

In order to effectively managed the emerging situation as a result of the coronavirus pandemic and to reduce the number of victims, different government agencies across the country and states have adopted series of awareness programmes in order to educate their people on the standard precautions so as to minimize the spread of the diseases as well as the casualties (Zhong, Luo, Li, Zhang, Liu, Li, & Li, 2020). Government had usually resulted into use of media publicity such as advertisement on radio and television, newspaper publications, internet services, communication agencies and other community based sensitization platforms to facilitate fast information dissemination and public education to enhance the knowledge, attitudes and adherence to important precautions whenever there is an emergency most especially during health related crises such as tuberculosis, ebola, flu, Influenza and the corona virus (Tachfouti, Slama, Berraho & Nejjari, 2012; Ajilore, Atakiti & Onyenankey, 2017). However, the various medium explored in the dissemination of important new life practices that serve as precautions against the spread of the COVI-19 seems not to have yielded much result as the number of confirmed cases keeps skyrocketing daily. Shi, Wang, Yang, Wang, Wang, Hashimoto, Zhang and Liu (2020) raises serious concern on the adequacy of the knowledge acquired during any awareness sensitization on deadly diseases like the corona virus pandemic even among

professional health workers. Liao, Cowling, Lam, Ng and Fielding (2010) revealed that those who accepted government-based information on pandemic outbreaks and standard precautions was more associated with greater self-efficacy and hand washing while those who accepted interpersonal, informal or unverified information strongly correlates with perceived health threat and avoidance behaviour. Shi, et al., (2020) advocated for effective training to solve problems of varying belief, knowledge and practice from very poor to fair understanding of the situation and required practices. Goni, Hasan, Naing, Wan-Arfah, Deris, Arifin and Baaba (2019) established that level of awareness after exposure to relevant information may be wrongly assumed with unimaginable gap in knowledge and poor attitude which usually results in lack of prevention and control of diseases. This has led to multiple spread of infection and low level of impact from mass education (Hasan, et al., 2019).

Furthermore, Balkhy, Abolfotouh, Al-Hathlool and Al-Jumah (2010) ascertained that "misconceptions and worries have led to inappropriate behaviour by the public such as; refusal to comply with precautionary measures, including wearing a mask or accepting a vaccination; avoidance of certain activities including visiting the hospital due to fear of healthcare facilities as a venue for aqcuiring the infection". In essence, it may be difficult to overrule poor level of awareness due to misinformation or misconception most especially with cases of unverified information on social media which may likely mislead some of the populace. Hence, the need to investigate the level of awareness, readiness to practice and the actual practice of the recommended standard precautionary measures to prevent the spread of the virus as well as manage the effect on those who have contacted it especially during the period of consistent rise in the number of infectious cases.

The expected spread of information regarding coronavirus pandemic was seemingly planned and executed using virtually every available means to ensure appropriate awareness of all and sundry including health practitioners and the populace. However, the situational report of daily infection keeps increasing alarmingly (Almutairi, Al-Helih, Moussa, Boshaiqah, Alajilan, Vinluan, and Almutairi, 2015). Situational awareness in this study simply describes the level of knowledge, perception and belief of relevant information, situational updates and prescribed practices of the public on the infectious disease with its associated detrimental effects. Several efforts and resources from government to contain the spread include public health awareness campaign, provision of isolation centres, improvement of health care facilities, providing special training for health workers, provision of palliatives for the less privileges and enforcement of lock down in areas where most cases are been recorded such as south-west region. With the aforementioned efforts to stop the spread, it is surprising that there has been no day when there was no record of infection and more importantly with an average of over one hundred cases. Hence, the causes of the continuous spread despite all the effort put in place to limit the spread becomes difficult to explain. The major challenge tends to point towards level of standard precautionary practices established to prevent the spread which may be related to or influenced by the people's awareness and readiness to practice (Amin & Al-Wehedy, 2009). Amin and Al-Wehedy (2009) posited that certain interference may be established by demographic background and characteristics such as gender, professional classification or status among other things which may mediate the level of awareness and understanding, readiness and actual practice of established standard precautionary measures.

The ever-increasing outbreak of new cases seems to be an indication of non-compliance or practice of the standard precautions such as social distancing, washing

of hands, avoidance of populated areas among other things. It is usually expected that established risks of infections which may include ultimate death, quarantine, intensive care unit experience among others would aid public readiness and optimum compliance with established precautionary practices, however, that often negates the actual occurrences (Almutairi, et al., 2015). However, despite the heavy investment of the government in promoting health through public education among other means, individual involvement in terms of readiness and actual practice cannot be subsidised. Readiness in this study refers to individuals' agreement, efforts and provision of necessary ingredients needed to adhere and carry out the prescribed precautions in avoiding being infected with the coronavirus. Maroldi, Felix, Dias, Kawagoe, Padoveze, Ferreira, Zem-Mascarenhas, Timmons and Figueiredo (2017) hinted that individual level of preparedness and readiness usually prompt adherence and effectual practice of standard precautions against spread of deadly diseases. Adebimpe (2016) explained that most often, only those who demonstrate a good level of readiness engage in the practice of any precautionary activities. Occupational Safety and Health Administration (OSHA, 2009) and WHO (2009) ascertains that prompt readiness to strictly follow standard precautions and practices usually limits the chances of severe outbreaks and outcomes of any deadly diseases among residents of any nation.

Practice means contemplation of rules and knowledge that lead to action. Thus, appropriate knowledge and positive attitude towards practice are vital to accepting and following the guidelines for preventing infections (Jain, et al., 2010). Actual practice in this study explains total compliance and effective observation of all stated precautions accordingly such that an individual completely narrow down the possibility of contacting the virus. Maroldi, et al., (2017) established that weakness in knowledge and low risk perception are major causes of lack of practice or poor practice of standard precautions against spread of any pandemic. Hasan, et al., (2019) in their study established significant and negative linear relationship between knowledge and practice as well as between attitude and practice of standardized precautionary measures against infectious diseases. Moreover, Amin and Al-Wehedy (2009, p. 70) found that "poor practice of standard precautions was as a result of lack of knowledge or awareness and also perception of risks". Other researches established that lack of awareness and appropriate knowledge of standard precautions as well as infection control predicted poor compliance or practice (Stein, Makarawo & Ahmad, 2003; Motamed, BabaMahmoodi, Khalilian, Peykanhertitati & Nozari, 2006; Adebimpe, 2016). Moreover, Hasan, et al., (2019) predicted that where there is a qualitative level of awareness of the negative impacts of an epidemic outbreak, there is likelihood of appropriate practices of preventive precautions in discontinuing the spread and for effective control of such diseases. The findings of Jain, Sawla, Mathur, Nihlani, Ayair, Prabu & Kulkarni (2010) indicated a positive linear correlation between two items of survey including knowledge to attitude, knowledge to practice and attitude to practice. This is an indication of inconsistencies from one place or study to another. The understanding and practice of members of the university organizations in relation to coronavirus pandemic, its dreaded outcomes and essential practices for its avoidance/control may or may not be exceptional.

The university organization as the apex of educational institutions has its members majorly as the staff and students. Staff (usually academics, non-academics or technologists) and students at this level are classified as highly intelligent and knowledgeable so as to exhibit appropriate understanding of disseminated information and expected practices compared to the less educated and the uneducated members of the general society (Adebimpe, 2016). University staff and students most especially in the technical education departments and colleges are usually exposed to safety

precautions and essential health practices for life security as the profession and activities are constantly hazardous. It may be expected that their understanding of rules and regulations and more importantly health and safety precautions be better adhered to with expected practices. A related study conducted by Fadeyi, Fowotade, Abiodun, Jimoh, Nwabuisi and Desalu (2011, p. 144) established that "even though safety precaution was aimed at preventing transmission of HIV, HBV and other blood borne pathogens, the result indicated that awareness and practice among classes of medical laboratory personnel was not encouraging". Fadeyi, et al., (2011) raises concern about the attitude and practices of safety precautions and unsatisfactory use of personal protective equipment even when they are provided. Hence, investigating the awareness and practices of different groups such as university staff and students among many others would be necessary. In Nigeria, there has been increasing number of confirmed cases of infections with eventual casualties across the country and most especially in the south west. The number of laboratory-confirmed cases of coronavirus infection in the south-west is over two-third of the entire cases in the country. Hence, this study focused on higher institution in this environment.

Purpose of the Study and Hypotheses

The study sought to establish the level of awareness, readiness and actual-practice of corona virus pandemic precautions among university staff and students of technical education in South-west, Nigeria. The specific purposes were translated into the following hypotheses:

1. There is no significant mean difference between academic staff, technologists and technical education students on level of awareness on COVID-19.
2. There is no significant mean difference between academic staff, technologists and technical education students on level of readiness to practice standard precautionary measures of COVID-19.
3. There is no significant mean difference between academic staff, technologists and technical education students on the level of actual practice of standard precautionary measures for COVID-19.
4. Level of awareness on the reality and management of the dreaded COVID-19 do not correlate with the readiness and actual practice of the precautionary measures among staff and students of VTE in South-West Universities.
5. Level of awareness and readiness of university staff and students in VTE do not significantly predict the actual practice of COVID-19 precautionary measures.

METHODOLOGY

Study Design

This study employed a cross-sectional study design.

Study Population and Sampling Technique

All the academic staff, technologists and students in the technical education departments of the four universities in south-western region of Nigeria offering the programme forms the population for the study. An online survey employed using accidental sampling techniques generated a sample of 214 participants which comprised of 36 academic staff, 21 technologists and 157 students of technical education programme in the selected universities.

Instrument for the Study

A structured questionnaire was used as instrument for data collection in the study. The questionnaire collected relevant information on the demographic characteristics of the

respondents and each construct of the study. There were 11 items structured to measure situational awareness construct of COVID-19 while readiness and actual practice of COVID-19 precautionary measures has 8 and 9 items respectively. The instrument was developed on a four point scale of very high extent (VHE), high extent (HE), low extent (LE) and very low extent (VLE) with assigned scoring values of 4, 3, 2 and 1 respectively. The instrument was administered to the respondents through different online platforms.

Validity and Reliability of the Instrument

The instrument was validated by 3 experts across relevant fields of study. The test of the internal consistency of the instrument established a reliability coefficient of .79 with Crombach Alpha technique.

Data Analysis

The data analysis for this study was carried out with the aid of SPSS software. The mean and standard deviation were used in answering the research questions raised and thus, described the situational awareness level of the participants as well as their level of readiness and actual practice of COVID-19 precautionary measures. Moreover, the hypotheses generated in the study were tested using pearson correlation, regression analysis and analysis of variance (ANOVA) at 0.05 level of significance.

RESULTS

Table 1: Demographic Variables of Respondents

Variables		Frequency	Percentage
Status	Academics	36	16.8
	Technologists	21	9.8
	Student	157	73.4
Gender	*Male*	180	84.1
	Female	34	15.9

Table 1 presents the demographic variables of university staff (academics and technologists) and students in the technical education programme from the universities in the South-west, Nigeria. The table shows that 16.8% of the entire participants are academics and 9.8% are technologists while the rest are students. Moreover, 15.9% of the participants are females showing that very few females are involved in the technical education profession.

Hypothesis 1

There is no significant mean difference between academics, technologists and technical education students on level of awareness on COVID-19.

Table 2: Analysis of Variance between academics, technologists and students on level of awareness on COVID-19

S/N	COVID-19 SITUATIONAL AWARENESS	Mean	Std. Dev.	F	Sig.	Remark
1	Information is in circulation about the rampaging pandemic termed Corona Virus or COVID-19	3.78	.414	.15	.860	NS
2	I am informed that COVID-19 is a deadly disease	3.52	.640	2.47	.087	NS
3	I am aware that there is no government certified vaccine for the virus at the moment	3.58	.581	7.37	.001	S
4	I am aware that the virus is transferable or contagious	3.91	.285	.32	.721	NS
5	Apart from others, I learnt that the major symptom of COVID-19 is difficulty in breeding	3.51	.729	37.31	.000	S
6	I have the knowledge of the fact that the virus has now been declared an air-borne disease	2.94	.875	21.81	.000	S
7	I have heard through different sources that the corona virus is avoidable and preventable	3.48	.748	.19	.821	NS
8	I have heard of the difficulty associated with self-isolation when manifesting COVID-19 symptoms	2.95	.854	24.23	.000	S
9	I have understanding of the issue of quarantine after testing positive for the virus	3.24	.875	.55	.577	NS
10	I have understanding of the global impact of the virus with reference to active cases, discharged victims and death rate	3.48	.755	.16	.848	NS
11	I regularly cross checked the ratio of active cases to discharged victims and deaths across different countries as a result of this pandemic attack	2.95	.960	15.76	.000	S
	Overall	**3.39**	**0.70**	**7.067**	**.001**	**S**

The table presents the result of situational awareness on the ravaging COVID-19 pandemic among academics, technologists and students of technical education. The table shows the mean responses ranging from 2.94 to 3.91. The result shows no significant difference among the groups with reference to items 1, 2, 4, 7, 9 and 10 with p-values ranging from .087 to .860 but significant differences were established on items 3, 5, 6, 8 and 11 with p-values ranging from .000 to 001. Overall, a significant difference ($F = 7.067$; $p < .05$) was established on the level of situation awareness of COVID-19 among academics, technicians and students of technical education in south-west universities. Thus, the null hypothesis 1 was rejected. Hence, there is a significant mean difference between academics, technologists and technical education students on level of awareness on COVID-19.

Hypothesis 2

There is no significant mean difference between academics, technologists and technical education students on level of readiness to practice standard precautionary measures of COVID-19.

Table 3: Analysis of Variance between academics, technologists and students on readiness to practice standard precautionary measures of COVID-19

S/N	READINESS	Mean	Std. Dev.	F	Sig.	Remark
12	The rules and regulations surrounding COVID-19 prevention is not too much for me	3.38	.925	1.09	.336	**NS**
13	I have decided to play my roles in reducing the chances of spreading COVID-19	3.65	.476	3.81	.024	**S**
14	I am determined to stay at home till this COVID-19 issue is resolved	3.45	.796	1.27	.282	**NS**
15	I have made preparations for washing of my hands and use of sanitizers as appropriate	3.57	.726	11.12	.000	**S**
16	Although, it is not easy but I have decided not to attend any gathering for now.	3.76	.527	24.33	.000	**S**
17	I have made preparations for use of face masks anytime there is need to go out of my home	3.56	.615	2.14	.120	**NS**
18	If I discover that am manifesting the prescribed symptoms of COVID-19, I am ready to report at the appropriate treatment centres	3.45	.728	12.07	.000	**S**
19	I am ready to comply with the regulations preventing any form of exposure to COVID-19	3.70	.543	1.30	.273	**NS**
	Overall	**3.57**	**0.67**	**8.066**	**.000**	

The table presents the outcome of readiness among academics, technologists and students of technical education to adopt precautionary measures against COVID-19 pandemic. The result shows mean responses which ranges from 3.38 to 3.76. the table reveals a non-significant difference on items 12, 14, 17 and 19 with p-values ranging from .120 to .336. Meanwhile, significant differences were found on items 13, 15, 16 and 18 with p-values ranging from .000 to .024. Overall, the table revealed a significant difference ($F = 8.066$; $p < .05$) in the level of readiness of academic staff, technologists and students of technical education on adoption of precautionary measures against COVID-19 pandemic. Thus, the null hypothesis 2 was rejected. Hence, there is a significant mean difference between academics, technologists and technical education students on level of readiness to practice standard precautionary measures of COVID-19.

Hypothesis 3

There is no significant mean difference between academics, technologists and technical education students on the level of actual practice of standard precautionary measures for COVID-19.

Table 4: Analysis of Variance between academics, technologists and students on actual practice of standard precautionary measures for COVID-19

S/N	PRACTICE OF COVID-19 PRECAUTIONS	Mean	Std. Dev.	F	Sig.	Remark
20	I have stayed at home throughout the lockdown	3.32	.54	11.02	.000	S
21	I have not participated in any gathering as discouraged by the government	3.59	.49	4.46	.013	S
22	I have been engaged in regular washing of my hands for at least 20 minutes with soap and running water as prescribed	3.03	.99	7.41	.001	S
23	I have been using hand sanitizers everyday	2.88	1.03	5.28	.006	S
24	I have efficiently practiced social distancing during the on-going COVID-19 pandemic	3.43	.65	18.80	.000	S
25	In any case of leaving my home, I have used nose mask regularly	2.98	.83	16.14	.000	S
26	I have always kept my environment clean and tidy in order to reduce the chances of contacting the corona virus	3.42	.70	3.75	.025	S
27	I have reported cases of individuals with COVID-19 symptoms in my environment	1.65	.96	6.73	.001	S
28	I have isolated myself for at least 14 days after contacts with people whose travel history is undefined	2.00	1.23	5.57	.004	S
	Overall	**2.92**	**0.82**	**13.393**	**.000**	**S**

The table presents the result of actual practice of recommended precautionary measures against COVID-19 pandemic by academics, technicians and technical education students. The mean responses on the variable ranges from 1.65 to 3.59. The table reveals a significant difference across all the items with p-values ranging from .000 to .025. It was established overall ($F = 13.393$; $p < .05$) that a significant difference exist in the actual practice of precautionary measures recommended against the ravaging virus among the academic staff, technologists and students of technical education. Thus, the null hypothesis 3 was rejected. Hence, there is a significant mean difference between academics, technologists and technical education students on the level of actual practice of standard precautionary measures for COVID-19.

Hypothesis 4

Level of awareness on the reality and management of the dreaded COVID-19 do not correlate with the readiness and actual practice of the precautionary measures among staff and students of technical education in South-West Universities.

Table 5: Correlation of Awareness, Readiness and Practice of COVID-19 Precautions

	Mean	S. Dev.	1	2	3
1. Awareness	3.39	0.70	1		
2. Readiness	3.57	0.67	.334**	1	
7. Actual practice	2.92	0.82	.240	.521**	1

*Note: **. Correlation is significant at the 0.01 level (2-tailed)*

The table presents the interrelationship among level of awareness, readiness and actual practice of COVID-19 precautionary measures among staff and students of technical

education. The table, on a general note, shows a level of situational awareness (M = 3.39), readiness (M = 3.57) and actual practice (M = 2.92) on COVID-19 precautionary measures recommended which are above the 2.50 minimum level adopted in this study. Moreover, the table reveals that level of awareness is positively related to readiness (r = .334) and actual practice (.240), however, the strength of the association is weak. Furthermore, the relationship between level of awareness and readiness is significant ($p < .05$) but not significant with actual practice ($p > .05$). In addition, the association between readiness and actual practice is positively strong and significant ($r = .521$; $p < .05$). Therefore, the hypothesis was rejected. Hence, level of awareness on the reality and management of the dreaded COVID-19 correlate with the readiness and actual practice of the precautionary measures among staff and students of technical education in South-West Universities.

Hypothesis 5

Level of awareness and readiness of university staff and students in technical education do not predict the actual practice of COVID-19 precautionary measures.

Table 6: Prediction of Actual-Practice of COVID-19 Precautionary Measures by Level of Awareness and Readiness of University Staff and Students

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.231	2.905		2.145	.033
Level of awareness	-.105	.062	-.105	-1.698	.091
Readiness	.841	.094	.556	8.970	.000

Dependent Variable: Actual Practice

The table presents the result of predictions of actual practice of COVID-19 precautionary measures by level of awareness and readiness. The table established that readiness to practice has positive, strong and higher ($\beta = .556$) influence on the actual practice of COVID-19 precautionary measures while the influence of level of awareness is negative, very weak and low ($\beta = -.105$). The influence of readiness ($p < .05$) on actual practice of COVID-19 precautionary measures is significant while that of level of awareness is not significant ($p > .05$). Thus, readiness and not level of awareness significantly predict the actual practice of COVID-19 precautionary measures. The hypothesis was rejected. Hence, level of awareness and readiness of university staff and students in technical education predict the actual practice of COVID-19 precautionary measures.

DISCUSSION

This study focuses on situational awareness, readiness and actual-practice of precautionary measures towards coronavirus outbreak management among technical education members in universities. The results of findings in the study established a significant difference among academics, technicians and students of technical education in south-west universities on situation awareness, level of readiness and actual practice of precautionary measures recommended against the ravaging coronavirus. This outcome may be a pointer to the daily rise in the situational report of infection (Almutairi, et al., 2015). Maroldi, Felix, Dias, Kawagoe, Padoveze, Ferreira, Zem-Mascarenhas, Timmons and Figueiredo (2017) indicated different level of strength for knowledge and perception (classifying some as weak/low and weaker) which may be responsible for the decision made to either comply fully or partially in

any recommended safety health practices most especially when it relates to a pandemic. This is an indication of irregularities in the level of perception, understanding of the information or believes of the existence of the virus as well as the level of practices to manage emerging situations. In the findings of Amin and Al-Wehedy (2009), the mediated level of awareness, readiness and actual practice of established standard precautionary measures would be based on certain interference among the university members. In essence, this ascertains varying level of situational awareness which may have led to different level of readiness and selective practices of the standard measures of COVID-19 management.

The findings established relationships among level of awareness, readiness and actual practice. The relationship is significantly stronger between readiness and actual practice which is an indication that awareness may not necessarily lead to practice. With reference to the study of Almutairi, et al., (2015) the expectation of optimum compliance with recommended precautionary practices based on the awareness of established risks accompanying the infections such as death, quarantine and intensive care unit experience usually negates the actual occurrences. Hence, awareness does not necessarily lead to the actual practice of any recommended standard practice. Invariably, Amin and Al-Wehedy (2009) found that the actual practice is mostly influenced by individual level of readiness. Literature further strengthens the reliance of actual practice of any recommended precautionary measures against ravaging diseases or pandemic on level of readiness (Adebimpe, 2016; Maroldi, et al., 2017). Moreover, OSHA (2009) and WHO (2009) reported that the most important way to stop the spread of any disease attack on any community is through prompt readiness to strictly follow standard precautions and practices. Amin and Al-Wehedy (2009) provided a clue that the actual practice of standard precautions may not be sufficiently ascertained with lack of or poor awareness level. Motamed, et al., (2006) explained that compliance or practice of standard precautions cannot be guaranteed based on mere awareness but appropriate knowledge which can strengthen the need for such practices.

The influence of readiness on actual practice of COVID-19 precautionary measures is higher than that of level of awareness. In essence, readiness has higher tendency than level of awareness to lead to actual practice of COVID-19 precautionary measures. This outcome is justified by the proposition of Jain, et al., (2010) who established that a right knowledge with positive attitude or readiness cum good practice are major requirements to stop or manage a situation such as COVID-19. Most recently, Hasan, et al., (2019) established a significant and varying relationship between knowledge and practice as well as between attitude and practice of standardized precautionary measures against infectious diseases. The findings of Fadeyi, et al., (2011) indicated not-encouraging link between awareness and practice of safety precaution even though it was focused on preventing transmission of deadly pathogens. Jain, et al., (2010) however established the association between the actual practice and readiness to practice. Fadeyi, et al., (2011) hinted on the importance of focusing on the attitude to practice rather depending on the information or awareness provided.

CONCLUSION

It could be established based on the findings of this study that the level of awareness does not necessarily translate into actual-practice of precautionary measures without readiness as a key player. Therefore, compliance or practice of standard precautions cannot be guaranteed based on mere awareness but appropriate knowledge which can trigger the readiness for such practices. Hence, it is more important to focus on the attitude to practice rather depending on the information or awareness provided.

RECOMMENDATION

Based on the findings of this study, the following are recommended:

1. A better improvement on awareness campaign and procedure will be required to ensure adequate understanding of the implications of contacting the ravaging disease using house to house, , smaller group and face to face techniques rather than the media based methods that has been maintained.
2. Provisions of required amenities like hand sanitizers, face masks among others should be highly provided for the less privileged to avoid non-compliance as a result of inability to provide for the necessity. Hence, aiding convenient and wilful compliance for all categories of individuals in the society.
3. Enforcement of compliance should be introduced by the government with mild punishment for defaulters which will improve the actual practice of standard precautionary measures.
4. Updates of emerging COVID-19 situation should be done continuously based on localities for individuals to know how close the virus travels around in the local communities.

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