Perceived Impacts of Social Media Information on COVID-19 Pandemic Among Adults

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ARTICLE INFO

ABSTRACT

Coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus has brought a massive global health concern as it accounts to more than 42 million cases. This information together with other news articles are predominantly appearing in social media. Wealth of information regarding COVID-19 and its preventive measures during the pandemic can be accessed by individuals instantly through this channel. Filter failure in social media platforms is present as any individual can publish any information about the disease, including personal experiences, which can leave significant impacts to its audience. Objective of the Study to determine the impact of social media information on COVID-19 pandemic to adult community members. The study utilized quantitative descriptive design. It involves the identification of the phenomenon of interest and its variables within the phenomenon. The study concludes is significant difference between gender and factor pertaining to self-isolation intention; there is significant difference between educational attainment and factors pertaining information overload and perceived vulnerability; there is significant difference between occupation and factor pertaining to self-isolation intention.

INTRODUCTION

Coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus has brought a massive global health concern as it accounts to more than 42 million cases and 1.1 million deaths worldwide, as of October 25, 2020. However, the first cases of COVID-19 were reported to the World Health Organization back on December 21, 2019 (Li, Burm, Hong, Ghayda, Kronbichler, Smith, Koyanagi, Jacob, Lee & Shin,

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2021). The source of this transmissible disease is linked with the seafood markets located in Wuhan, china. Authorities made efforts to contain the virus, but infectious outbreaks spread globally (Li et al., 2021). Thus, international efforts were established across different countries due to the challenges brought by COVID-19. These encompass social disruption as authorities ordered suspension of activities and places undergo quarantine to prevent the disease transmission. Furthermore, guidelines and protocols in response to COVID-19 are updated from time to time. This information together with other news articles are predominantly appearing in social media. Wealth of information regarding COVID-19 and its preventive measures during the pandemic can be accessed by individuals instantly through this channel. However, filter failure in social media platforms is present as any individual can publish any information about the disease, including personal experiences, which can leave significant impacts to its audience.

Relatively, Farooq, Laato & Islam (2020) studied the impact of online information on self-isolation intention during the COVID-19 pandemic and revealed that information overload and cyberchondria, which are largely present in social media, had a significant impact on individual's threat and coping perceptions, that linked the two identified factors to affect self-isolation intention.

Additionally, a study conducted by Pennycook, Mcphetres, Zhang, Lu & G Rand (2020) and Bridgman, Merkley, Loewen, Owen, Ruths and Teichman (2020) identified that COVID-19 pandemic has been related to "infodemic", since it concerns serious problems about the health of many individuals. This information can be accessed and shared through social media platforms. Their study regarding sharing of false and misleading COVID-19 information, where more than 1,700 U.S. adults participated, is done as they find it alarming because individuals are sharing the posts immediately without evaluating its resources and found out that Facebook and Twitter are the most influential sites that boost misconception.

Objective of the Study to determine the impact of social media information on COVID-19 pandemic to adult community members.

METHOD

The study utilized quantitative descriptive design. It involves the identification of the phenomenon of interest and its variables within the phenomenon. Eventually these identified variables will lead to interpretation of the theoretical meaning of the findings and development of variables (Polit, 2013). Specifically, this study described the impact of the information related to COVID-19 pandemic via social media among adults.

The study was conducted at the selected barangay of Calumpit, Malolos and Sto. Tomas which are located in the province of Bulacan and Pampanga, Philippines. The residences of the setting of the study were greatly affected by the different events related to the outbreak of COVID-19. The subjects of the study are the 373 adult members of the community ages twenty-one years old and above

Inclusion Criteria

1. Adult aging from 21 years old and above;

2. residence of Calumpit and Malolos, Bulacan; Brgy San Matias, Santo Tomas; 3. owning a gadget that have access the different social media platforms for COVID 19 pandemic information;

3. ability to read & write;

4. persons with disability (PWD) provided that they are being allowed by LGU to go out in the house.

Exclusion Criteria

1. With psychological incapacity to digest information on COVID 19 pandemic;

2. Persons who exhibit any signs and symptoms of COVID-19 and other communicable and non- communicable diseases.

Withdrawal Criteria

The respondent/s who refused to participate in the study or withdrew their participation in the study will be excluded in the total subjects of the study.

An informed consent was fielded as preliminaries to the qualitative research questions.

Research Instruments

The researchers utilized a self-administered questionnaire in googleform to gather needed data from respondents in selected barangays of Bulacan and Pampanga. The questionnaire was adopted from the related literature and was modified based on a series of reviews and brainstorming. The final draft of the questionnaire displayed a good internal consistency (α=0.871) and an excellent content validity (S-CVI=1). It composed of 3 parts: the first part is the demographic profile; Second part is the type social media platforms ;and, third part is the 24 items.

The said questionnaire was composed of 4 items for the demographic profile, 2 items for the types of social media platforms, and 24 items on the impacts of social media.

Data Gathering Procedures

After seeking the approval of the offices concerned and the person in authority to conduct the study, the researchers distributed the questionnaire to the respondents. The questionnaire is adapted to related literature that is a suitable question to the research topic. After the adviser approved the questionnaire, it was distributed to adults aged 21 years old and above in selected barangay in Malolos and Calumpit, and

selected barangay in Santo Tomas, Pampanga particularly Barangay San Matias. The hard copy of questionnaires is distributed on selected barangay in particular barangay bulihan and Centro Escolar University in the City of Malolos. The questionnaire in the rest of the barangay in the City of Pampanga and Calumpit is distributed online thru messenger attached to the google form containing the questions. After data is gathered, the score was scored, tallied, and tabulated.

Disclaimer: Since the researcher will conduct the face-to-face data gathering procedure at the selected barangay in Malolos with the permission from the barangay health workers and president of home owners' association of the subdivision, health protocols will be followed in accordance with the World Health Organization guidelines.

RESULT AND DISCUSSION

The results of the responses on the impact of social media information on COVID-19, particularly on information overload, cyberchondria, perceived severity, perceived vulnerability, and response cost was interpreted based on the following: 1.00 – 1.75 strongly agree

1.76 – 2.50 agree

2.56 – 3.25 disagree

3.26 – 4.00 strongly disagree

Meanwhile, the data on preventive behavior and self-isolation intention was interpreted based on:

1.00 – 1.75 strongly disagree

1.76 – 2.50 disagree

2.56 – 3.25 agree

3.26 – 4.00 strongly agree

The data gathered was directly encoded to Microsoft Excel software. The Excel file was converted to SPSS version 23.

A descriptive statistic was utilized in analyzing the profile of the respondents such as the age, sex, educational attainment, occupation. Likewise, the extent of responses of the respondents in the items on description of impact of COVID-19 pandemic information via social media will be analyzed using mean, weighted mean and standard deviation.

To determine the significant difference between the demographic profile and the impact of COVID-19 pandemic via social media, Kruskal-Wallis ANOVA was used.

RESULTS AND DISCUSSION

Table. 1

Result of Kruskal- Wallis Test of respondents' age related to perceived impact of social media information on COVID- 19 pandemic

Informatio n

Overload

Cyberchondria

Perceive d

Severity

Perceived Vulnerability

Respons e Cost

Preventive Behavior

Self Isolation Intention

Chi-Square 24.81 18.15 9.84 27.09 8.52 1.46 9.70 df 2 2 2 2 2 2 2 Asymp. Sig .00 .00 .00 .00 .014 .48 .00

The result establishes the fact that there is a significant difference between the age of the respondents and Information overload, Cyberchondria, Perceived severity, Perceived vulnerability, Response cost and Self- isolation intention. Nevertheless, there is no significant difference between the age of the respondents and preventive behavior as an impact of social media information of COVID- 19 pandemic. This means that regardless of the respondents' age, they still follow preventive behaviors to minimize the risk of spreading the virus.

The findings were similar to the study of Laato et al. (2020) which indicates that younger people are more vulnerable in having information overload and sharing COVID 19 misinformation. In addition, Zhong et al. (2020) suggest that despite the spread of the virus, increased risk of going into crowded places are attributed to young ages 16-29 (4.4%) than middle age 30-49 (3.1%) . Furthermore, a study conducted by Daoust (2020) indicates that ages 60 above are the most

disciplined or obedient in regards to attitude of compliance on preventive measures due to their vulnerability in acquiring the virus.

Table. 2 Result of Mann- Whitney U Test of respondents' gender related to perceived impact of social media information on COVID- 19 pandemic

Information

Overload

Cyberchondria

Perceive Severity

Perceived Vulnerability

Response Cost

Preventive Behavior

Self isolation Intention

Mann- Whitney U

15349.00 15456.50 14893.50 15748.50 14458.50 14762.50 13660.00

Wilcoxon W 41684.00 41791.50 41228.50 42083.50 40793.50 41097.50 39995.00 Z -1.02 -.91 -1.50 -.63 -1.93 -1.78 -2.74

Asymp. Sig. (2-tailed)

.30 .36 .13 .52 .05 .07 .00 Table 2 indicates that there is a significant difference between gender and

Self-Isolation Intention. However, there is no significant difference among the Gender of the respondents and the Extent of Perceived impacts of Social Media in Information Overload,

Cyberchondria, Perceived Severity, Perceived Vulnerability, Response Cost, and Preventive Behavior. It indicates that the gender of the respondents has a perceived impact on social media information on the COVID-19 pandemic. Particularly in the Information Overload, which affects the processing of information; Cyberchondria that affects the emotions of the respondents may feel frightened, frustrated, and impulse to read more information; Perceived Severity that they consider the COVID-19 as a high impact, life-threatening, and a serious threat to family members; Perceived Vulnerability that they think they are easily infected with the disease; Response Cost that may affect their work, debt to the government, and a lot of expenses; and Preventive Behavior to lessen the risk of spreading the virus.

The findings also validate the findings of Hou, Fengsu, et al. (2020) that Gender has a role in seeking information related to the COVID-19 pandemic. It showed that Male relies on media such as television, radio, press, and media as the main source of information. Despite this, information related to COVID-19 has shown no gender differences and more severe anxiety symptoms, particularly in females. Nevertheless, higher stress levels are reported in females and have a lower tendency to self-isolate, the opposite pattern for the Male with a lower level of stress

but a greater tendency to self-Isolate (Cervera-Torres, Sergio, et al., 2021).

Table. 3

Result of Kruskal- Wallis Test of respondents' educational attainment related to perceived impact of social media information on COVID- 19 pandemic

	Information Overload	Cyberchondria	Perceived Severity	Perceived Vulnerability	Response Cost	Preventive Behavior	Self isolation Intention
Chi-Square	17.57	10.02	6.56	13.68	7.40	3.12	4.07
df	6	6	6	6	6	6	6
Asymp. Sig.	.00	.12	.36	.03	.28	.79	.66

The table revealed that the null hypothesis is rejected in terms of educational attainment and information overload and perceived vulnerability, indicating that there is a significant difference between the aforementioned demographic profile and perceived impacts. However, the rest of perceived impacts of social media information on COVID-19 as to cyberchondria, perceived severity, response cost, preventive behavior, and

self-isolation intention showed no significant difference in educational attainment. Based on the results of demographic profile in terms of educational attainment, baccalaureate degree has the highest percentage (44.8%) in the respondents, which means that it affects how the respondents perceive constructs as an impact, particularly information overload and perceived vulnerability. Those who have a baccalaureate degree have the ability to apprehend the presence of voluminous information in social media and the tendency to digest existing information, which leads to awareness of their vulnerability.

The statistical significance found in the table was also reported in some studies; the use of social media is negatively related to knowledge and positively related to fake news beliefs and this seemed to enable unverified information to disseminate rapidly causing difficulty to correctly inform people and those with lower education level may have unfavorable circumstances with regard to learning the guidelines and protecting themselves from COVID-19 (Gerosa et al., 2021). In addition to this, lower education attainment is associated with greater perceived disease vulnerability (De Coninck et al., 2020).

Conversely, although a non-significant association between educational level and COVID-19 information overload (COVIO) was found, it may have been linked to the respondents'

postgraduate degree, which means they are well educated and not vulnerable to COVIO (Mohammed et al., 2021)

Table. 4

Result of Kruskal- Wallis Test of respondents' occupation related to perceived impact of social media information on COVID- 19 pandemic

Information

Overload

Cyberchondria

Perceive Severity

Perceived Vulnerability

Response Cost

Preventive

Behavior

Self isolation Intention

CONCLUSION

The study concludes that age, gender, and education attainment are signofcant because determinging the impact of social media and community. Result revealed that their result significant difference between age and factors such as information severity, perceived vulnerability, response cost, and self isolation intervention; there is significant difference between gender and factor pertaining to self-isolation intention; there is significant difference between educational attainment and factors

pertaining information overload and perceived vulnerability; there is significant difference between occupation and factor pertaining to self-isolation intention.

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