

# COVID-19 Related Knowledge, Attitude and Practices of Market Vendors

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**Abstract**— This study primarily aimed to assess the knowledge, attitude, and practices of market vendors. A mixed method design was used, and 104 out of 113 vendors at wet market were selected randomly for the survey and 10 vendors were selected for the in-depth interview. Findings revealed that public market vendors may be practicing specific measures but are unsure of the effectiveness of these measures for disease prevention. There is a need to increase or improve information dissemination to the public regarding COVID-19 preventive practices and their importance. Another notable finding from the study was that the respondents lacked the intention to access health services in the event of experiencing flu-like symptoms. This is mainly due to the fear of being viewed as an outcast in the community.

**Keywords**— Attitude, COVID-19, Knowledge, Pandemic, Practices, Vendors.

## I. INTRODUCTION

A newly discovered virus causes coronavirus disease (COVID-19)-Severe Acute Respiratory Syndrome Corona Virus 2 (SARS Cov2), under the coronavirus family, which is an infectious disease [14]. The first case of SARS Cov2 infection originated from Wuhan, China, on December 2019. The virus quickly swept across the globe and was declared a global pandemic crisis in March 2020 due to its infectious nature and lethality. It has already infected 108,822,960 individuals and claimed more than 2,000,000 lives worldwide as of February 17, 2021 according to the World Health Organization (WHO) [15].

Coronaviruses often infect certain animals and can sometimes evolve and infect people. Human coronaviruses were first recognized in the mid-1960s. Some of the deadliest coronavirus that has infected human population are Middle East Respiratory Syndrome (MERS COV) and Severe Acute Respiratory Syndrome (SARS), both of which cause severe respiratory syndrome and have caused global pandemic [8].

In the Philippines, the first case of COVID-19 was reported on February 1, 2020. However, government measures against the newly discovered disease only began on March 16, 2020. Despite stricter government measures in implementing COVID-19 protocols, local transmission cases continually surge, reaching a total of 3,709,386 cases as of July 5, 2022 (DOH COVID-19 Case Tracker). Although most cases were concentrated in Metro Manila, it quickly spread to surrounding regions, including the Mindanao area [5].

Several health and safety protocols were established to curb local transmission such as enforcing enhanced community quarantine in areas with a high incidence of COVID-19 cases

[9]. Implementation of strict home quarantine, suspending public transportation systems, travel restriction bans to local and international destinations for air and sea travel, and implementing lockdowns in areas with COVID-19 cases were some of the government strategies in bringing down COVID-19 cases in the country [10].

In Basilan, particularly Isabela City, nevertheless is no exception to COVID-19. The local government unit (LGU) of Isabela City tremendously worked to mitigate the spread of COVID-19 by setting guidelines and policies, particularly on a well-dense place like a public market. Such can be a source of contamination and possibly put consumers and individuals at risk due to the influx of people who go to the public market. However, as observed, market vendors, including consumers, fail to adhere to the set protocols. Additionally, the renovation of the public wet market building has temporarily displaced vendors and forced them to trade outside the building along the streets. This causes congestion in the market and apparent lack of engineering controls to adhere to the 2 meter physical distancing.

Despite lockdown protocols, public markets continuously operate to provide a vital and constant food supply to the people [7]. However, markets could be a potential source of COVID-19 in the community due to the influx and continuous interaction with many people. Vendors are at high risk of being contaminated and could be a source of contamination [3]. Since overcrowding in the marketplace could be a problem, Manila's local government enforced several measures to stop overcrowding. The Inter-Agency Task Force (IATF) recommended a "one entry, one exit" policy, deploying joint social distancing teams, and prohibiting retail sales in place of wholesale selling and drop-off of products [11].

The Center for Disease Control and Prevention (CDCP) also released an operational consideration for COVID-19 mitigation measures for the marketplace with low-resources. Included among the CDCP recommendations is the layered approach, which consists of layering different controls on top of each other to reduce COVID-19 transmission for customers and market vendors. The three different controls are personal, administrative controls, and engineering controls [3].

Several studies indicated a correlation between Knowledge, Attitude, and Practice (KAP) towards adherence to specific health protocols or actions. A study done by Szymona-Pałkowska et al. [12] determined that studying KAP is an essential tool for health promotion and disease prevention in

public health. Thus, studying the KAP towards COVID-19 is essential during the implementation stage. It plays a role in determining the public's adherence to the implemented protocols. Also, good knowledge about the disease and its prevention promotes a good attitude and practices, thus decreasing the transmission of COVID-19. The study of knowledge, attitude, and practices would also help assess knowledge deficiency regarding COVID-19 among specific population groups and provide targeted health education [2].

Knowledge is vital in influencing attitudes and practices. As shown in several studies, having correct information about the disease conditions, especially during outbreaks, leads to better practices on preventing disease transmission. Determining knowledge level is also relevant as it influences the public's emotion and lack of knowledge can promote fear or panic among the public. According to WHO Director-General Dr Tedros Adhanom Ghebreyesus, "we're not just fighting an epidemic; we're fighting an infodemic" [14]. This misinformation strings along with several problems with it. According to Lau and Wei [7] lack of knowledge does not only stimulate fear but may provide a "false sense of security" among the people. Moreover, misguided beliefs and lack of knowledge on the nature of the virus and how to prevent transmission will put people at greater risk of contracting the virus. Thus, assessment of public knowledge of COVID-19 is vital in addressing misinformation. This, in turn, provides the public with greater awareness and promotes correct practices on preventing COVID-19 transmission.

Some studies also reveal that certain factors affect the person's knowledge of COVID-19. A study on public knowledge, attitudes, and practices towards COVID 19 in Malaysia showed that inadequate income is related to insufficient knowledge [2]. Similar findings can be seen in several studies indicating an association of gender, education, and income level with knowledge of COVID-19. Also, the study revealed that, a higher level of knowledge regarding COVID-19 can be seen among groups with higher income and educational levels. Another relevant finding from numerous studies exploring KAP is the significant relationship between knowledge to the attitude and practices towards COVID-19. A study among Chinese residents which shows that people with higher knowledge of COVID-19 reflected a more positive attitude and practices towards COVID-19 [17]. Thus, the study implies that health education programs that target knowledge of COVID 19 greatly help improve the public's health practices and attitude. Similar findings show that good and safe practices reflect participant's high level of knowledge of COVID-19 [1]. Some studies also recognized the importance of determining information sources as it helps target the specific platforms frequently used by the people when implementing health education programs [13].

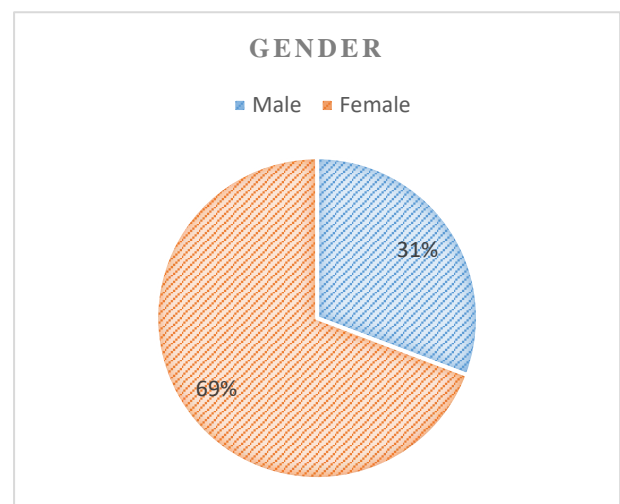
In the context of market vendors in Isabela City, assessing their knowledge regarding COVID-19 is an essential aspect of health strategy to combat COVID-19 as most vendors are often considered under those categories. Moreover, their frequent contacts with many people made them a key player in preventing the virus's local transmissions; thus, they should have good practices in preventing COVID-19 transmission.

## II. METHODOLOGY

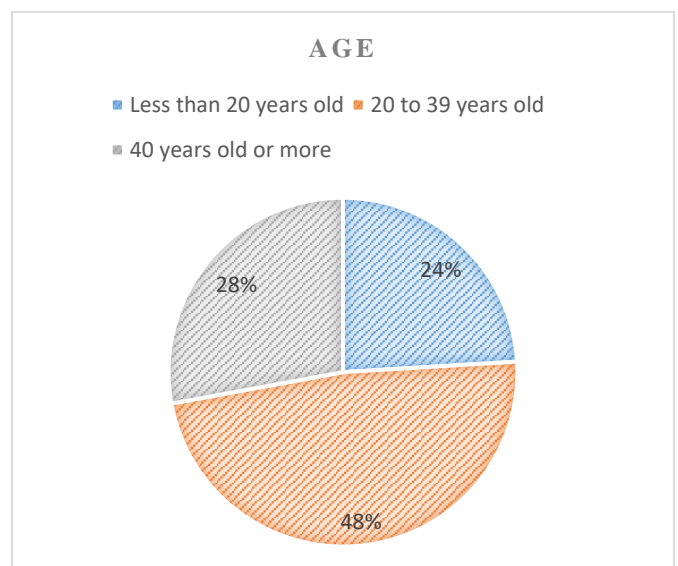
A mixed-method research design was used in the study. The Isabela City Public Wet Market has a total of 113 store vendors with store license. A sample of 104 vendors were selected for the quantitative survey and 10 vendors were selected randomly for the in-depth one-on-one interview. Proper government health protocol was strictly followed during the gathering of data for both quantitative survey and qualitative interview. The data collection covers the period from January 15, 2021 to July 15, 2021.

## III. FINDINGS AND DISCUSSIONS

Some demographic profile was taken to present a simple array of the characteristics of the respondents. The chart below shows the distribution of respondents according to gender.

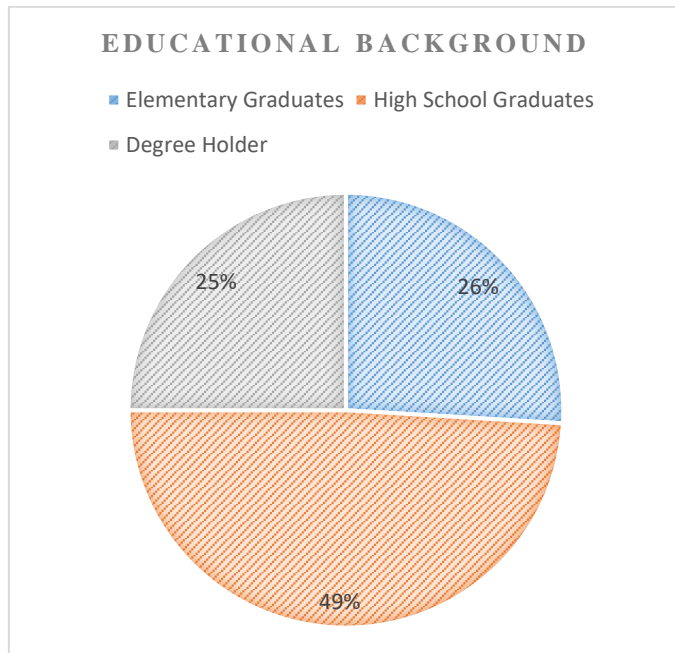


Data shows that majority of the respondents were females. The next graph shows the distribution of the respondents according to their age.



Data shows that almost half of the respondents belongs to

the age group of 20 to 39 years old. The next chart shows the educational background of the respondents.



Data shows that almost half of the respondents were high school graduates.

#### A. Knowledge

On the knowledge about the COVID-19, the respondents were asked about their knowledge about the disease. The first question is about were the respondent heard of the new COVID-19 virus, the 104 respondents affirm that they have knowledge and heard about the disease. Qualitatively, the information was heard through local channel either on television or radio. Some says that they saw it from the social media like facebook. According some respondents:

*“We heard the COVID-19 virus almost every day in the television.” (R1)*

*“The facebook is full of information about the COVID-19 Virus.” (R10)*

The next question is about the knowledge on transmission. The 104 respondents affirm that the virus is being transmitted through coughing/sneezing, face to face talking, handshaking/hugging, indirect hand contact (touching common item), and food (eating or sharing the same dish). Moreover, some believes that touching common items is the most common means of transmission because some of the infected individuals who are asymptomatic are unaware and sometimes went to market unaware about their situation and hence touching some items such as vegetable. According to Respondent 5:

*“The most common way of transmitting the disease is not the lack of knowledge about the virus but the unawareness of some person who are asymptomatic and mingled into the crowd.”*

The next question is about the knowledge on response in case of the presence of some symptoms like cough, fever, and sore throat. Ninety-five respondents say that they will stay at

home and wait to get better, while 36 among them responded to have self-medication by using the stored medicine at home. The perception of the vendors shows that they don’t want to consult any medical personnel or submit themselves for confirmatory COVID-19 test due to unacceptance of the community for those infected person. According to Respondent 6:

*“We are afraid to have a COVID-19 confirmatory test because the health personnel will go to your place with their full personal protective equipment (PPE) suits together with at least 4 Police officers as escorts which scares our neighbors.”*

Moreover, 59 respondents say that they will wash their hands if they feel to have symptoms, while 73 respondents say that they will wear face masks at all time.

Another important finding is that none of the respondents answered avoiding large crowds and changing clothes after in public as part of assessing their knowledge on preventive practices, which, are crucial measures in preventing COVID-19. Only 1% answered that hand sanitizers protects them against COVID-19. These findings suggest that the respondents have good knowledge on the mode of transmission yet do not have enough knowledge of preventive practices.

#### B. Attitude

This section presents about the attitude of the vendors about the COVID-19. The respondents were asked about their daily life such as disturbance or change about their daily activities. All of the respondents says that their life has been disturbed and anything has been changed during the pandemic. During the peak of the outbreak, the local government were very strict on the implementation of the health protocols such as wearing of facemask and observing one-meter distance from each person. According to Respondent 2:

*“The police officers are kept on patrolling and reminding individuals to properly observed social distancing and wearing of facemask at all times. They even detained some who are negligence of following government health protocols.”*

These government health protocols make the lives of the vendors difficult especially in selling their goods. However, because their goods are the basic needs of the community, they sometimes look for alternative way of selling, while others look for an alternative livelihood through online selling. According to Respondent 8:

*“Some of us tries to open their store by strictly following government health protocols by wearing the facemask, face shield, and hand gloves. But the goods that we can sell is limited to the basic necessity of the people.”*

The next question asked was about the worries of the vendors on contracting the virus. There is one respondent who don’t worry about the virus, while 5 have little worries about the virus and 98 of them are very much worried of contracting the virus. Most of the vendors feel that their lives are very precious and hence open their store following the health protocols for those who have no alternative livelihood while those with alternative or other means of livelihood, they completely didn’t open their store. According to Respondent



10:

*"We still have savings to support our daily needs and there are vendors from among us engage on online selling."*

### C. Practices

The respondents were asked if they always avoided crowded places and all of them responded positively. They think that avoiding crowded places is one way to prevent the spread of the virus but due to their nature of work (as vendor in a public market), they cannot escape from being crowded. According to Respondent 2:

*"We are in the public market on which many of our people needs to buy their basic necessity and so we cannot avoid for not being crowded."*

Moreover, Respondent 5 reiterated that:

*"Most of the time, our store is very crowded."*

The next question is about wearing facemask and other PPE. All of the respondents affirm that wearing facemask is a must because it is mandated by the government but some of them believe that this is their primary defense against the virus while most of them believe that facemask or face shield does not make individual free from the virus. Accordingly,

*"My neighbor is always wearing facemask and face shield but he was still positive from the virus."* (R10)

*"We wear facemask because everybody is wearing it and it is required by the local government."* (R1)

*"Facemask may protect us from the virus but not totally prevent from contacting it."* (R5)

Most of the respondents wear the surgical mask (79 vendors) while the rest (25) either wear cloth or other facemask such as N95 and KN95. The respondents simply use it for convenience without thinking about the protection of what they get from the mask. Other respondents think about the price of the facemask rather than the effectiveness of the mask in protecting from the virus. Accordingly,

*"We don't care about what type of mask that we wear for as long as we are wearing it."* (R9)

*"We cannot afford to buy the K95 and KN95 brand of facemask because it is too expensive."* (R7)

*"Our income is not enough to buy expensive facemask so we simply use cloth as our facemask and we feel it convenient to wear it."* (R1)

All of the respondents say that they always kept distance from any person with COVID-19 even that person is their relatives. Respondent 10 reiterates:

*"Even our relatives will be isolated if they have symptoms of COVID-19 such as fever."*

Lastly, vendors were aware about the danger of the virus to their lives but what they care is the present situation on which if don't open their store, then how can they survive with their daily necessity. They are afraid to be infected by the virus but they are also afraid of hunger. Vendors sometimes forget the danger of the COVID-19 because they need to provide the daily foods for their family.

## IV. CONCLUSION

As observed, wet marketplaces can be a potential source of

spread of virus due to the limited space and potential overcrowding from the public, thus, it is necessary to conduct a study on the knowledge, attitude and practices of the vendors in the marketplace towards COVID-19.

At the time this survey was conducted people have already heard of the coronavirus thus, all of the respondents have scored well with regards to the mode of transmission of the COVID-19. However, although knowledge of the mode of transmission As observed, wet marketplaces can be a potential source of spread of viruses due to the limited space and potential overcrowding from the public; thus, it is necessary to study the knowledge, attitude and practices of the vendors in the marketplace towards COVID-19.

When this survey was conducted, people had already heard of the coronavirus. Thus, all of the respondents have scored well with regard to the mode of transmission of COVID-19. However, although knowledge of the mode of transmission routes was high, appropriate preventive measures against COVID-19 were not well identified. None of the respondents answered social distancing (especially with sick people), avoiding large crowds, and changing clothes after in public, which are crucial measures in preventing COVID-19.

In addition, only 1% answered that hand sanitizers protect them against COVID-19. These findings contradict their practices as they have identified only hand washing and wearing face masks as preventive measures in the knowledge section. However, most respondents answered that they practice sanitizing their hands with alcohol and keep away from sick people. These findings suggest that although people responded that they are practicing preventive measures against COVID-19, they lack knowledge of the rationale behind those practices, as evidenced by the failure to identify them as part of preventive measures.

Thus, it is essential to reiterate to the public the mode of transmission and its rationale. The public may be practicing specific measures but are unsure of the effectiveness of these measures for disease prevention. Thus, there is a need to increase or improve information dissemination to the public regarding COVID 19 preventive practices and their importance.

Another notable finding from the study was that the respondents lacked the intention to access health services in the event of experiencing flu-like symptoms. This is mainly due to the fear of being viewed as an outcast in the community. This poses a problem with contact tracing in the event of a real COVID-19 case; there will be a lot of underreported cases, thus, increasing the number of cases.

Regarding planning initiatives, it is also essential to consider the structural barriers limiting the vendors' capability to practice social distancing. It is noted that at the time of the research, the main market building was renovated and the vendors were displaced outside of the building. This leads to overcrowding of the marketplace. Due to this reason, some vendors opted to close their stores while others with no other means of livelihood continue their operations amidst the risk of COVID 19.

There is a need to reiterate to the public the mode of transmission and its rationale so the public can be fully aware of it. In addition, an intensive information campaign should be

done to provide awareness to the public regarding the importance of immediate reporting of flu-like symptoms to the LGU for contact tracing and to promote non-discrimination towards infected families in the community to encourage reporting of COVID-19 symptoms. Finally, the researcher recommends the Local Government Unit formulate and implement a strict policy to prevent overcrowding in the marketplace by placing engineering controls in the area.

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