Knowledge, Attitude, and Practices Regarding COVID 19 Among Chronic Illness Patients at Outpatient Departments in Ho Chi Minh City, Vietnam

Background: The novel coronavirus disease (COVID 19) has become a major threat to human life around the world. This study aims to assess the knowledge, attitude, and practices regarding COVID 19 among people with chronic diseases at the outpatient departments in Ho Chi Minh City.

Methods: A cross sectional study was carried out between February and March 2020 using a convenience sampling strategy in three hospitals in Ho Chi Minh City (HCMC) via the use of a structured self administered questionnaire. Factors relating to practices, prevalence ratio (PR), and 95% confidence interval were estimated by using the Poisson regression with robust options. P value 0.05 was considered as statistically different.

Results: A total of 522 participants had a mean age of 51.5 10.6 years. Most of them reported seeing information regarding the COVID 19 pandemic (93.7%) via television and social media (72.8% and 62.1%, respectively). Just over two thirds of the participants (68.4%) answered with sufficient knowledge of COVID 19. Most respondents had a positive attitude toward COVID 19 (90.8%), although some misconceptions existed. Almost over three fourths of them (77.2%) maintained good practices for prevention. The rate of good practices in those who had sufficient knowledge was 1.24 times greater than that among those who had insufficient knowledge (PR 1.24, 95% CI: 1.10 1.41, P 0.05). Also, the rate of good practices in males was lower than that of females (PR: 0.91, 95% CI: 0.83 0.99, P 0.05).

Conclusion: There still exists an amount of insufficient knowledge and negative attitude regarding COVID 19, which may be barriers to good prevention practices among chronic illness patients. Education programs need to continue via television and social media and emphasize that people with chronic diseases are more likely to experience severe symptoms, including death from COVID 19. Additionally, management authorities should prolong specific policies to protect the more vulnerable in our community.

Keywords: knowledge, attitude, practice, COVID 19, chronic disease the first half of 2020, the number of cases grew exponentially in many countries with infected cases having been recorded almost everywhere, including hospi tals and in the community.4 By 21 July 2020, the World Health Organization (WHO) recorded 14,562,550 con firmed cases leading to 607,781 deaths worldwide, with the highest number of confirmed cases and deaths recorded in the Americas and Europe.1 Clinical symptoms of infected persons have been reported to include cough, fever, and shortness of breath, with the average incubation period of 5 6 days, but can be up to 14 days.5 In terms of transmission, WHO has stated that touching contaminated droplets on surfaces or objects, or close contact with an infected person, within about 1 m (3 feet), can facilitate transmission between humans.6 The challenge with this virus is that many victims have reported mostly mild symptoms. This has contributed to the threat to public health because the detection of infected persons can be very difficult in the early stages. Some sufferers could develop more serious symptoms with a small number resulting in death. Since the first case was reported at the end of January 2020, Vietnam has recorded 396 confirmed cases across the country but most of the cases seemed to be centered around the two big cities of Hanoi and Ho Chi Minh City.7 Due to the management of the virus, Vietnam is becoming a noted country having successfully isolated the COVID 19 pandemic via rapid response, clear leader ship, and support by clinical care and public health response.8 At the beginning of the pandemic, all the sus pected cases were isolated for 2 weeks. All were tested and followed, as well as the country having mobilized teams to respond and control the spread of COVID 19 in the community. In particular, people with chronic diseases were advised to stay home and practice social distancing. In some big cities including Ho Chi Minh City, doctors and nurses checked the condition of these patients at their homes and promoted online medical advice for older patients or they were examined and received quality treat ment at the hospital once every 2 months instead of once a month.9 It is widely noted that people over 60 years old with underlying noncommunicable diseases (NCDs) like diabetes, heart, or lung disease, were more likely to be a high risk of severe disease and death.10 Currently, there is no recommended effective treatment with vaccine devel opment still in progress. Thus, it is necessary to perform health education interventions aimed towards preventive measures and how to avoid being exposed to the virus in the community, especially for people with chronic diseases.11 Some previous studies about infectious dis eases such as SARS, MERS showed knowledge and atti tudes were associated with the level of practices to prevent the spread of disease.12,13 However, some findings showed a lack of understanding about this pandemic and available processes to prevent transmission.14,15 Therefore, asses sing the knowledge, attitude and practices toward COVID 19 plays an important role, especially in patients with a chronic illness, which will help to develop the effective educational interventions to ensure safe and qual ity care while stopping onwards viral transmission.

Methods

Study Population

A cross sectional study was conducted between February and March 2020. A total of 522 people with chronic diseases such as diabetes and hypertension at outpatient departments in three hospitals in HCMC including District 2, Thu Duc, and Binh Thanh were recruited for this study. A convenience sampling strategy was considered on all the people with chronic diseases who have been diagnosed by a physician and more than 18 years old. All participants were informed regarding the objective of the study and completed the consent form before participating.

Data Collection

Study Instrument

The questionnaire was designed by using frequently asked questions regarding COVID 19 from the WHO webpage, and Ahmed M. Asaads questionnaire about the Middle East Respiratory Syndrome Coronavirus (MERS CoV), and our questionnaire about COVID 19 among healthcare workers.16 18 Firstly, a pilot study was done to test 10 subjects at the outpatient department at District 2 Hospital to assess comprehension and accessibility of the questionnaire, with no necessary reformation recognized from participants. The final structured questionnaire was defined by the authors. Data were collected via the use of a structured self administered questionnaire, which included four main domains. The first section elicited information on demographic characteristics including age, gender, occupation, education, and the source infor mation of COVID 19 knowledge including types of face masks. The second section was designed to assess partici pants knowledge of COVID 19 including a set of 9 yes no options. The third section estimated the attitude toward COVID 19, to which participants were asked to respond using a 5 point Likert scale ranging from strongly agree to strongly disagree. The final section recorded the partici pants practices using a set of three open ended questions. All were arranged at the hospital of District 2, Thu Duc, and Binh Thanh.

Method of Analysis

To assess the knowledge score, nine items of knowledge on the questionnaire were measured, each correct answer was counted as 1 point with no points allotted for an incorrect answer. The general knowledge score was recorded from 0 (no correct answers) to 9 (all correct answers), and the cut off level of 6 was set as the level of sufficient knowledge.19 To assess 6 items of attitude, the scores were based on 5 point Likert scales, ranged from strongly agree to strongly dis agree. For each attitude item, the point was assigned into 1 point (strongly agree and agree) and 0 points (strongly dis agree, disagree, undecided), the cut off level of total attitude items 4 indicated as a positive general attitude. Response questions for 3 items of the practices ranged from 0 (no correct answers) to 3 points (all correct answers), a total of

2 points for good practices. The data were calculated using Stata 13 and Epidata 3.1 software. Factors with practices, prevalence ratio (PR), and 95% confidence interval (95% CI) were estimated by Poisson regression with robust options. All factors which had a significance level P value 0.20 in the bivariate analysis were included in the multivariate ana lysis by the Poisson regression model. P value 0.05 was considered as statistically different.

Ethical Approval

Our research complied with the Declaration of Helsinki. All the eligible participants were informed about the aims of the study, they signed a consent form before participation. The protocols of the study were approved by the Ethics Council of University of Medicine and Pharmacy at Ho Chi Minh City (protocol number 162/UMP BOARD).

Results

As shown in Table 1, a total of 522 (87.0%) participants completed and returned the questionnaire from the out patient department of the three hospitals. Some of the main characteristics of participants were mainly in the mean age of 51.5 10.6 years, with 55.7% being female, (31.1%) public workers and (61.9%) having completed high school level. Most of them reported seeing information regarding the COVID 19 outbreak globally (93.7%), as having their main source as television and social media (72.8% and 62.1%, respectively), while only 34.3% of participants gathered information from the websites of the Hospitals or Health Ministry. The majority (98.3%) reported using a face mask. Table 2 provides an overview of knowledge and attitude regarding COVID 19. The majority of parti cipants knew COVID 19 can be spread via respiratory droplets from infected people (92.5%), and potentially causing death (91.8%). Almost over three quarters of participants reported being aware that COVID 19 is a type of virus (79.7%) and also having knowledge of symptoms including fever, cough, sore throats, and short ness of breath (62.1%). Additionally, they reported knowl edge of the vaccine not being available (69.5%). Further, it was recorded that the knowledge that individuals should be washing hands with soap and water and wearing face masks to prevent the infection was 60.9%. Besides, 63.2% of respondents knew that patients with underlying chronic diseases are at a higher risk of severe disease and death.