

Study of the level of Knowledge, Attitude, And Practice Towards Covid-19 Among Community Pharmacists

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Abstract: Pharmacists, as members of the health service, played a vital role in controlling, hindering the spread of emerging COVID-19 in the community. However, knowing the pharmacist's level of preparedness, such as knowledge, motivation, attitude, and practices, is a prerequisite step for future planning. This study attempts to assess the basic COVID-19 associated with knowledge, attitude, and practice among community pharmacists in different countries. The association of knowledge with attitude and practice among community pharmacists have been highlighted. A summarization of some related work has been presented

Keywords: Community Pharmacists, Covid-19, Knowledge, Attitude, Practice.

I. INTRODUCTION

Knowledge of the disease is regarded as the first step toward achieving the benefits of any community health education activity. Knowledge, attitude, and practise review provide a methodology for evaluating existing programs and identifying effective behaviour change strategies in the community. Knowing the origins and causes of disease transmission increases the likelihood that people will become more mindful of disseminating infectious diseases and the prevention steps that can be taken to minimize transmission. COVID-19 is a relatively new virus that has caused a disastrous impact in a short period since its discovery in March 2020. There was a limitation of published data on pharmacists' knowledge, attitudes, and practices toward COVID-19, especially in Libya. The novelty of Covid-19, with no standard treatment or cure, makes it important for health authorities to develop suitable and acceptable public management strategies. Thus, to achieve the best results from the interventions, it is critical to investigate pharmacists' knowledge, attitudes, and practices. Along with physicians, pharmacist's knowledge, attitude, and practices are vital for preventing and controlling the disease [1]. The knowledge, attitude, and practices people have towards a disease have a central role in ascertaining their readiness to adopt behavioural change measures imposed by the health authorities. This is even more challenging when a massive amount of misinformation is distributed via social media, creating a misunderstanding of COVID-19[2]. A knowledge, attitude, and practice study is a quantitative form of research that provides quantitative and qualitative information regarding misunderstandings and misconceptions that can provoke resistance or obstacle in bringing about a behavioural change in society. This research aims to determine investigate and explore the level of knowledge, attitude, and practice of COVID-19 among the overall population in Libya. Previous research demonstrates the correlation of knowledge with attitude and practice among the Community Pharmacists

II. ROLE OF COMMUNITY PHARMACISTS

Traditionally, the community pharmacist's role is to deliver patients medications based on their doctor's prescription (News Medical, 2019). Nevertheless, the pharmacist's role has been established significantly and is now merely associated with various other health initiatives. A community pharmacist's tasks can include:

Processing prescriptions: preparing the medication for the patient and examining the doctor's prescription.

Verifying drug interactions implies that medications and doses are suitable for the patient taking into account wellness issues and other prescriptions. Dispensing medications: entails properly marking the drug and providing the patient guidance on how to take it. Medication disposal: removing needless medications from patients and safely disposing of them. Offering advice: assisting patients in understanding their health and medications and providing suitable advice.

Promotion of healthy lifestyle: assisting patients in making healthier selections, including eating nutritious foods, exercising more frequently, or quitting cigarettes. Since the community pharmacist is frequently the health professional that patients see the most, they significantly role in patients' ongoing healthcare and checkups. Various community pharmacies, ranging from small, independently owned pharmacies in isolated rural towns to massive chains in large shopping malls and supermarkets. The safe and efficient application of medication to enhance patient outcomes is the central pillar in the training and education of all pharmacists, particularly those who work in community pharmacies. This principle guides the training offered in undergraduate, postgraduate and continuing professional development programmes. The pharmacy workforce should have already been seen as front-line employees but particularly given the presence of Covid-19. There is no global consensus about what a front-line staff is, which adds to occupational and regional disparities related to additional classifications for essential workers during this global epidemic. The varying strategies of various governments across the world result in certain governments adopting a neutral position against pharmacists' work in the pandemic. In contrast, others disregard pharmacists' activities during the epidemic. With the latest contract that New Zealand has negotiated, pharmacists have earned an increased payout of reimbursement for their valuable contributions to Covid-19. On the other side, Ontario, Canada's most populated province, has forgotten to provide pharmacists with a spot on a roster of front-line employees, which involves co-workers who share a workplace with pharmacists. Pharmacists have always worked in front-line positions, whether in the community or hospitals, but they are not well-known for their contributions [3].

While most health care professionals have locked their doors to customers, community pharmacies remain available to the public despite extremely tight lockdown controls. In essence, community pharmacists are known as widely trusted healthcare clinicians because of their essential contributions to helping relieve the disparity amplified by increased infrastructure pressures and limited access to healthcare services[4]. The common opinion tends to be that community pharmacies give low to middle-income countries the value of medical advice without any out-of-pocket costs for patients who are unwilling to pay medical fees[4]. Also, after a brief lack of personal safety devices, pharmacy workers managed to provide immediate patient treatment. They give medicine at no expense to patients, teaching patients about telehealth facilities, recognizing patients who need a renewal of chronic drugs. Moreover, offering evaluations for conditions that may not represent a medical emergency (such as earaches, flatulence, headaches, etc.) are also indicators of pharmacies providing to patients.

Keeping a view for the potential, pharmacists' drug experience can be advantageous in vaccine production and clinical trials. When the vaccination against COVID-19 is eligible, pharmacists could be among the front-line health workers who must be allowed to provide immunisations. Based on the previous experience of community pharmacists, which can effectively improve annual seasonal influenza vaccine consumption, and their availability, pharmacists would be needed to be integral in delivering COVID-19 vaccinations to ensure universal population coverage. Also, screening and monitoring patients for COVID-19 are important measures that are needed to level out the slope of the curve. Their pharmacists are testing the citizens of Alberta on a regular basis and any that need a second opinion will be led to nearby testing facilities (Global News. 2020). However, pharmacists in the United States can order and administer FDA-approved tests [5]-[6]. The more open research is, the more nations would keep themselves out of lockdown conditions.

III. KNOWLEDGE OF COVID-19

A few pieces of research in Asian countries have shown that the general population has a high degree of COVID-19 knowledge [6]. Workers in the healthcare profession. Malaysians' average awareness rate on COVID-19 was moderate at 10.5+1.4, with a correct overall rate of 80.5%. Despite this, COVID-19 information accuracy ranged broadly, implying

that some participants knew a lot about the disease while others did not. This may be due to the overrepresentation of some subgroups, such as women and individuals with high socioeconomic status [6].

However, closely related research operated in Saudi Arabia [7] indicated that nearly half of the participants (44%) had less knowledge of standard operating procedures, such as when and who should wear masks to avoid infection. According to the WHO and the CDC, face masks must be worn by those ill or considerate for people suspected of possessing COVID-19 (CDC, 2020). These research results highlight the importance of motivating and emphasizing social distancing to hinder the virus's spread. In the current scenario, where the only way to break the chain of infection is to obey standard operating procedures and social distancing guidelines, it is essential to determine the general public's level of knowledge to avoid the spread of this novel disease.

IV. ATTITUDE TOWARDS COVID-19

The Malaysian survey showed that people have a positive attitude with a high level of confidence towards their government[8]. Furthermore, Malaysians' high levels of knowledge were linked to this positive attitude toward health crises [8]. Similarly, residents of Saudi Arabia have a positive attitude and high confidence in the government's control of COVID-19, which can be interpreted by the government's unusual behaviour and quick response in implementing rigid control and precautionary measures against COVID-19 to protect people and guarantee their well-being [9]. Both domestic and international flights, prayer held in mosques, churches, and universities were shut down and halted, where people were subjected to a nationwide curfew. This result is in line with a recent study undertaken in China, which found that most participants believed the disease was curable and that their country would fight it [8]. However, these research results reflect they contradict other research results that recommend people to portray negative emotions, such as anxiety and panic, during a pandemic, which could impact their attitude [9].

V. PRACTICE OF COVID-19

The most practical solution for preventing the virus's spread should be for the government to enforce action rules limiting group activities between people to avoid infection [10]. Social distance and self-isolation and lockout are two significant nationwide social measures, according to WHO (2020). The research of Chinese citizens revealed that rigid preventive practices are mainly due to the local government's implementation of stringent prevention and control measures, such as prohibiting public gatherings [7]. Second, they may result from residents' knowledge of the COVID-19 virus's high infectivity, which can easily be spread between people through invisible respiratory droplets. A study of internet users in Bangladesh found that having a good knowledge of COVID-19 is also necessary for better practice towards the virus [10].

VI. ASSOCIATION OF KNOWLEDGE WITH ATTITUDE AND PRACTICE

In the absence of vaccines and antiviral treatment, the comprehensive introduction of conventional public health programmes in Iran with the SARS virus effectively interrupted human-to-human spread. It eliminated the virus[11]. In this confined situation, specific steps are needed to avoid disease transmission from person to person by social distancing to halt the epidemic. COVID-19 was studied via KAP among Iranians[11]. The participants' knowledge, attitude, and practice had a significant relationship ($p < 0.001$). This demonstrates the importance of health education programmes in enhancing the general public's knowledge of Covid-19, which will improve their attitude and practice of Covid-19.

According to a related study conducted in Saudi Arabia, participants' high knowledge of COVID-19 converts into safe and good practises during the COVID-19 pandemic, implying that Saudi residents' behaviours are extremely cautious[9]. Higher COVID-19 knowledge scores were correlated with a lower risk of negative attitudes and potentially harmful practices towards the COVID-19 epidemic among Chinese residents in this study [7]. These results highlight the value of increasing citizens' COVID-19 knowledge by health education, leading to enhancements in their attitudes and practices toward Covid-19. Therefore, the characteristics of KAP of community pharmacists in Tripoli towards COVID-19 and identification of their demographic factors connected with KAP will provide helpful information for public health policy-makers and health workers to recognise target populations for COVID-19 prevention and health education.

VII. RECENTLY PUBLISHED WORK RELATED TO KNOWLEDGE WITH ATTITUDE AND PRACTICE AMONG COMMUNITY PHARMACISTS

In this part, the recently published work that mainly related to this study variables has been investigated. All previous studies in this field mention that the pharmacist has always been considered the front-line healthcare professionals, enabling rational healthcare to the community [12]-[4]. Thus, pharmacists must possess accurate knowledge of COVID-19 and publish it to the general public. Both classical and social media affect society and health professionals' attitudes [13]-[14].

Surveys such as that conducted by (Schumacher et al., 2020) showed that pharmacy had faced various challenges during the pandemic's first wave. Some missions performed were even beyond the traditional duties. Based on the lessons learned from this pandemic, the disaster plan of our pharmacy and the associated staff training have been further developed. Several attempts have been made to assess the knowledge, attitude and practice towards COVID-19 among community pharmacists in different areas over the world. The scope and level of knowledge and belief on COVID 19 among the Pharmacy professionals of the Indian population have been investigated by [15]. This study provides an exciting opportunity to advance our knowledge of highlights that 75.8% of the participants were well-informed about the clinical features of COVID-19. Also, 70.4% of the participants were well-informed about the diagnosis and management of COVID-19. 73.7% of the participants knew about the correct diagnosis technique for COVID-19. A clear association is observed between knowledge score and an increased- age group, level of education, experience in the pharmacy field. According to a study implemented in Addis Ababa, Ethiopia, by [16] the study findings confirmed a high level of knowledge on each primary feature of COVID-19 among study participants. Even so, only about half of the participants were well informed about the disease. The pharmacists were mostly positive about the significance of WHO recommendations and mostly negative about the country's ability to cope with the pandemic. At the institutional level, COVID-19 experience was insufficient. Despite this, the majority of pharmacists decided to take self-protective measures against COVID-19.

Another study between June and July 2020 in Egypt in this study's knowledge, attitudes, and practices of Egyptian population pharmacists regarding the novel Coronavirus (COVID-19) during the height of the pandemic has been evaluated to discover their sources of information. The Community pharmacists were included between June and July 2020. Approximately two-thirds (n=287, 68%) showed good knowledge with a median knowledge score of 8 [IQR= 7-9]. About 63% of the participants showed positive attitudes towards the Egyptian ministry of health in controlling the pandemic. Less than half (n =171, 40.5%) were found to have a good practice level. The type of community pharmacy and the academic degree were connected with knowledge levels (p=0.014 and p=0.033). No correlation was found between knowledge and practice (rs=0.068, p=0.163). Official health organisations were found to be the primary (n=326, 77.3%) source of information in our sample. Many Egyptian community pharmacists had good to fair knowledge, attitude and practice levels towards the novel Coronavirus pandemic [17]

In the results presented in [13] among hospital pharmacists in Turkish, it was discovered that the participants' age and source of information had a significant impact on their knowledge and attitudes towards COVID-19 infection.

Another study has been implemented by [18] among hospital pharmacists in Lebanon. They conclude that > 90% of the knowledge-based questions regarding COVID-19. Due to their professional exposure, most of the respondents were worried about being infected and infecting their relatives. Additionally, about 67 % committed to the safety recommendations. The majority of the participants acknowledged facing mask and sanitiser shortages, rising costs, and supply delays. Around 50 % of hospitals have taken real action toward COVID-19 preparation.

The hospital's and community pharmacists' role in the management of COVID-19 in Italy was discussed by [19] The COVID-19 epidemic also opened up new opportunities for pharmacists: community and hospital pharmacists played an important role during the COVID-19 pandemic, indicating the importance of fully integrated, inter-sectoral, and inter-professional cooperation dealing with disasters and public health emergencies. Earlier, research suggests that a new age in pharmacy history has started ("the post-COVID-19 post-pharmaceutical care era"), with community pharmacists gaining more employment qualifications and becoming true heroes and front-line health professionals.

TABLE: I Studies on knowledge, attitude and practice towards COVID-19

Author	Country	Participants	Instrument & Type of Study	Result
Puspitasari et al.,2021[20]	US, the UK, Italy, Jordan, and China	Healthcare workers, medical students, and populations	A Review (KAP)	The level of the knowledge was positive and optimistic attitudes and good practices are held. The level of panic is correlated with (KA) among the population
Kara et al.,2020[13]	Turkey	Hospital Pharmacist (n=237)	questionnaires A cross-sectional survey on KA	The high level of K of individuals also positively affects their A
Hweissa,et al.,2021[21]	Libya	Health Care Workers (n= 318)	questionnaires A cross-sectional survey (KAP)	Most Libyan HCWs had good K of the virus, and the K scores were significantly associated with the age difference. HCWs had a positive A toward COVID-19.
Zeenny et al.,2020[18]	Lebanon	hospital pharmacists (n= 81)	questionnaires A cross-sectional survey (KAP)	An appropriate level of K and good P towards COVID-19 among hospital pharmacists (> 90%)
Muhammad et al.,2021[22]	Pakistan	Community pharmacists (n= 393)	questionnaires A cross-sectional survey (KAP)	71.5% (n=281) had good K 44% (n=175) had positive A . 57.3% (n=225) had good P about COVID-19. The Most of the CPs had good K but had a poor A and P towards the COVID-19.
Ebid et al.,2021[17]	Egypt.	Community Pharmacists (n= 422)	questionnaires A cross-sectional survey (KP)	(68%) showed median K score. 40.5% were found to have good P levels. The academic degree and the type of CPs were associated with K No correlation was found between K and P
Tesfaye et al.2021[16]	Ethiopia	Community Pharmacists (n= 295)	questionnaires A cross-sectional survey (KAP)	A high level of K on each specific aspect of COVID-19. 50% of the participants had adequate K about the disease. positive A towards the importance of WHO recommendations. Negative A towards the country's capacity to deal with the pandemic.
Yimenu et a;.,2021	developing country	Community Pharmacists (n= 47)	questionnaires A cross-sectional survey (KAP)	The mean knowledge score was 8.15 (SD: 1.86), 29 (63%) were found to have good K about COVID-19. The mean A score was 31.52 (SD: 4.288). Only 30.4% of the CPs were found to have a good P toward the prevention of COVID-19

VIII. CONCLUSION

In this paper, the overview of the main points related to knowledge attitude and practice towards COVID-19 has been summarized and interpreted. The research community emphasizes that investigating knowledge, attitude and practice towards COVID-19 pandemic is vital among health care workers worldwide. The KAP towards COVID-19 among community pharmacists in different regions has been analyzed and critically evaluated. Throughout the literature, there is consistent evidence that knowledge attitude and practice towards COVID-19 among community pharmacists have to be presented and assessed at the local level to provide supportive care to the pharmacist community.

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