

COVID-19: What should health professionals know? Assessment of Knowledge, attitude, and practice of community pharmacists in a developing country

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Abstract

Background: Healthcare professionals are the primary frontiers of the fight against every public health threat. These had made them vulnerable to various infectious agents, with many reports of morbidity and mortality also being evident.

Objectives: The current study aimed to assess the knowledge, attitude, and practice toward COVID-19 among community pharmacists in Gondar town, Ethiopia.

Methods: A cross-sectional study was conducted. A structured, self-administered questionnaire was used for data collection, and the collected data were coded, validated, and analyzed using SPSS version 26. Quantitative data were summarized using means and standard deviations, while frequencies and proportions were used to summarize categorical data. A chi-square test was used to assess an association between the different variables, and a P-value of less than 0.05 was considered to declare statistical significance at a 95% confidence interval.

Results: A total of 46 community pharmacy professionals had participated in the study. The main sources of information about COVID-19 were news media 29 (63%), followed by social media 24 (52.2%). The mean knowledge score was 8.15 (standard deviation: 1.86), and among the total study participants, 29 (63%) were found to have good knowledge about COVID-19. The mean attitude score was 31.52 (standard deviation: 4.288). Only 30.4% of the study participants were found to have a good practice toward the prevention of COVID-19. Chi-square results showed that having a good knowledge of COVID-19 was significantly associated with practice ($P=0.035$).

Conclusion: Significant gaps were identified concerning community pharmacy professional's knowledge of COVID-19 and their practice toward prevention of the disease. Strategies should be implemented to equip community pharmacy professionals with all necessary information about COVID-19 through continuous training programs and other virtual platforms.

Keywords

Community pharmacists, Gondar, COVID-19, coronavirus, pandemic

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Introduction

COVID-19 is a highly contagious disease that can be transmitted via animal-to-human and human-to-human interactions. The current outbreak was first reported in December 2019 among patients with symptoms of viral pneumonia in Wuhan, the capital city of Province Hubei, China.^{1,2} On 30 January 2020, the World Health Organization (WHO) declared COVID-19 as public health emergency of international concern, and on 11 March 2020, after the frequent

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escalation in the number of affected countries, the severity of illness, fatality rate, cases, and causalities, the WHO declared coronavirus disease 2019 (COVID-19) a global pandemic.^{3,4} To date (as of 7 June 2020), the virus has already been spread in at least 215 countries, and there are 7,037,384 confirmed cases; 403,347 deaths; and 3,442,061 recovered cases of COVID-19 worldwide.^{5,6} In Ethiopia, since the first COVID-19 case, a 48-year-old Japanese national who had entered the country after visiting Burkina Faso was confirmed on 13 March 2020, there are 2020 cases, 27 deaths, and 344 recoveries of the virus as of 7 June 2020.⁶

COVID-19 was reported to have an incubation period of 2–14 days, and the main human transmission occurs via droplets when an infected person sneezes or coughs and by direct contact.⁷ The disease is mainly manifested by fever, headache, dry cough, dyspnea, myalgia, fatigue, hypolymphemia, and radiographic evidence of pneumonia.^{1,8} Increased severity of the disease and mortality rates were reported in elder people and those with pre-existing illnesses such as asthma, hypertension, diabetes, cardiac disease, and cancer among many others.^{9,10} As there is no currently approved vaccine or treatment for COVID-19, the only appropriate measure is the prevention of its transmission, and the WHO recommends regular handwashing with soap and water/alcohol-based sanitizer, social distancing/avoiding social gathering, and respiratory hygiene (covering mouth and nose with mask) as a primary preventive measure to avoid human-to-human transmission.^{11–14}

Healthcare professionals (HCPs) are the primary frontiers of the fight against the pandemic which makes them at higher risk of this highly transmittable disease. Evidence suggests that HCP's knowledge and understanding are associated with the timing of diagnosis, the spread of disease, and infection control practice.¹⁵ Several thousands of healthcare workers were reported to be infected by COVID-19 globally, and in the United States alone, as of 28 May 2020, there were more than 62,000 doctors, nurses, and other healthcare providers affected by the virus, and at least 291 were reported to be dead.¹⁶ In Ethiopia, though there are many rumors in many hospitals about health professionals being infected with the virus, the government so far confirmed 97 HCPs being infected with COVID-19, with 1 mortality reported as of 7 June 2020.^{17,18} Community pharmacists are at higher risk to the pandemic because they are the easily accessible HCPs and whom patients usually go for collecting medications and consultations before going to see a physician. With the current social and psychological impact of being quarantined, most people with signs and symptoms of the virus may opt to go to community pharmacies to collect some pain killers or for consultancy and this will add community pharmacists' risk of getting the infection.

To increase HCP's awareness and preparedness regarding the prevention and control of COVID-19, the WHO has issued several guidelines and also started online courses and training sessions.¹³ The International Pharmaceutical Federation (FIP) has also issued information and interim

guidelines for pharmacists and the pharmacy workforce to increase pharmacy professional's awareness and preparedness for preventing the spread of the virus.¹⁹ Although educational campaigns will increase their awareness about COVID-19, it is still unclear to what extent this knowledge can be put into practice and to what extent this practice reduces the spread of the virus. Therefore, the current study aimed to assess the knowledge, attitude, and practices regarding COVID-19 among community pharmacists in Gondar, Ethiopia.

Study methods

Study design and setting

A cross-sectional study was conducted from 1 May to 7 June 2020, on 46 community pharmacies in Gondar town, Amhara regional state, Ethiopia. Gondar is located 727 km away from Addis Ababa, the capital city of the country, and 185 km from Bahir Dar, the capital city of the region. Based on a projection from the 2007 National Census, its population is estimated at around 227,100.²⁰ During the study period, there were 19 pharmacies and 33 drug stores in the town.

Sample size determination and procedure

The source population of the study was all community pharmacy professionals working in Gondar town, Ethiopia. Since the total number of licensed community pharmacists in Gondar was not known, all community pharmacy professionals that fulfilled the inclusion criteria for the study (those who have had worked for at least 6 months in a community pharmacy setup) were invited to participate. From the total available community pharmacy professionals, five of them had participated in the pretest (pilot study for validation of the data collection tool) and those pharmacists were systematically excluded from the final survey. To adjust for pharmacy shops who have only one dispensing pharmacy professional, only one pharmacist per pharmacy shop was invited to participate from each of the available community pharmacies. When there were more than one pharmacy professionals available in a single pharmacy setup, a random sampling method was used to select one study sample (pharmacist). Pharmacists that were not available at the time of data collection and/or those who do not want to participate in the study were excluded from the study. A final sample of 52 community pharmacy professionals were invited to participate in the study.

Study variables

Knowledge, attitude, and practice toward COVID-19 were taken as dependent variables, and the independent variables included the sociodemographic characteristics of the study participants: sex, age, educational level, years of experience, and sources of information on COVID-19.

Data collection tools and techniques

A structured, self-administered questionnaire adapted from previous literature^{21,22} was used with the permission of the copyright holder(s), and some of the items were modified to fit the current setup. The questionnaire had four parts. The first part consisted of seven questions that assessed the sociodemographic characteristics of the respondents. The second part of the questionnaire consisted of questions to assess the knowledge of the respondents. The knowledge part has two parts by itself; the first part consisted of 10 questions that assessed the source of information about COVID-19 and general awareness questions. The second part consisted of 11-item questions adapted from Zhong et al.²³ and modified to suit the current study question. The questions assessed the clinical presentation, transmission, prevention, and control strategies of COVID-19. Each correct answer weights 1 point and 0 for incorrect answers. The total score ranged from 0 to 11, and a cutoff level of ≤ 7 was set for poor knowledge and >7 for good knowledge.²⁴

The third part of the questionnaire consisted of eight questions that assess the attitude of the respondents toward COVID-19, and a 5-point Likert-type scale that has been adopted and modified from Goni et al.²⁵ was used. The responses were strongly disagree, disagree, not sure, agree, and strongly agree, each weighing 1–5, respectively, for each positive statement. The total score ranged from 8 to 40, with an overall higher mean score indicating a positive attitude toward COVID-19.

The fourth part of the questionnaire consisted of nine questions adopted from the WHO COVID-19 practice guideline,¹⁴ with three options (always, occasionally, and never). Each correct answer was given “1” and “0” for the wrong answer. The total score ranged from 0 to 9, and a score of 7–9 demonstrated good practice and a score of 0–6 indicates poor practice toward preventive measures of COVID-19 (Annex).

Data processing and analysis

The collected data were coded, validated, and analyzed using SPSS version 26. Quantitative data were summarized using means and standard deviations (SDs), while frequencies and proportions were used to summarize categorical data. A chi-square test was used to investigate the presence of an association between the dependent variables (knowledge, attitude, and practice) and the independent variables. A P-value of less than 0.05 was considered to declare statistical significance at a 95% confidence interval (CI).

Data quality assurance

The questionnaire was adopted from previously conducted similar studies and was determined to measure the parameters in question. The data were also collected by the investigators themselves, and thus, they were well aware of the

purpose of the study as well as the study in question. The data collection tool was also pre-tested on five community pharmacists to check for its applicability and clarity before the actual data collection procedure, and all the necessary modifications have been made based on the results of the pilot study. Besides, each day, the collected data were checked for completeness, accuracy, and consistency before entering to software for analysis.

Ethical consideration

Ethical clearance of the study was obtained from the ethical review board of the School of Pharmacy, the University of Gondar, on a Ref. No. SoP/784/2020, and the study was also performed following the Declaration of Helsinki as revised in 2013. The study participants were well informed about the purpose of the study, and written informed consent was collected from each study participant before the commencement of the data collection. The data were collected anonymously, and there was no personally traceable information on the questionnaire.

Result

A total of 52 community pharmacists were approached, and 46 completed the survey with a response rate of 88.5%. The majority of the participants were male (52.2%). The mean age of the participants was 31 years (SD=8.6) with the majority of them being within the age range of 26–35 years (43.5%). About 60.9% of the study participants were pharmacy degree holders. The majority of the participants had a work experience of between 3 and 5 years (32.6%) with a mean experience of 7.9 (SD=6.1) years (Table 1).

More than two thirds of the participants (71.1%) reported that they check new updates on COVID-19 more than once per day. However, only 11 (23.9%) of the participants reported that they have attended lectures/discussions about COVID-19. The main sources of information about COVID-19 among the study participants were news media (TV, radio, newspapers, etc.) 29 (63%), followed by social media (Facebook, Twitter, WhatsApp, YouTube, Instagram, etc.) 24 (52.2%; Figure 1).

Knowledge

The mean knowledge score was 8.15 (SD=1.86). Of the total study participants, 29 (63%) were found to have good knowledge about COVID-19. The majority of the study participants correctly answer that symptoms of the novel coronavirus COVID-19 may appear in as few as 2 days or as long as 14 days after exposure (76.1%), having a flu shot (vaccinated) is not sufficient against the novel coronavirus (COVID-19; 58.7%), and early symptomatic and supportive treatment can help most patients recover from the infection (84.8%; Table 2).

Table 1. Background characteristics of the study participants: N=46.

Characteristics	Frequency	Percentage (%)
Sex		
Male	24	52.2
Female	22	47.8
Age (years)		
18–25	12	26.1
26–35	20	43.5
36–45	12	26.1
>45	2	4.3
Educational level		
Diploma	16	34.8
Degree	28	60.9
Masters	2	4.3
Years of experience (years)		
<2	6	13.0
3–5	15	32.6
6–10	12	26.1
>10	13	28.3
Type of facility		
Drug store	20	43.5
Pharmacy	26	56.5
How often do you check new updates on COVID-19?		
More than once daily	33	71.7
Once daily	7	15.2
Less often	5	10.9
Never	1	2.2
Have you attended any of the lectures/discussions about COVID-19?		
Yes	11	23.9
No	35	76.1

About 14 (30.4%) of the respondents correctly answered that the incubation period of COVID-19 was 2–14 days. When asked about the origin of COVID-19, the majority of the participants reported that it was from bats 25 (54.3%), while 19 (41.3%) of the participants reported that it was unknown (Table 3). About 42 (91.3%) of the respondents correctly answered that novel coronavirus (COVID-19) transmission can occur through air and via fecal–oral and personal contact, while 2 (4.3%) respondents answered that it can only be transmitted through air, and 1 (2.2%) respondent reported it can only be transmitted through personal contact only. For the question on “how to reduce the risk of transmission,” almost all the study participants 45 (97.8%) correctly answered that it can be reduced by maintaining hand hygiene, avoiding public transportation, covering the nose and mouth when coughing, having well-cooked meat and eggs, avoiding sick contacts, and avoiding crowded places, while one person (2.2%) answered that avoiding crowded places was enough to reduce its transmission.

As shown in Figure 2, the majority of the respondents (73.9%) reported that complications such as pneumonia, respiratory failure, and death all may be evident as a complication of COVID-19, while 17.4% of them reported that respiratory failure is the only complication of COVID-19. A chi-square analysis revealed that about 43.4% of the study participants with an experience of greater than 6 years had good knowledge about COVID-19 compared to their counterparts of less than 6 years of experience. However, the difference was not statistically significant ($P=0.069$; Table 4).

Attitude

The mean attitude score was 31.52/40 ($SD=4.28$). The majority of the study participants strongly agreed that wearing a well-fitting face mask was effective in preventing COVID-19 26 (56.5%) and using a hand wash can prevent COVID-19 26 (56.5%). The majority of the respondents also strongly disagreed that Black race was protective against COVID-19 21 (45.7%) and COVID-19 was a bio-attack on the human race fabricated in the laboratory 12 (26.1%; Figure 3).

Practice

Only 30.4% of the study participants were found to have a good practice toward the prevention of COVID-19. About 23 (50%) of the study participants responded that they occasionally wear a mask when in contact with patients and 50% of them also reported that they wash their hands before and after handling their patients. The majority of the respondents reported that they always counsel/educate their patients about COVID-19 28 (60.9%). When asked about whether they cover their nose and mouth during sneezing or coughing, the majority 32 (69.6%) reported that they always cover their nose and mouth, while 13 (28.3%) and 1 (2.2%) reported that they occasionally and never cover their nose and mouth, respectively (Figure 4).

From the total of 29 study participants who had good knowledge score, 12 (41.4%) had good practice score, and from the total of 17 participants with poor knowledge, only 2 (11.7%) had good practice score. The chi-square analysis showed that having a good knowledge of COVID-19 was significantly associated with practice ($P=0.035$). The other sociodemographic characteristics (sex, age, educational level, and work experience) were found not to have a significant association with practice at $P<0.05$.

Discussion

COVID-19 is a highly contagious, global pandemic affecting people of all ages and sectors without any discrimination.^{26,27} HCPs are at a higher risk of acquiring the disease compared to the general population because they are at the forefront of the fight against this highly contagious disease and have

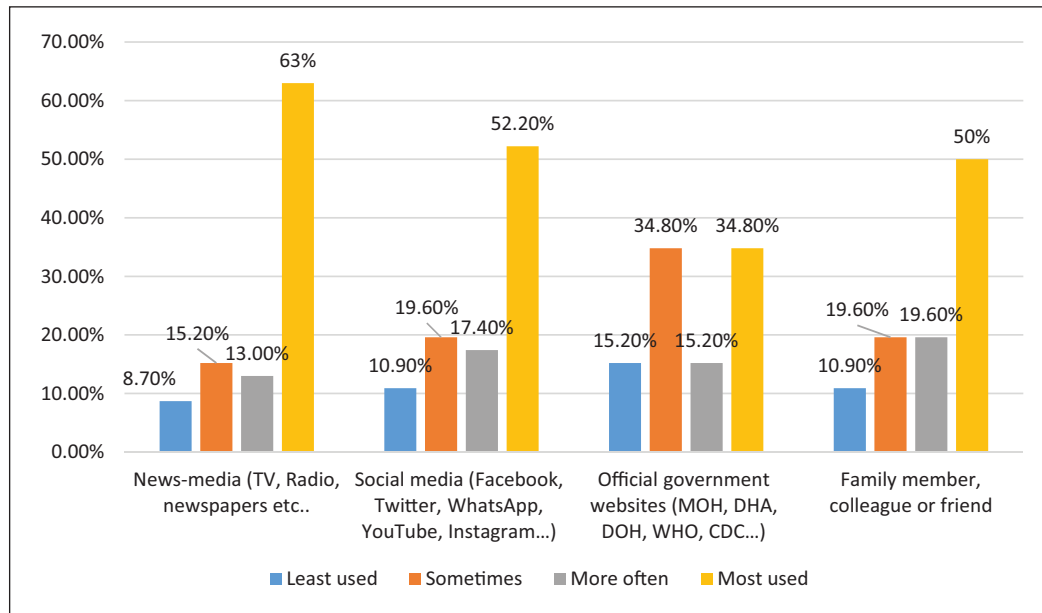


Figure 1. The main sources of information about COVID-19 among community pharmacists in Gondar, Ethiopia.

Table 2. Knowledge about coronavirus virus (COVID-19) among community pharmacists in Gondar, Ethiopia: (N=46).

No.	Characteristics	True, N (%)	False, N (%)	I do not know, N (%)
1.	It is believed that symptoms of the novel coronavirus (COVID-19) may appear in as few as 2 days or as long as 14 after exposure.	35 (76.1)	9 (19.6)	2 (4.3)
2.	If anyone gets the novel coronavirus (COVID-19), there is no possibility of survival.	1 (2.2)	45 (97.8)	0
3.	Having a flu shot is enough against the novel coronavirus (COVID-19).	16 (34.8)	27 (58.7)	3 (6.5)
4.	Persons with COVID-2019 cannot transmit the virus to others when a fever is not present.	7 (15.2)	39 (84.8)	0
5.	Even in areas experiencing outbreaks, meat products can be safely consumed if these items are cooked thoroughly and properly handled during food preparation.	32 (69.6)	13 (28.3)	1 (2.2)
6.	Eating or contacting wild animals would result in the infection by the COVID-19 virus.	35 (76.1)	9 (19.6)	2 (4.3)
7.	Early symptomatic and supportive treatment can help most patients recover from the infection.	39 (84.8)	6 (13.0)	1 (2.2)
8.	If anyone works in a “wet market,” it is recommended to disinfect the equipment and working area at least once a day.	35 (76.1)	8 (17.4)	3 (6.5)
9.	Not all persons with COVID-19 will develop severe cases. Only those who are elderly, have chronic illnesses, and are obese are more likely to be severe cases.	35 (76.1)	7 (15.2)	4 (8.7)
10.	It is not necessary for children and young adults to take measures to prevent the infection by the COVID-19 virus.	2 (4.3)	41 (89.1)	3 (6.5)
11.	Wearing general medical masks can prevent one from acquiring infection by the COVID-19 virus.	38 (82.6)	6 (13.0)	2 (4.3)

direct contact with affected patients.²⁸ It is therefore highly important that HCPs across every corner have sufficient knowledge about all aspects of the disease from its clinical manifestations to its diagnosis, proposed treatment, and established prevention strategies.

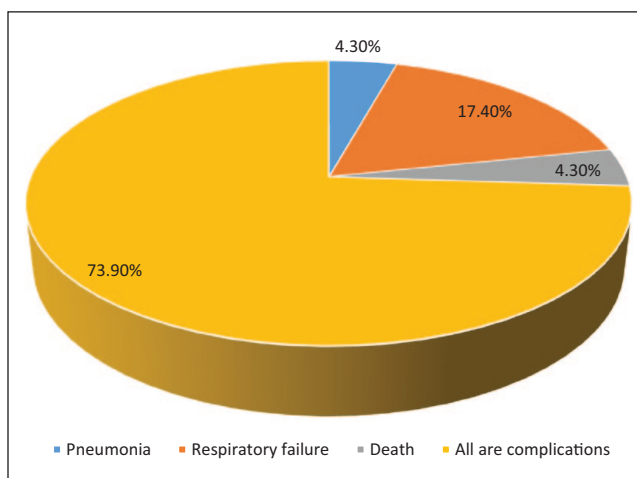
In the current study, the majority of the participants reported that they check new updates on COVID-19 more than once per day (71.1%), but only 23.9% of the participants have attended any of the lectures/discussions about COVID-19. This finding was lower than a study conducted

by Bhagavathula et al.,²¹ in which 44.1% of the study participants had attended lectures or discussions related to COVID-19. This difference could be because, since most of the discussions were conducted on a virtual basis, most of the study participants in the current study area may not have Internet access, and they may not be aware of the availability of these kinds of opportunities. Frequency of checking/watching a media was found to be associated with pharmacists’ levels of COVID-19 knowledge and risk perception of the disease.²⁹

Table 3. Perception about coronavirus virus (COVID-19) among community pharmacists in Gondar, Ethiopia: (N=46).

Characteristics	Frequency	Percentage (%)
What is the incubation period of novel coronavirus (COVID-19)? (days)		
2–7	12	26.1
2–14	14	30.4
7–14	9	19.6
7–21	7	15.2
Other	4	8.7
Symptoms of novel coronavirus (COVID-19) are all except		
Sore throat	1	2.2
Runny nose	20	43.5
Skin rash	28	60.9
Myalgia	6	13.0
Smell disturbance	15	32.6
Diarrhea	17	36.8
Sneezing	1	2.2
Confusion	7	15.2
Novel coronavirus (COVID-19) origin is thought to be from		
Bats	25	54.3
Snakes	1	2.2
Fish	1	2.2
Unknown	19	41.3
What is the treatment of novel coronavirus (COVID-19)?		
Supportive care	33	71.7
Antiviral therapy	2	4.3
Vaccination	1	2.2
None of the above	10	21.7

The main sources of information about COVID-19 among the study participants were news media (TV, Radio, newspapers, etc.) 63%, followed by social media (Facebook, Twitter, WhatsApp, YouTube, Instagram) 52.2%. This finding was a little different from previous studies conducted in Vietnam and Saudi Arabia, in which in the former case, social media (91.1%) and seminars were the primary sources of information, while workshops (48%) were the primary sources of information in the Saudi Arabian study.^{30,31} Relying on information from the news media (TV, Radio) may not be an issue in Ethiopia because the media mainly collect their information from the country's ministry of health (Ethiopian Ministry of Health) daily updates of the disease. However, in the current study, a significant number of the study participants (52.2%) utilized the social media (Facebook, Twitter) as a source of information, and this should be a concern because there is a huge amount of information available through the Internet that include unverified malicious information, that can spread quickly and misguide HCPs. Health authorities and scholars have cautioned that widespread misinformation about COVID-19 is a serious concern that can cause xenophobia.^{32–35} In this regard, health care workers (HCWs)

**Figure 2.** Respondents' answer to the question "What are the complications of Novel Coronavirus (COVID-19)?"**Table 4.** Association between sociodemographic characteristics and knowledge about COVID-19.

Characteristics	Good knowledge, N (%)	Poor knowledge, N (%)	Chi-square (P value)
Sex			
Male	17 (36.9)	7 (15.2)	1.307 (0.253)
Female	12 (26)	10 (21.7)	
Age (years)			
18–25	5 (10.9)	7 (15.2)	5.192 (0.136)
26–35	12 (26)	8 (17.3)	
36–45	10 (21.7)	2 (4.3)	
>45	2 (4.3)	0	
Educational level			
Diploma	7 (15.2)	9 (19.5)	4.061 (0.113)
Degree	20 (43.6)	8 (17.3)	
Masters	2 (4.3)	0	
Years of experience			
<2	2 (4.3)	4 (8.7)	6.870 (0.069)
3–5	7 (15.2)	8 (17.3)	
6–10	10 (21.7)	2 (4.3)	
>10	10 (21.7)	3 (6.5)	

should carefully evaluate COVID-19-related information and should use scientific and genuine sources only.

In the present study, 63% of the study participants were found to have good knowledge of COVID-19. The current finding was in line with studies conducted in Uganda in which 69% of the study participants were found to have adequate knowledge.²² However, the current result was much lower than studies conducted in Vietnam and Pakistan, in which 88.4% and 93.2% of the health professionals, respectively, were found to have sufficient knowledge about COVID-19.^{30,36} Further education and training of community pharmacists through continuous online trainings and invitations to participate in virtual discussions regarding

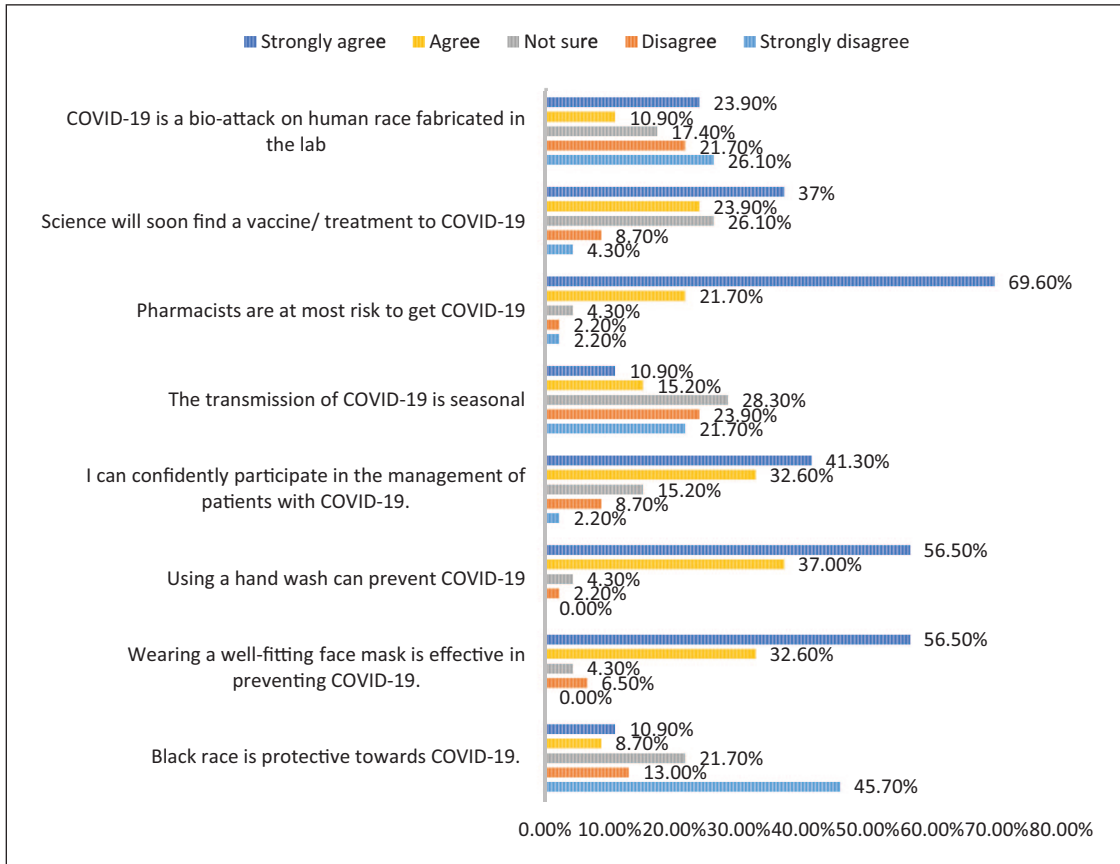


Figure 3. Attitude-related characteristics of community pharmacists in Gondar, Ethiopia, toward COVID-19, N=46.

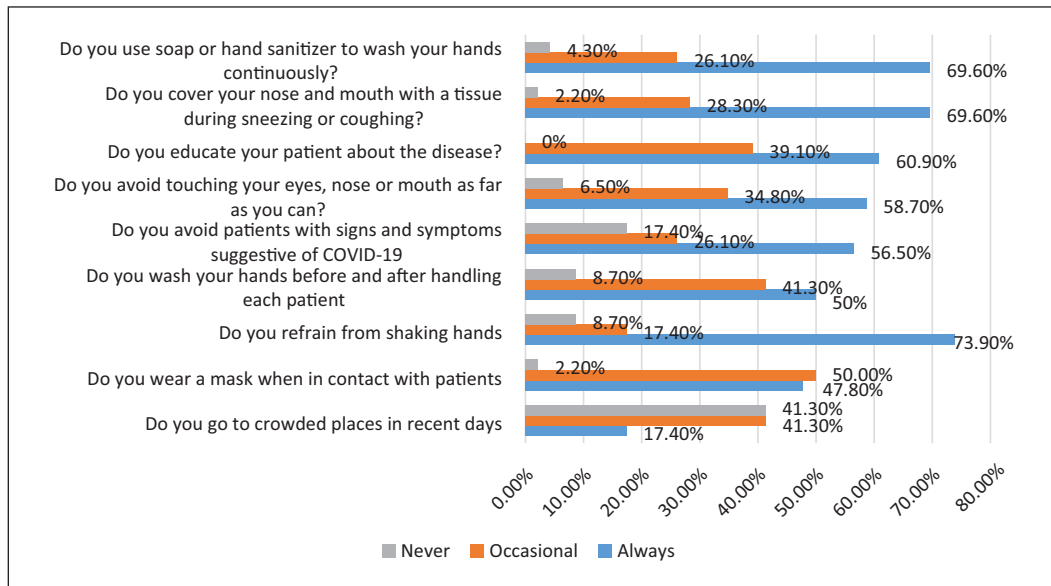


Figure 4. Practice-related characteristics of community pharmacists in Gondar, Ethiopia, toward COVID-19, N=46.

COVID-19 are needed particularly on symptoms and transmission of the disease to improve their knowledge and understanding of the pandemic.

The majority of the study participants in the current study were found to have a positive attitude toward COVID-19. The current finding was also consistent with studies conducted in

Vietnam and Pakistan,^{30,36} in which the majority of the respondents were found to have a positive attitude toward COVID-19. However, the finding was different from a study conducted in Uganda, in which the majority of the HCPs did not have a positive attitude toward COVID-19.²² Having a positive attitude is an important driving force that will let health professionals act enthusiastically with the hope that they can bring a difference to minimize the transmission of the disease.

In the current study, it was found that only 30.4% of the study participants were found to have a good practice toward the prevention of COVID-19. This finding was much lower than a similar study conducted in Pakistan in which 57.3% of the pharmacists had good practice regarding COVID-19.³⁶ The current finding was very concerning because community pharmacists, as part of the healthcare team, are the prime frontiers toward preventing the transmission of the disease, which makes them vulnerable to being infected. This is also true in Ethiopia, and although they are currently implemented to varying extents across different countries, community pharmacists are involved in management of minor ailments (as patients will choose to go to community pharmacies instead of other health facilities because most of these will only provide COVID-19-related services or due to patients' fear of contact at health facilities), extended prescribing roles and related activities, balancing supply and demand, and other related activities.³⁷

Chi-square results showed that having a good knowledge of COVID-19 was significantly associated with practice. Similar findings were reported in Pakistan.³⁶ Health professionals who have better knowledge about the disease (COVID-19) will have a better understanding of its severity and transmission which will lead them to practice in a manner that they can act with maximum caution to protect themselves and their customers.

Limitation of the study

Since the current study was a cross-sectional study, most of the findings were mainly dependent on the genuineness of the information provided by the study participants and a possible cause–effect relationship was also impossible to make. Another limitation could be the lack of power calculation for estimation of sample size (the number of pharmacists to participate) in the current study.

Conclusion

The current study found that a significant number of community pharmacists do not have adequate knowledge about COVID-19. A significant gap was identified particularly concerning community pharmacists' practice toward COVID-19. This was very concerning because those health professionals in the healthcare team are the prime frontiers toward preventing the transmission of the disease and particularly in the current scenario where no vaccine and particular treatment are available to prevent/treat the disease.

Recommendations

Strategies should be implemented to improve community pharmacist's knowledge about COVID-19 through continuous online training programs and invitations to participate in virtual discussions. Community pharmacists should strive to maintain their role in the fight against the pandemic and act in a manner that can minimize their chances of being infected by the virus and make sure that they will not transmit to others.

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Author contributions

D.K.Y. conducted the sequence alignment, statistical analysis, interpretation, and drafted the manuscript. C.A.D. and A.E.K. carried out the data collection and participated in the statistical analysis. S.A. and A.B.M. participated in the revision and drafting of the manuscript. All authors have read and approved the final manuscript.

Availability of data and materials

The data sets generated and/or analyzed during the current study are not available in public due to the requirement of confidentiality upon which consent was secured from the study participants but are available from the corresponding author on reasonable request.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical approval

Ethical clearance of the study was obtained from the ethical review board of the School of Pharmacy, the University of Gondar, on a Ref. No. SoP/784/2020, and the study was also performed following the Declaration of Helsinki as revised in 2013. The study participants were well informed about the purpose of the study, and a written informed consent was collected from each study participant before the commencement of the study. The data were collected anonymously, and there was no personally traceable information on the questionnaire.

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Informed consent

A written informed consent was obtained from all study participants before the commencement of the study.

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Supplemental material

Supplemental material for this article is available online.

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