Population perceptions and views of community pharmacists during the Covid-19 pandemic: a comparative, cross-sectional study in Jordan and Kuwait

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The novel coronavirus disease (Covid-19) pandemic has stressed health care systems worldwide and community pharmacists who had to operate under challenging conditions. Since the Covid-19 pandemic started in December 2019, pharmacists worldwide have played a critical role in devising novel strategies to minimize and control the pandemic's effects. Even through the spread of the pandemic, pharmacies have progressed to provide essential health services to their communities. Community pharmacists are well positioned to provide high-priority pandemic interventions, including Covid-19 immunizations and testing. The importance of community pharmacists for the general population has been evident throughout this pandemicand in previous pandemics. Using an online questionnaire, this cross-sectional comparative study was conducted to assess, explore, and compare the perceptions and views of community pharmacists during the Covid-19 pandemic in Jordan and Kuwait. The study showed that both populations had positive perceptions of and trust in community pharmacists, suggesting that pharmacists prioritized their patients' care over business-related concerns, despite their belief that pharmacists used the Covid-19 pandemic to raise the prices of immuneboosting supplements and sanitizers. During the pandemic, study participants frequently visited community pharmacies and preferred pharmacies close to their residences.

Introduction

The global scope of the Covid-19 outbreak cannot be overstated. The first case of Covid-19 was reported in Wuhan, China, in December 2019 (Ciotti et al. 2020). The Covid-19 pandemic rapidly spread worldwide (Kincses—Tóth 2020). On March 11, 2020, because of the rapid global spread of Covid-19, the World Health Organization (WHO) proclaimed a worldwide pandemic. As of 3:20 PM CEST on June 14, 2023 [5]: a total of 6,943,390 fatalities and 767,984,989 confirmed cases of Covid-19 have been reported to the WHO from dashboards worldwide.

The Covid-19 pandemic has caused a worldwide shock. The world currently faces new uncertainty as a result of the Covid-19 pandemic, and the subsequent wave of the Covid-19 pandemic is currently being addressed by numerous nations and areas (Nyikos et al. 2021).

Fever, coughing, and shortness of breath are the most prominent signs of Covid-19 infection and may emerge anywhere, from 2 to 14 days after exposure. Organ failure, haemorrhage, and septic shock are all possible complications during a Covid-19 infection ICU stay, although severe acute respiratory distress may be the sole cause of death in the latter stages of the infection. Humans may transfer Covid-19 to one another via the saliva of infected bats, through the air, or through direct contact with infected people. Touching contaminated surfaces or hands and then touching one's face, eyes, nose, or mouth are the most common ways that people are exposed to infectious droplets. The global economy, society, and health have all been severely impacted by the epidemic. Health services and governments worldwide are fighting to contain the virus and treat its consequences. To halt the rapid spread of Covid-19, governments have established unambiguous directions and restrictions. Since then, the WHO and individual nations have issued public health advisories urging people to take preventative measures, including washing their hands often and keeping a safe distance from those who are ill. With billions of people confined to their homes, borders have been shut down, as have schools and nonessential enterprises (Saab et al. 2020).

On March 2, 2020, Jordan reported the first incidence of Covid-19, prompting authorities to take a wide variety of nonpharmaceutical measures to prevent the spread of the virus (Khatatbeh 2020). Therefore, the government quickly implemented many nonpharmaceutical efforts to halt the spread of the virus. After the first case of Covid-19 was reported in Jordan on March 2, 2020, a procedure was created involving extensive contact tracing, screening of questionable contacts, and obligatory hospital admission for all Covid-19 patients. This was backed up by a nationwide lockdown and a curfew that prevented anyone from leaving their homes at night. On March 15, 2020, the borders were locked, and all traffic to and from Jordan ceased. The National Defence Law became effective on March 17 when a royal order was issued (Samrah, 2020) and (Alqutob et al. 2020). In Kuwait, it was

verified on February 24, 2020, that Kuwait had its first case of Covid-19. Since then, the State of Kuwait has faced serious public health problems, such as mortality and morbidity, as a result of the pandemic's direct effects and the consequences of pandemic-related restrictions, such as the curfew imposed from March 22 to August 30, 2020, which caused significant disruptions to people's normal activities [3]. Everyone was subject to the Covid-19 curfew, with the exception of those who needed emergency medical assistance or frontline personnel with specific permissions. Virtually all businesses and schools, public and private, made the transition to remote work during this period. Covid-19 has a wide-ranging, negative effect on the health-related behaviours of Kuwaiti citizens and residents (Salman et al. 2021).

Beds in critical care units, ventilators, disposable personal protective equipment, and even basic home and food goods are limited as a consequence (Sen-Crowe et al. 2021). Community pharmacists have played a crucial role in both this and earlier pandemics (Cadogan-Hughes 2021). To assess the value added by pharmacists to health care during the coronavirus epidemic, Visacri and her associates performed a scoping assessment. They discovered that pharmacists had responsibilities in several areas, including stocking and supplying, patient care, professional assistance, and the prevention of sickness and infection. Eleven studies revealed that pharmacists provide services to patients through personal contact (either via phone or video chat), with seven showing that pharmacist interventions are predominantly performed to provide services to patients and support health care professionals. Eight studies showed the usefulness of pharmacists providing guidance to patients, while seven studies showed the value of pharmacists providing medication information to health care professionals (Visacri et al. 2021). In light of the recent Covid-19 outbreak in Jordan and Kuwait, the purpose of this research was to gauge public trust in community pharmacists.

Strategically situated between Europe, Africa, and Asia, the Middle East and North Africa (MENA) area is economically close to China as the home of various firms (Ibrahim et al. 2020). According to the WHO there were approximately 22 million confirmed cases in the Eastern Mediterranean area, with approximately 350 thousand fatalities [4]. Five imported cases of Covid-19 from Iran were reported in Kuwait on February 24, 2020. Like many others, Kuwait has implemented several travel restrictions in an effort to curb the spread of illness. Combining this approach with additional strategies, including mandatory isolation and lifestyle adjustments, has a considerably greater impact (Gasana—Shehab 2020). On August 15, 2024, according to the Kuwait Covid-19 — Coronavirus Statistics — Worldometer, there were 667,158 confirmed cases and approximately 2570 fatalities [7].

While Jordan reported its first confirmed case of Covid-19 on March 2nd, 2020, other instances of Covid-19 contracted while visiting Jordan began to surface midway through that same month (Khatatbeh 2020). On March 17, 2020, the Jordanian government activated the Defence Law, giving the Minister of Defence the authority

to work and formulate orders based on the situation. As a result, a national curfew was imposed to confirm the country's complete isolation. Various media outlets were also used to raise public awareness about the severity of Covid-19 and its potential consequences (Alqutob et al. 2020). On August 15, 2024; 1,746,997 cases of Covid-19 were confirmed in Jordan, leading to more than 14,000 fatalities [6].

Covid-19 will have a major effect on weak economic conditions in many nations. It will take afflicted countries longer to recover from the Covid-19 pandemic because of short-term financial tremors and long-term negative growth in economic activity. In addition, the majority of the population in these nations will be impacted by climate change, leading to disproportionately low household incomes and economic activity (Hashemi-Shahri et al. 2020). Jordan is classified as a Middle East Upper-middle-income country (Jaber 2023), while Kuwait is one of the Gulf Cooperation Council (GCC) high-income countries (Oguoma et al. 2021).

Pharmacists create and dispense medicines and educate patients and the public about their use. As stated by Van Mil (2002), this field includes tasks such as evaluating prescription orders; compounding, labelling, and dispersing pharmaceuticals and devices; selecting drug goods; examining drug consumption; monitoring patients; intervening as needed; and offering cognitive services about the use of drugs and devices.

To promote responsible drug usage, a pharmacist should be included in all medication-related decisions. Better patient outcomes may be achieved in outpatient settings if pharmacists are empowered to act as advocates, counsellors, and mediators for their patients to promote safe drug use. Pharmacists, including researchers, educators, regulators, and managers, have several roles in the health care system as pharmacotherapy experts in both community and hospital settings (Caamańo et al. 2008, Mohiuddin 2020).

Several international studies have examined the general public's perspective, understanding, satisfaction with, and attitude towards community pharmacy services. According to research conducted in Europe (Farris et al. 2000, Stergachis et al. 2002, Wirth et al. 2010), patients have a positive view of community pharmacists and the role they play in the health care system. Due to their convenient location and professional reputation, pharmacists are often the initial point of contact for patients in the health care systems of many developed and developing countries. The expanded responsibilities of community pharmacists in the multidisciplinary delivery of health care are also acknowledged tacitly by several developed countries, such as Australia, the United States, and the United Kingdom. In these nations, community pharmacists provide a wide range of health care services.

The majority of community pharmacists in neighbouring countries continue to perform their traditional roles as medication distributors and provide very little medical assistance to their patients (Haig–Kiser 1991, Adepu–Nagavi 2006, Radford et al. 2009). Since the current coronavirus (Covid-19) epidemic started in December

2019, pharmacists worldwide have been instrumental in finding novel approaches to limiting the spread of the virus. Despite the widespread spread of Covid-19, community pharmacies have persisted in meeting the health care needs of their patients and clients. High-priority pandemic interventions include point-of-care testing for chronic disease management, vaccinations, and Covid-19 testing (Visacri et al. 2021, Strand et al. 2020), all of which community pharmacists are well situated to perform.

Over the last several years, Kuwait has made strides towards establishing pharmaceutical care services that aim to improve health outcomes for patients. These services describe the pharmacists' understanding of pharmaceutical care, their dedication to enacting the practice, and the potential roadblocks to its growth. The authors described the pharmacists' self-reported pharmacy procedures at general public hospitals in Kuwait (Awad et al. 2006). However, clinical pharmacies that provide additional services are difficult to find in Kuwait. Pharmacists are primarily responsible for technical duties in hospitals, such as processing medicine orders and managing inventories, with little participation in providing direct patient care and little interaction with patients in wards (Matowe et al. 2003, Kheir et al. 2008). Furthermore, only one study describing the scope of pharmaceutical care activities undertaken in Kuwait was conducted, and it included 80 hospital pharmacists working in four general hospitals. The study results showed that pharmacists lacked a proper grasp of pharmaceutical care practices, notwithstanding their claims that they performed a variety of pharmaceutical care activities. Except for a very few dedicated pharmacists, most professional pharmacists do not routinely deliver pharmaceutical care services. In addition, see (Awad et al. 2006, Kheir et al. 2013). Similarly, Jordan places a premium on the medical knowledge and availability of neighbourhood pharmacies. This has led to community pharmacies being a go-to for health advice and medication information. Furthermore, during the last decade, the pharmacist's role in Jordan has gradually broadened to include more clinically oriented responsibilities. Between 2000 and 2004, PharmD and Master of Clinical Pharmacy programs were established at leading Jordanian institutions (Ayob-AbuRuz 2005, Wazaify et al. 2008), which contributed to the growing prominence of pharmacists in the country's health care system.

As a result, researchers in Jordan and Kuwait conducted cross-sectional surveys to gauge public opinion on community pharmacists and their evolving roles.

Method

The study sample

Visitors to community pharmacies in Kuwait and Jordan composed the study's primary population. A particular focus was placed on including persons from all genders, age groups, educational backgrounds, employment statuses, and geographic

areas within the sample to ensure diversity and representation. As a result, a judgemental or purposive sampling strategy was used to carefully choose participants who would offer the study relevant viewpoints and experiences.

Questionnaire development

An online survey was used in a descriptive, cross-sectional comparative study conducted in Jordan and Kuwait to determine how the Covid-19 epidemic affected people's views on the job of community pharmacists. Before creating the questionnaire, the researcher first modified a validated instrument used in a prior study carried out in Kuwait (Awad et al. 2017). Awad and his colleagues conducted their study in Kuwait using a previously validated instrument that was chosen by researchers in Taiwan (Chen et al. 2012), Qatar (El Hajj 2011), the UAE (Al Akshar et al. 2014), and the KSA (Bawazir 2014).

This decision was influenced by the pertinent literature investigating Covid-19 and the public perceptions of community pharmacists. The questionnaire was then painstakingly translated into Arabic by a qualified and experienced professional translator fluent in English, German, and Arabic. A pilot study was conducted utilizing a convenient sample of 30 Jordanians and 30 Kuwaiti patients who were not included in the final survey. The pilot study aimed to evaluate the target population's acceptance, validity, and clarity of the questionnaire. The final version of the survey questionnaire was authorized after consideration of the input and some minor revisions to improve readability and comprehension. Each question was offered in both Arabic and English to accommodate respondents' preferred languages. Using a 5% margin of error and a 95% confidence interval, the sample size was calculated using the sample size table from Johnson and Gill (2010). The intended respondents for the study were adults older than 20 years who agreed to participate anonymously. According to the Johnson and Gill methodology, 385 adults were deemed the minimum acceptable sample size. Distinguishing returns can quickly set in when samples exceed a specific size, which needs to be balanced against the researcher's resources (Johnson-Gill 2010). The researcher distributed 500 questionnaires in each country (Jordan and Kuwait) to avoid bias and maximize the likelihood that the findings would be accurate.

Data collection

In this descriptive cross-sectional survey, self-developed questionnaires were sent through online survey platforms to a convenience sample of both the Jordanian and Kuwaiti populations via the authors' connections and three academics and researchers in the pharmacy field. The questionnaire was developed on Google Forms. The online survey link was shared through social media, including WhatsApp and Facebook groups. Survey data were collected from March to September 2022. A total of 406

and 389 completed valid surveys were included in the studies from Jordan and Kuwait, respectively.

A total of 11 structured questions (Q1–11) organized into two parts were included in the final questionnaire.

- The first part consisted of seven questions (Q1–7) about the sociodemographic characteristics of the respondents, including age, sex, location, education level, educational background, monthly income, and health status.
- The second one, which included four questions (Q8–11), investigated the general public's patterns of visiting community pharmacies and their perceptions of community pharmacists during the Covid-19 pandemic.

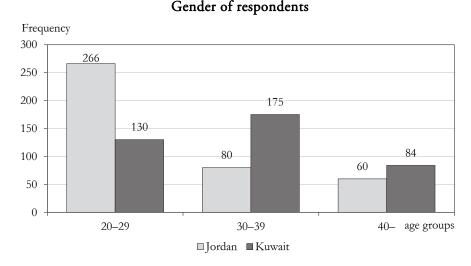
Findings

Demographic distribution of the respondents

Gender

The age distribution of the research participants is depicted in Figure 1. The majority of participants were female, with women comprising 70.7% of the Jordanian participants and 59.4% of the Kuwaiti participants.

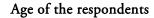
Figure 1

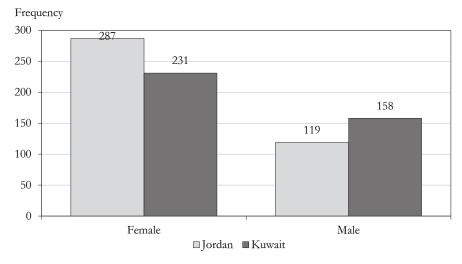


Age

The age distribution of the study respondents is shown in Figure 2. While the majority of Kuwaiti participants were aged 30–39 years (45%), the majority of Jordanian participants were aged between 20 and 29 years (65.5%).

Figure 2



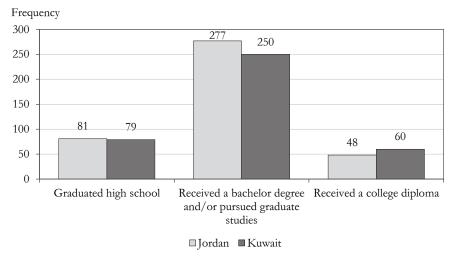


Level of education

The distribution of respondents' educational levels in the survey is shown in Figure 3. With percentages of 68.2% and 64.3%, the majority of Jordanian and Kuwaiti participants, respectively, earned bachelor's degrees and continued their education in graduate school.

Figure 3

Respondents' level of education



Educational background

Nearly half of the Jordanian participants (48%) had a of health sciences background, while 25.4% of the Kuwaitis participants had a business and economic background.

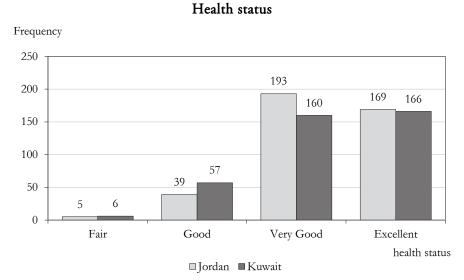
Monthly income

The majority of the participants in both Jordan and Kuwait had a monthly income of 565 USD or less (63.8% and 24.9%, respectively); in Jordan, the monthly income was 22.4%, ranging from 565–1128 USD, while in Kuwait, 21.6% had an income of 2093–2493 USD.

Health status

The distribution of respondents' health status according to the survey is shown in Figure 4. Less than half of the participants (47.5%) were in very good health, 41.6% had excellent health, 42.7% had excellent health, and 41.1% had very good health.

Figure 4



Frequency of visiting community pharmacies during the Covid-19 pandemic

Regarding the frequency of visiting community pharmacies during the Covid-19 pandemic, 23.4% of the Jordanian population mentioned that they visited once every month during the Covid-19 pandemic, 21.2% of whom visited once every three months, 26.7% of whom visited once every three months, and 23.9% of whom visited once a year.

Reasons why the participants visited community pharmacies

Nearly half of the Jordanians (51.7%) visited the community pharmacy to purchase nonprescribed medications, particularly supplements that boost immunity. In contrast, 46.6% of the participants visited to purchase prescribed medicine, 39.7% and 37.2% visited to purchase sanitizers and antiseptics, respectively, and to purchase nonprescribed medications, e.g., supplements. In Kuwait, 45.5% of the participants visited community pharmacies to purchase nonprescribed medications, most of which were supplements known to boost immunity; 40.9% visited the community pharmacies to purchase prescribed medicine; and 32.4% of the participants visited the community pharmacies to purchase nonprescribed medications, e.g., supplements and the same percentage visited to purchase sanitizers and antiseptics.

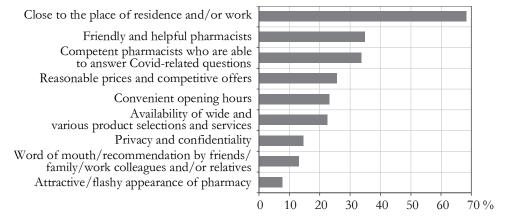
Reasons influencing participants' choice of community pharmacy

Figures 5 and 6 indicate the reasons influencing participants' choice of community pharmacy in Jordan and Kuwait, respectively.

The majority of the Jordanians (68.5%, n=278) mentioned that they chose community pharmacies because they were close to their place of residence and/or work, were friendly and helpful pharmacists, and were competent pharmacists who could answer general health care-related questions; these were the second and third reasons, with 35% and 33.7%, respectively.

The same first reason was used in Kuwait (59.9%, n=233), followed by 30.8% who visited because of reasonable prices and competitive offers.

Reasons influencing participants' choice of community pharmacy in Jordan*



^{*} The number of completed valid surveys is 406.

Figure 6 Reasons influencing participants' choice of community pharmacy in Kuwait*



^{*} The number of completed valid surveys is 389.

Perception of community pharmacists

Half of the Jordanians, 50.5% (n=205), believed that community pharmacists would put their patients' care above business-related matters, and 42.4% of Kuwaitis believed so. The detailed results are shown in Appendix.

Discussion

Both Jordanians and Kuwaitis people visited community pharmacies frequently, which can be explained by the fact that despite the limitations of Covid-19 and lockdown, community pharmacists, as frontline health care providers, continue to work in pharmacies and serve patients through face-to-face communication (Goff et al. 2020). In addition, the findings indicate that the role and contribution of pharmacists during Covid-19 were substantial as professional health care providers, not only dispensing medicines.

According to the findings of this study, the most common reason for both populations to visit a community pharmacy was to purchase nonprescribed medications, most notably supplements known to boost immunity; these results are consistent with the recommendations that the majority of health care professionals view supplements (particularly vitamin C supplements) as a preventative tool against the spread of Covid-19 [1]. Vitamins C and D and zinc were also mentioned as immune-boosting vitamins and minerals. Herbs, probiotics, and other dietary supplements may have an effect on immunity and inflammation [2]. In addition, after the introduction of Covid-19, the sales of immune health dietary supplements increased as a result of the widespread belief that they could protect against Covid-19

infection and lessen the severity of disease in Covid-19-infected patients (Günalan et al. 2021, Hamulka et al. 2020).

Curfew or quarantine limits the freedom of movement and prevents long-distance travel in Jordan (Alqutob et al. 2020) and Kuwait (Gasana–Shehab 2020).

This study revealed that 50.5% of the Jordanian population and 42.2% of the Kuwaiti population had a positive perception and image of the community pharmacist, as their perception is that community pharmacists put their patients' care above business-related matters. Additionally, 39.4% and 23.7% of the Jordanians and Kuwaitis, respectively, believe that the pharmacists provided valuable and enlightening advice on Covid-19.

The majority of participants pharmacists had good knowledge about Covid-19 and a high level of preparedness for pandemic control and that the majority of pharmacists agreed that they had a significant role in the management of the ongoing crisis and a solid understanding of the most prevalent Covid-19 treatments (Al Mazrouei et. al 2021). Cheong et al. (2020) found in a separate Malaysian study that pharmacists are committing to public action to increase public expectations regarding their contribution to quality medication use during pandemic epidemics and complex situations. Moreover, studies from Australia, China, and the United States that describe the roles and contributions of pharmacists during the Covid-19 pandemic have been validated (Nguy 2020, Li et al. 2020, Mostafavifar-Groff 2020). According to Goff and his colleagues, pharmacists provide frontline services to Covid-19 patients in community pharmacies, clinics, hospitals, and nursing homes. To diagnose and treat Covid-19 patients in the hospital after discharge or as outpatients, a multidisciplinary team of specialists, including pharmacists, is needed. While patients and physicians utilize telehealth, pharmacies continue to operate and provide direct access to community pharmacists, primary care providers. (Goff et al. 2020). A substantial proportion of Jordanians and Kuwaitis people (34.2% and 41.4%, respectively) believed that pharmacists used the Covid-19 pandemic as an excuse to raise the prices of immune-boosting supplements and hand sanitizers. This belief can be explained by the panic buying behaviour of these items exhibited by the population during the pandemic, as pandemics are associated with panic buying of food and other supplies (Taylor 2021), and this behaviour was observed during the pandemic.

Conclusion

The results of this study indicate that the majority of respondents had favourable perceptions and images of community pharmacists in Jordan and Kuwait. Since the pandemic restricted travel and mobility freedom, it makes sense that the proximity of the pharmacy to one's residence was a significant factor in one's selection of a pharmacy. During the Covid-19 pandemic, both Jordanians and Kuwaitis people

expressed high levels of confidence and trust in community pharmacists and believed that they prioritized patient care over business-related concerns.

Despite the belief that pharmacists used the Covid-19 pandemic as an excuse to raise the prices of these items, the study revealed that purchasing immune-boosting supplements and hand sanitizers was among the most common reasons for visiting a community pharmacy. This study provides insights into the views and perceptions of Jordanian and Kuwaiti community pharmacists during the Covid-19 pandemic and is expected to assist pharmacists, pharmacy managers, and decision makers in better understanding their clients' views and expectations to provide the best services and care while managing patient-pharmacist relationships.

Future research

More qualitative research is needed to describe and understand the perceptions and views of the Jordanian and Kuwaiti populations towards community pharmacists. A mixed methodology (with in-depth interviews) will explain the participants' points of view and the reasons behind choosing each answer and collecting any suggestions they have to strengthen the patient-pharmacist relationship and focus on the evolution and contribution of the community pharmacy and the importance of their role.

Managerial implications

Based on the study's findings, the following recommendations are made to help pharmacists, pharmacy managers, and decision-makers in Jordan and Kuwait advance community pharmacy practices:

In creating marketing campaigns, pharmaceutical companies emphasize social responsibility and the critical role that community pharmacists play during pandemics, despite the circumstances and difficulties. In addition, ongoing training and education should be provided.

Professional development to community pharmacists should be provided to extend professional responsibilities and improve interactions with patients to strengthen patient-pharmacist relationships and increase public awareness of community pharmacists' knowledge and capacity to provide medical information and patient care services.

Limitations

1. This research was completed using a convenience sample based on online platforms and the authors' connection, so it may not be a completely representative sample that ensures that residents from different geographical areas

participate and excludes people who do not have access to online platforms. In addition, online questionnaires are more likely to be exposed to response bias and fraud, and the answers may depend on personal experiences and views of the participants.

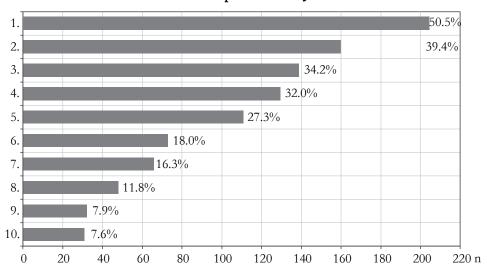
- 2. The demographics and socioeconomic parameters of the participants were not tested as factors or compared between the two counties regarding their effects on the population perceptions of the pharmacists.
- 3. The present study did not compare participants' perceptions of and confidence in pharmacists before and after the Covid-19 pandemic; rather, we assessed their responses only during the pandemic.

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Appendix

Figure A1
Perception of community pharmacists by participants during
the Covid-19 pandemic in Jordan*

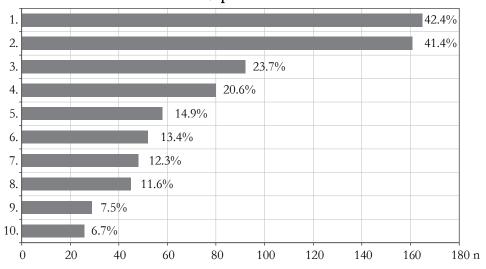


- 1. They put their patients' care above business-related matters
- 2. They offered valuable and enlightening advice on prevention of Covid-infection and general safety practices during the pandemic
- 3. They took the Covid-pandemic a reason to raise the prices of immune-boosting supplements and sanitizers
- 4. They informed the patients about the correct doses and times of taking non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 5. They asked about the history of patients before selling them non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 6. They put business-related matter above patient care
- 7. They didn't ask about the history of patients before selling them non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 8. They didn't take advantage of the Covid-pandemic and raised the prices of immune-boosting supplements and sanitizers
- 9. They didn't inform the patients about the correct doses and times of taking non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 10. They didn't offer valuable and enlightening advice on prevention of Covid-infection and general safety practices during the pandemic

^{*} The number of completed valid surveys is 406.

Figure A2

Perception of community pharmacists by participants during the Covid-19 pandemic in Kuwait*



- 1. They put their patients' care above business-related matters
- 2. They took the Covid-pandemic a reason to raise the prices of immune-boosting supplements and sanitizers
- They offered valuable and enlightening advice on prevention of Covid-infection and general safety practices during the pandemic
- 4. They informed the patients about the correct doses and times of taking non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 5. They put business-related matter above patient care
- 6. They asked about the history of patients before selling them non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 7. They didn't ask about the history of patients before selling them non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 8. They didn't take advantage of the Covid-pandemic and raised the prices of immune-boosting supplements and sanitizers
- They didn't inform the patients about the correct doses and times of taking non-prescription medications e.g.: immune-boosting supplements such as, Vitamin C/Zinc and Magnesium
- 10. They didn't offer valuable and enlightening advice on prevention of Covid-infection and general safety practices during the pandemic
 - * The number of completed valid surveys is 389.

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