



PRACTICE REPORT

Consumers' perceptions on the contribution of community pharmacists in the dispensing process at Dawadmi



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KEYWORDS

Dispensing;
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Abstract *Background:* Community pharmacies are widely distributed and developments in this sector will greatly improve pharmaceutical health care delivery.

Objectives: To provide consumer's perceptions towards the contribution of community pharmacists in the dispensing process.

Method: The study was performed from mid-October to mid-November 2013 in Dawadmi, KSA. Data were carried out using a structured face-to-face questionnaire with randomly selected 100 consumers at different community pharmacies. The questionnaire composed of nine closed questions about consumer's perceptions towards the pharmacist's role, counselling quality and dispensing errors in community pharmacies.

Results: Consumers perceive that pharmacists are not committed to dispense medications with prescription (72%), it is embarrassing to ask questions to the pharmacist in the current pharmacy premises (48%), pharmacists do not give enough counselling about their medications (48%) and they previously encountered a dispensing error (26%).

Conclusion: The professional performance of community pharmacists in dispensing is below expectation. Majority of consumers perceive that community pharmacists are violating pharmacy law and giving them insufficient medicine information while dispensing. Authorities should stimulate both pharmacist's and consumer's awareness by educational campaign, improve standards for the profession and penalise violators. It is a necessity for community pharmacies to develop consultation areas to assure privacy, improve counselling quality, and reduce dispensing errors.

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1. Introduction

Community pharmacy is the most accessible and widely distributed of the various health care facilities (Najjar et al., 2001). The health care facilities in Saudi Arabia are predominantly governmental, offering their services to all citizens. Outside government hospitals, consumers obtain their

medications from over 3200 private community pharmacies. Therefore, developments in community pharmacies sector will greatly improve health care delivery (Al-Arifi, 2012).

Community pharmacists are involved in a wide variety of professional activities that optimises medication therapy and promotes health and disease prevention. The dispensing process in community pharmacy is a major part of the quality use of medicines and the provision of medicine information in the form of verbal or written information (Flynn et al., 2009). Consumer's counselling covers basic drug information in terms of appropriate drug usage, administration, dosage, side effects, storage, drug-drug and drug-food interactions (Al-Arifi, 2012).

Errors associated with dispensing prescriptions are committed every day in community pharmacies. A dispensing error is a discrepancy between a prescription and the medicine that the pharmacy delivers to the consumer (Cheung et al., 2009). Table 1 summarizes the different types of dispensing errors (Szeinbach et al., 2007; Cheung et al., 2009; Beso et al., 2005). Dispensing errors account for 21% of all medication errors (Santell et al., 2003). Studies show that the rates of dispensing errors were 0.01–0.08% (Ashcroft et al., 2005; Chua et al., 2003; Knudsen et al., 2007). Improvements in pharmacy distribution systems are important because pharmacies dispense large quantities of medications that even a low error rate can reach a large number of consumers (Cheung et al., 2009). Professionally competent community pharmacists with specialized training in dispensing can intercept potentially harmful prescribing errors and prevent adverse effects (Al-Arifi, 2014). In 1978, a law regulating pharmacy profession in Saudi Arabia was implemented for better health care delivery. The law demanded professionalization of pharmacy performance and pharmacist to dispense drugs on prescription only, except OTC drugs (Bawazir, 1992).

Unfortunately, the contribution of community pharmacists in the dispensing process and health care delivery worldwide is below expectation. For example, consumer counselling, which is the basis of pharmacy practice, was reported to be practiced in 62.2% (USA), 25% (UK), and over 50% (Canada), of the cases (Najjar et al., 2001). Pharmacists should implement strategies to communicate adequately with consumers and accordingly prevent administration errors and minimize the risk of adverse effects. (Cheung et al., 2009).

The pharmacist's role in community pharmacies allows him to directly interact with the consumer. This experience

generates opinions and views for both the consumers and pharmacists. Collecting consumer's views of pharmacist's performance is crucial to improve the quality of current health services and evaluating the need for new strategies or services (Al-Arifi, 2012).

2. Objective of the study

Few studies in Saudi Arabia explore the consumer's perceptions of the role of community pharmacists in the dispensing process. The objective of this study was to determine consumer's perceptions on selected parameters connected to the community pharmacist and pharmacies in Dawadmi. These parameters included whether pharmacists are dispensing drugs based on prescription, pharmacist's role, counselling quality and the degree of dispensing errors.

3. Methodology

3.1. Study site

A survey of community pharmacists in Dawadmi, Riyadh province, KSA was conducted over a period of one month from mid-October to mid-November 2013. Data collection was carried out using a structured face-to-face questionnaire

Table 1 Classification of dispensing errors.

Dispensing medicine for the wrong patient
Dispensing the incorrect drug
Dispensing the wrong dose
Dispensing the wrong dosage form
Dispensing the wrong quantity
Dispensing with inappropriate, incorrect, or inadequate labelling
Confusing or inadequate counselling to the patient or representative
Incorrect preparation, packaging, or storage of medication prior to dispensing
Dispensing a medicine of inferior quality
Dispensing an expired or almost expired medicine
Omission (i.e. failure to dispense, screen for interactions)

Table 2 The list of questions used in the survey.

Q.	Parameter	Answer
1	Did the pharmacist dispense your medication with prescription?	Yes No
2	How did you get most of your needs of medications from pharmacies?	With prescription Without prescription Both ways
3	Do you think that pharmacists are committed to dispense medications with prescription?	Yes No
4	Do you feel embarrassed to ask the pharmacist a question related to your health?	Yes No
5	Do you support the development of private space for consultation to maintain consumer privacy?	Yes No
6	Do you think that the pharmacist in the community pharmacy gives you enough information about the medications?	Yes No
7	Pharmacist behaviour while dispensing.	Give instruction and encourage questions Did not pay attention Give instruction in response to requests
8	Based on your experience, what do you think about pharmacists of community pharmacies?	Businessman More as businessman Balanced professional
9	Did you experience a dispensing error before?	Yes No

with 100 consumers from randomly selected community pharmacies from different areas of Dawadmi region.

3.2. The questionnaire

A modified questionnaire from a previous study (Najjar et al., 2001) was prepared. The questionnaire included nine closed questions about consumer’s attitudes towards pharmacist contribution in the dispensing process. The actual version of the questionnaire in Arabic was translated into English (Table 2). The first three questions were about dispensing drugs on prescription only, except those defined as OTC, by pharmacists and the degree of reliance on prescription to obtain medications from pharmacies. Questions four to six dealt with issues regarding counselling such as if consumers feel embarrassed to ask the pharmacist a health or medication related question and if pharmacy design is suitable for such interaction and the counselling quality offered by pharmacists. Questions seven and eight measured the impression of consumers on the pharmacist in terms of the time of dispensing and/or receiving queries and about their professional attitudes. The last question measured the degree of dispensing error encountered by the consumers.

The concept of research and its impact in improving health care are partly understood by Dawadmi community, which limits the will of consumers to respond to a comprehensive questionnaire. Therefore, a close ended and simple question format was chosen to enable the consumers to answer easily and promptly.

3.3. Data collection and analysis

Consumers were interviewed outside and inside the community pharmacies after getting the agreement of the pharmacists. The purpose of the study was explained to each consumer and they were invited to complete the questionnaire after assuring the willingness to participate. Survey responses were treated anonymously and confidentially. Upon receipt of the completed questionnaires, the percentage of responses of each variable was calculated.

4. Results

4.1. The response rate

Consumer’s responses were very high and showing great interest in accepting our questionnaire. All the participants managed to complete the parameters in the questionnaire due to the simplicity of the questions.

4.2. Dispensing prescription and OTC drugs

Initially, consumers were asked three questions to measure if pharmacists are obeying the law and dispensing prescription drugs on prescription, except for OTC drugs. In the first question, the majority of consumers (76%) said that the pharmacist had dispensed their medication with a prescription, and the rest (24%) without a prescription, as illustrated in Fig. 1. Similarly, in question two a significant amount of consumers (20%) gets their medications without prescription, and few

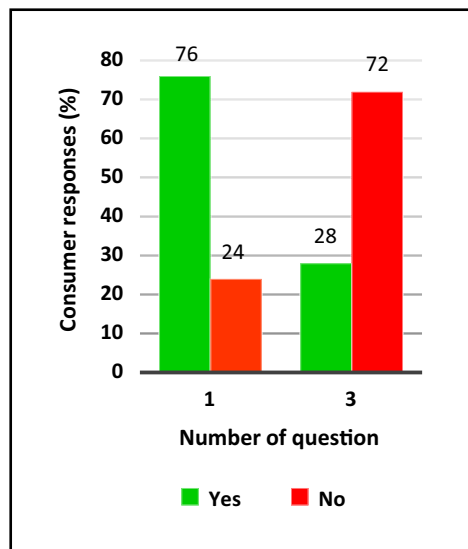


Figure 1 Consumer responses for questions 1 (pharmacist dispense medication with prescription) and 3 (pharmacists committed to dispense medications with prescription).

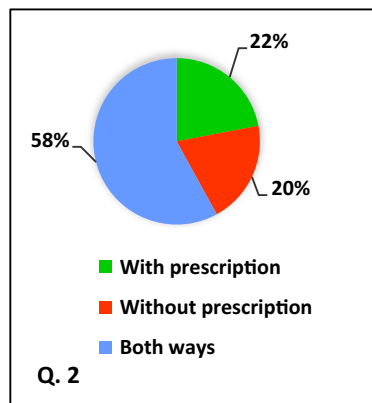


Figure 2 Consumer responses for question 2 (ways by which consumers get their medications from community pharmacies).

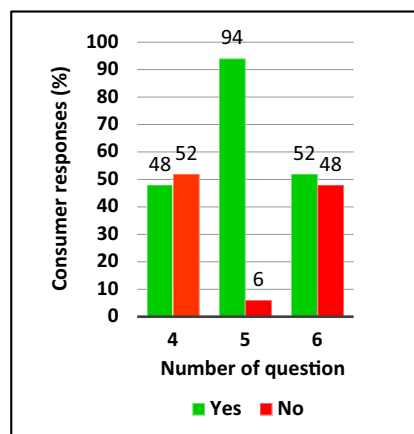


Figure 3 Consumer responses for questions 4 (consumer embarrassment in asking questions to pharmacist), 5 (development of consultation area) and 6 (pharmacist give enough counselling).

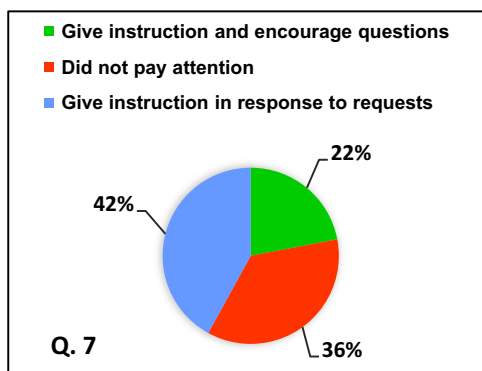


Figure 4 Consumer responses for question 7 (pharmacist behaviour while dispensing).

amount (22%) use prescription to get their medication and more than half of consumers (58%) use both ways (Fig. 2). Furthermore, question three confirmed that the majority of consumers (72%) think that pharmacists are not committed to dispense medications with prescription (Fig. 1).

4.3. Counselling

Questions four, five and six (Fig. 3), deals about the consumer's opinions regarding counselling. Almost half of the consumers (48%) feel embarrassed when they speak with the pharmacist regarding their health. Nearly 94% of the consumers support the development of an area in the pharmacy where consultation between them and the pharmacist may be conducted with acceptable privacy. A large number of the consumers (48%) believed that pharmacists in community pharmacies did not give enough counselling about their medications.

4.4. Consumer attitude towards pharmacists

In question seven the majority of consumers (42%) think that pharmacists give instruction in response to requests only, 22% think they give instruction and encourage questions and surprisingly 36% of the consumers think that the pharmacist

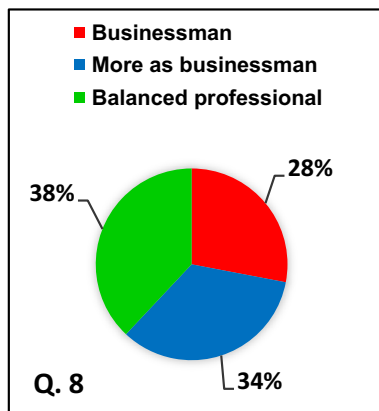


Figure 5 Consumer responses for question 8 (pharmacist professional attitude).

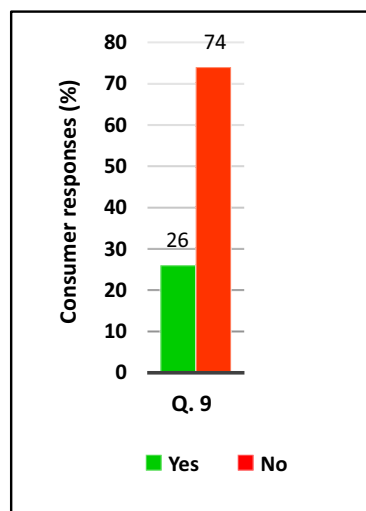


Figure 6 Consumer responses for question 9 (if a prescription error encountered).

did not pay attention to them when dispensing their medications (Fig. 4).

In question eight the percentage of consumers who perceive the community pharmacist's role as primarily a businessman was about 28% and 38% of the community pharmacist's showed a balance between both the business and the professional aspects. The rest of consumers (34%) feel the pharmacist pay more attention to the business side (Fig. 5).

4.5. Dispensing errors

Finally, question nine showed that a significant amount of the consumers (26%) believed that they encountered a dispensing error earlier and the rest (74%) did not face any problem regarding their medication dispensing (Fig. 6).

5. Discussion

In this study, we found that the majority of consumers agreed that pharmacists are still ignoring the law, which is leading to an intense malpractice in community pharmacies in Dawadmi. This is similar to a study conducted in Jeddah, KSA (Al-Mohamadi et al., 2013) in which about 98% of pharmacists handed out an antibiotic without a prescription. Such negligence can cause harm to the body and occasionally fatal or raise antibiotic resistance. Consequently, regulations should be reviewed and pharmacies should be monitored by regulators. In addition, educational campaigns are essential for the public in order to increase the proportion of consumers obtaining their medications with prescription.

It was found that almost half of the consumers are embarrassed to talk about their health with the pharmacist, which is greater than a previous study (10%) performed in KSA (Najjar et al., 2001). This may be due to the culture of Dawadmi residents, because they do not like to disclose their health problems openly. In connection to this, almost all of the consumers (94%) require consultation areas, to be developed in community pharmacies, where consultation between the consumer and the pharmacist may be conducted with a reasonable

assurance of privacy. In addition more than half (52%) of the consumers feel pharmacists do not give enough information about their medication. This might be due to pharmacist carelessness or negligence. On the other hand, consumers might not recognize the contribution of community pharmacist, in ensuring the safe and effective use of medicines and hence fail to use this vital pharmacy service. A study showed that an intensive counselling intervention significantly improved accuracy and adherence in administering liquid medications to children (Cheung et al., 2009). For community pharmacies to have a more active role in counselling, educational campaign and CPEs are required for both the consumers and pharmacists in order to highlight pharmaceutical services of pharmacies and the importance of counselling. In addition, all community pharmacies must have a patient consultation area with a trained pharmacist consultant by law, which is a separate, designated, conveniently located area for patient consultation within the pharmacy premises.

This study found that the counselling quality was inferior as for 42% of the consumers the pharmacist provides instructions to requests only and for 36% did not pay attention. This might be due to the pharmacist professional attitudes, as the majority of consumers perceive they are more concerned with the business side. In another study done in Riyadh, KSA, it was found that about 37% of the respondents perceived that the pharmacists are only a dispenser or vendor of prescription drugs (Al-Arifi, 2012) while our study shows pharmacists were more concerned with the business (34%) and less consumers (28%) as solely businessman.

Study results show that dispensing errors are common, as 26% of the consumers believe that they experienced an error in dispensing previously, this is compared to the results of a previous study conducted in Central Saudi Arabia in which 55.5% of respondents perceived that errors in dispensing are common (Al-Arifi, 2014).

Further research is required to get the views of pharmacists regarding the dispensing of prescription drugs without prescription, the causes of the different types of dispensing errors and reasons behind the low professional performance. In so doing pharmacies can introduce methods and strategies to expand their contribution in the dispensing process.

6. Conclusion

The image and professional performance of community pharmacist should improve for better pharmaceutical health care. The majority of pharmacists are violating the pharmacy law by dispensing prescription drugs without prescription and not recognising the compelling harm to the community of Dawadmi. There is an urgent need for the Saudi regulatory authority to adopt approaches such as educational campaign to promote both pharmacists and public awareness, improve standards for the profession and penalise violators. Finally, community pharmacies should develop consultation areas to assure privacy and improve counselling quality at the time of

supply thereby improving the dispensing process and reducing dispensing errors.

Conflict of interest statement

The authors declare that there are no conflicts of interest.

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