



# Community Pharmacists' Experiences and Beliefs towards Providing Pharmacy Services to Deaf and Hard of Hearing Patients: A Mixed-Method Study in Riyadh, Saudi Arabia

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**Introduction:** Provision of pharmacy services to patients requires the pharmacist to well communicate with the patients. Research has shown that healthcare providers, including community pharmacists, face many challenges while providing services to deaf and hard-of-hearing patients (DHOH).

**Aim:** To investigate community pharmacists' experiences and beliefs about providing pharmacy services to DHOH in Riyadh, Saudi Arabia.

**Methods:** This was a sequential explanatory mixed-method study involving a survey and semi-structured interviews. At first, a web-based, self-administered survey was disseminated to community pharmacists in Riyadh, Saudi Arabia during the period October to November 2020. The survey was disseminated through the official twitter account of Saudi Pharmaceutical Society. Two reminders were sent. To calculate an appropriate sample size, according to Hair et al, an acceptable sample size would be ten observations per variable (10:1). In this survey, there are 16 items, and hence the acceptable sample size was 160 participants. The semi-structured telephone-based interviews were conducted with a purposive sample of survey respondents to gather in-depth information on experiences, beliefs, and barriers about providing pharmacy services to DHOH. The interviews were conducted until saturation occurred. Survey data was analysed using Statistical Package for Social Sciences (SPSS version 24), and the semi-structured interviews were analysed by Framework analysis.

**Results:** A total of 175 community pharmacists completed the survey. The characteristics of the participants are presented in Table 1. The number of DHOH patients the pharmacists met during the past 6 months are presented in Figure 1.

**Table 1: Participants' Characteristics (n =175)**

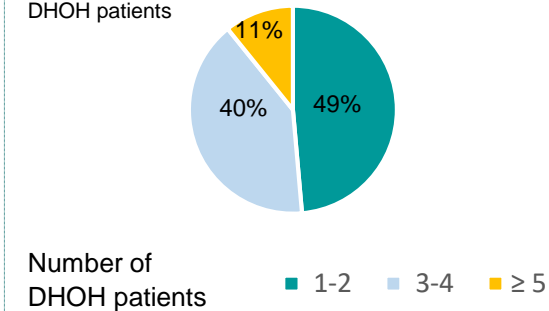
Characteristics	Frequency (%)
<b>Sex</b>	
Male	148 (84.6%)
Female	27 (15.4%)
<b>Age (in years)</b>	
< 25	15 (8.6%)
25-35	131 (74.9%)
36-45	23 (13.1%)
46-55	5 (2.9%)
> 55	1 (0.6%)
<b>Years of experience</b>	
< 1	37 (21.1%)
1-5	57 (32.6%)
6-10	51 (29.1%)
11-15	19 (10.9%)
>15	11 (6.3%)
<b>Pharmacy type</b>	
Chain Pharmacy	149 (85.1%)
Clinic-owned pharmacy	13 (7.4%)
Independent pharmacy	11 (7.4%)

Community pharmacists' methods of communication with DHOH patient are illustrated in Figure 2.

## Community pharmacists' experiences of providing pharmacy services to DHOH patients

Community pharmacists reported the following services provided to DHOH which included: prescription medications (by 82.9%), counseling on prescription medications (by 56.6%), OTC medication dispensing (by 54.3%), and counseling on OTC medications (by 52.6%).

% of Pharmacists met DHOH patients



**Figure 1: Percentage of Pharmacists met DHOH patients during the past 6 months (n = 175)**

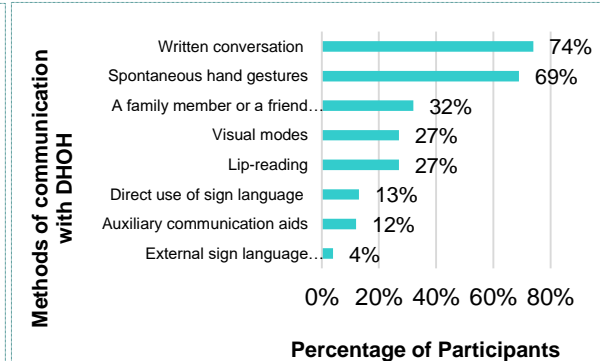
Forty participants (22.8%) reported their awareness of some basic signs of Saudi sign language (SSL).

## Beliefs towards Providing Pharmacy Services to DHOH Patients

Of the participants, 101 (57.7%) believed that they have handled communication barriers appropriately, while 61(35%) acknowledged unmanageable communication barriers.

## Barriers against Providing Pharmacy Services to DHOH Patients

Among the main barriers identified were lack of knowledge of the basics of SSL (70.9%) and the inability to recognize disability (52.6%).



**Figure 2: Community pharmacists' methods of communication with DHOH (n = 175)**

**Quantitative findings:** The semi-structured interviews further explored pharmacists' experiences and views on providing pharmacy services to DHOH patients. Of the main themes emerged were: (1) Experience; interviewees preferred written communication with DHOH patients, while spontaneous hand gesturing was the least preferred method of communication, and they also acknowledged that their roles in providing services, to the DHOH, need to be improved (2) Beliefs; interviewees believed that awareness of the basics of SSL is important.

**Conclusion:** To our knowledge, this is the first study of its kind to be conducted in Saudi Arabia. The study highlighted that when providing pharmacy services to DHOH patients, community pharmacists encountered multiple barriers. These barriers need to be addressed for better support THE provision of pharmacy services to DHOH. Further studies with large sample size, are warranted to better understand the situation.

## References:

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