

# Pharmacists' Perceived Barriers to Patient Counseling

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## ARTICLE INFO

### Article history:

Received on: 25/11/2013

Revised on: 19/12/2013

Accepted on: 24/01/2014

Available online: 30/01/2014

### Key words:

Patient Counseling;  
Discharge Counseling;  
Counseling Barriers;  
Pharmacy Practice.

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## ABSTRACT

The aim of this study was to investigate the prevalence and nature of patient counseling barriers as perceived by pharmacists. The data was collected by adding a question about the existence and nature of counseling barriers, if they exist, to the standard patient counseling form used by pharmacists. The prevalence of counseling barriers was 12.5%. The major counseling barrier was counseling the caregiver instead of the patient (27.8%), followed by low level of education, lack of privacy, lack of interest/time and partial consciousness of the patient (16.7% each) and hearing impairment (11.1%). Finally gender and delay of discharge order were the least reported (5.26% each). This study recommends that a special counseling protocol should be implemented for patients with low level of education and partial hearing impairment and that a proper setting for counseling and strict implementation of policies should be provided by the institution.

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## INTRODUCTION

Traditionally, the pharmacist played an important role in the health care system, but improving the pharmacist's efficiency was the real challenge (WHO Consultative Group, 1997). According to Cruthirds et al, hospital pharmacists provide drug monitoring, disease management, consultation on drug utilization, patient counseling and education, formulary management, provision of drug information in addition to being a part of multidisciplinary healthcare teams (Cruthirds *et al.*, 2013). Some of these roles allow the hospital pharmacist to be closer to patients in a productive and efficient way that goes above and beyond dispensing medicines. Patient counseling and education is one of the most important roles that a hospital pharmacist can play (Rantucci, 2007). Patient counseling is defined as "providing medication information orally or in written form to the patients or their representatives on directions of use, advice on side effects, precautions, storage, diet and life style modifications" (Subish Palaian, 2006). It is accepted that patient counseling and education helps in promoting the rational use of medicines which can lead to successful therapeutic outcomes (Hussain *et al.*, 2012) in addition to better medication adherence (Taitel *et al.*, 2012). Although the etiology and pathophysiology of various diseases have been

understood and a plethora new medications are available for use in the clinical setting, clinicians still in many instances fail to achieve the desired therapeutic goals (Subish Palaian, 2006), in major part as result of insufficient medication adherence by the patient (WHO, 2003). Limited health literacy, a problem that can be corrected by patient counseling and education, is associated with medication non-adherence, a higher incidence of medication errors and in turn higher medical expenses and longer or more frequent hospitalizations and poorer health in general (Ngoh, 2009). Effective patient counseling can be undermined by various barriers (Kathy Lococo, 2010) which can be classified as barriers to counseling and barriers of continued counseling (Kolasa and Rickett, 2010). Physical challenges such as blindness, dumbness and deafness are three main barriers to patient counseling, as they require special communication skills that a pharmacist may not know (Khan *et al.*, 2011; Beardsley *et al.*, 2012). Patient counseling requires the pharmacist to allocate sufficient time for this task, accordingly, factors such as large numbers of patients per pharmacist or the patient's eagerness for fast discharge can be major barriers to effective counseling (O'Donnell, 2006). Barriers can be complex, such as low financial resources which might force the healthcare institution to be understaffed leading to a less than adequate number of counseling pharmacists (Ngoh, 2009). Other barriers to patient counseling are wrong perception of what is the

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pharmacist's role and the lack of the proper attitude by the pharmacist (Wilbur, 2010). Lower patient educational levels can be a counseling barrier as it can affect medication knowledge (Raehl *et al.*, 2006; Alkatheri and Albekairy, 2013). Furthermore, the education level of patients can also act as a barrier for continued patient counseling. We have reported earlier that non-educated patients tend to have a significantly lower rate of previous counseling compared to more educated patients (Alkatheri and Albekairy, 2013). Finally, compromised privacy during counseling sessions can be a barrier for continued patient counseling (Brody *et al.*, 1990; O'Donnell, 2006). This study aims to investigate the potential patient counseling barriers that might be facing the pharmacist during discharge counseling at King Abdulaziz Medical City (KAMC), Riyadh, Saudi Arabia

## METHODS

This study was conducted by patient counseling pharmacists at King Abdulaziz Medical City (KAMC), in Riyadh, Saudi Arabia. The study used a convenience sample of patients that included hospitalized and ambulatory patients. The data was collected over a period of 5 weeks. The study was approved by the Institutional Review Board (IRB) of King Abdulaziz Medical City (KAMC) at the National Guard Health Affairs (NGHA), Riyadh, Saudi Arabia. A verbal approval to participate was sought from patients by the counseling pharmacist in order to include them in the study. Of 191 patients that were approached, 168 agreed to be included in the study. To collect data about the pharmacists' perceived barrier to patient counseling, the question "Are there any communication barriers during counseling this patient?" was added to the standard patient counseling form that is used during discharge counseling, which includes also demographics. The possible answers were: No barrier(s) or Yes there is(are) barrier(s). In the latter case, the pharmacist was asked to mention the perceived barrier(s). Data was analyzed descriptively using the Statistical Packages for Social Sciences (IBM SPSS Statistics, version 20.0) software.

## RESULTS

The patients' demographic information is summarized in table 1. The response rate was 88%. Almost two thirds of the participants were males. The participants were mostly 40 years old or above with an average age of  $53.19 \pm 17.79$  years.

Twenty one barrier incidents (12.5%) were reported by the counseling pharmacists in 18 (10.1%) out of 168 participants. This indicates that, sometimes, more than one barrier was reported per participant. The distribution of perceived barriers to counseling is shown in table 2. Eight barriers were identified from the responses of the pharmacists. The top counseling barrier was that counseling was given to the caregiver (27.8%, N=5). Low level of education, lack of privacy, lack of interest/time and partial consciousness of the patient were the second most common barriers (16.7%, N = 3 for each). Following them, hearing impairment accounted for 11.1% of the cases (N=2). Finally

gender and delay of discharge order were the least perceived barriers with 5.56% for each of them (N = 1). It should be noted that in some cases, pharmacists reported more than one barrier per patient so the total percentage may not add up to 100%.

**Table 1:** Characteristics of Sample.

Characteristic	Number (%)
<b>Gender</b>	
Female	66 (39.3)
Male	102 (60.7)
Total	168 (100)
<b>Age (Year)</b>	
Less than 40	38 (22.6)
40-59	65 (38.7)
60 or above	65 (38.7)
Total	168 (100)
<b>Level of Education</b>	
None	56 (33.3)
Primary/Secondary School	22 (13.1)
High School or above	9 (5.4)
Non-disclosed	81 (48.2)
Total	168 (100)

**Table 2:** Distribution of Counseling Barriers in 18 patients.

Type of Barrier	Percentage (%)
Counseling was given to the caregiver	27.8
Low level of education	16.7
Lack of privacy	16.7
Lack of interest/time	16.7
Partial Consciousness	16.7
Hearing Impairment	11.1
Gender	5.26
Delay of Discharge Order	5.26

## DISCUSSION

Perceived barriers to patient counseling were reported in 18 patients out of the total 168 participants in our study (10.1%). We could not compare this rate to available literature which does not report the rates of barriers collectively; instead, rates are reported for each individual barrier. Table 2 lists the rate for individual barriers. It is important to mention that some of these barriers have been reported together in the same patient. In this context, when analyzing the five cases where counseling was offered to the caregiver, it can be seen that in most cases the patients had sensory defects such as hearing impairment and partial consciousness. Counseling the caregiver instead of the patient him/herself poses challenges to the pharmacist as he must understand the family structure (if the caregiver is a family member), understand the burden laid upon the caregiver, and the level of the caregiver's emotional stress (Toner and Shadden, 2002). It is interesting that old age per se was not reported as a perceived barrier to counseling, although such patients might have multiple diseases that make counseling difficult (Toner and Shadden, 2002). This is in agreement with previous reports that concluded that correct knowledge of medication at discharge is not correlated with age (Kerzman *et al.*, 2005). Not perceiving age as a barrier could be viewed as a positive indicator of the counseling system and the level of competence of the counseling pharmacists who were involved in this study. Others showed that elderly patients have self-reported receiving less counseling than younger

age groups (Ali *et al.*, 2009). Low level of education, lack of privacy, lack of interest/time, and partial consciousness were the second most perceived barriers to counseling. With regard to low level of education, previous studies showed that the lower the level of education, the lower the medication knowledge (Alkatheri and Albekairy, 2013) and the harder it is for a pharmacist to communicate with the patient (Ngoh, 2009). Furthermore, in our study, patients with lower education levels have indicated receiving less continuous counseling than patients with higher educational levels (Alkatheri and Albekairy, 2013). This indicates, even if indirectly, that there are barriers to the counseling of poorly educated patients. Although lack of privacy during counseling is a frequently reported barrier in community pharmacies (Pohjanoksa-Mäntylä *et al.*, 2008; Hajj *et al.*, 2011; Al-Arifi, 2012), it is a less frequently reported barrier in hospital discharge counseling except when private space allocated for this purpose is not provided (Hussain *et al.*, 2013). In this current study, lack of privacy for counseling was, in part, due to interruption by other people in the healthcare team. Such an important observation might have been overlooked by previous reports that investigated barriers to patient counseling. Furthermore, in the conservative Saudi society, it was expected that gender would be reported as a major perceived barrier for patient counseling. In this study, gender was only reported once as a perceived barrier although the pharmacists involved were males. Lack of privacy has surpassed gender as a barrier and was reported for both males and females. A study by Hussain *et al.* (2013) in Dubai has concluded that gender per se is not the barrier for counseling rather it is that men were generally more satisfied with counseling (Hussain *et al.*, 2013). The third most commonly reported barrier is lack of interest/time by the patient. Lack of interest and/or time are grouped together because they are interconnected and one can be misinterpreted as the other. For example, if a patient does not show up for counseling, this can be interpreted as lack of time or lack of interest or both. Available literature reveals that this a common problem in community pharmacies although it does not mention lack of interest as a barrier to patient counseling. Rather, it was cited more than once as a main cause of refusing to participate or withdrawal from patient counseling studies (Oparah and Arigbe-Osula, 2002; Kuo *et al.*, 2007). In the current setting, it can be speculated that lack of interest can be due to many reasons such as low appreciation for the value of counseling, over-confidence by patients or caregivers that they know enough about medications, and low appreciation for the seriousness of the disease and/or its treatment. Lack of time, on the other hand, can be attributed to the fact that patients and/or their escorts are in a hurry to leave the health care facility to tend to other commitments. This study has also found that physical conditions such as hearing impairment and partial loss of consciousness are barriers to counseling. This is consistent with earlier reports (Khan *et al.*, 2011; Beardsley *et al.*, 2012; Huebner *et al.*, 2013), and in this study, these were the most common causes for delivering the counseling to the patient's caregiver. It can be argued that deaf patients cannot hear the pharmacist's instructions and questions and cannot respond to them and a

patient with partial hearing impairment will require more time and effort during counseling sessions. Also it can be argued that partially conscious patients are not good candidates for direct counseling because they will not comprehend the questions or instructions of the pharmacist nor can they coherently reply to them. The final barrier that was reported by pharmacists is the delay of discharge order, which in addition to lack of privacy is institution related. The discharge order for such patients is usually received by the pharmacist immediately before the actual discharge of the patient. In such cases the counseling pharmacist will not be able to reach the patient before actual discharge and hence there will be no counseling session. In this context, NGHA has implemented an Inpatient Discharge Planning Administrative Policy and Procedure, APP 1433-23, which contains among its articles that "Discharge prescriptions should be faxed to the Discharge Area, twenty-four (24) hours in advance whenever possible. The original prescription must be received in the Pharmaceutical Care Department before medication can be dispensed". Although this APP helped to minimize this barrier, it still exists and stricter implementation of the policy should be enforced.

## CONCLUSION

This study has shown that there are real barriers to patient counseling. Some of these barriers are patient-centered and the others are institution-centered. Patient-centered were counseling the caregiver instead of the patient, physical conditions and low level of education which is difficult to counteract but can be minimized by implementing special counseling protocols for patients with low level of education and partial hearing impairment. On the other hand, the institution-centered ones are lack of privacy and delay of discharge order which can be counteracted by providing the proper setting and strict implementation of policies.

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#### **How to cite this article:**

Abdulkareem M. Albekairy. Pharmacists' Perceived Barriers to Patient Counseling. *J App Pharm Sci*, 2014; 4 (01): 070-073.