

Patients' Perceptions of Drug Therapy Counseling in Israel

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Abstract

Background: The more patients know about their medications the higher their compliance with drug therapy, reflecting an effective communication between health professionals and their patients. Numerous studies on this subject have been published, but none has been conducted in Israel.

Objectives: To evaluate patients' perceptions of drug counseling by health professionals – the prescribing physician and dispensing pharmacist – and to determine whether there is a difference in the patient's perception according to his or her place of birth and mother tongue.

Methods: A total of 810 patients were interviewed following receipt of their medications from in-house pharmacies at two community clinics of Israel's largest sick fund. Each patient was interviewed in his or her mother tongue according to a constructed questionnaire, which included the patient's demographic background, type of medications received, the patient's perceptions of drug counseling given by both the physician and the pharmacist, and the patient's perception of non-prescription drug counseling given by the dispensing pharmacist.

Results: Of the 810 patients enrolled in this study, 32% received three or more medications at each physician visit. The main therapeutic classes of medications prescribed and dispensed were for neurological disorders, cardiovascular diseases, gastrointestinal problems and respiratory diseases. While 99% of the patients claimed that they knew how to use their medications, only 96% reported receiving an explanation from either physician or pharmacist. The quality of counseling, as evaluated by the patients, was ranked above average for 75% of the consultations with the prescribing physician and 63% with the dispensing pharmacist.

Conclusions: Although few conclusions can be drawn from this study based on the initial statistical analysis of the data, the major findings were that patients value highly the counseling they receive and that 99% believe they have the requisite knowledge for using their medications. Compared to the international literature, our results – based on the patients' perceptions – indicate that counseling by pharmacists is a common and well-accepted activity in Israel and occurs at a high rate.

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It is well accepted that an adequate level of knowledge and understanding on the part of patients regarding their medications is associated with an increased compliance with drug therapy [1–3]. It is also indicative of an effective communication between health professionals — physicians and pharmacists — and patients [4]. Furthermore, it has been found that drug counseling has an enormous impact on patients' compliance with drug therapy. Without adequate knowledge patients cannot be effective partners in managing their own care [5], consequently, failure to comply with medication instructions commonly leads to serious adverse outcomes.

Two counseling models are frequently cited in the health care literature: the Indian Health Service model, specifically designed for pharmacists, and the Health Communication model, developed primarily for physicians. The former approach is based on open-ended questions that help determine the patient's knowledge of his or her disease and medications, while the health communication model provides seven strategies for enhancing patient comprehension and recall [3]. Educating and counseling patients involves imparting information, as appropriate for each patient, on the following aspects of taking medication [5]:

- Its use and expected benefits and action
- Its onset of action
- Its route, dosage form, dosage and administration schedule
- Directions for preparation and use of the medication
- Precautions to be observed during medication use
- What to do in case of a missed dose
- Potential common and severe adverse effects that may occur during medication use
- Potential drug–drug and drug–food interactions
- Proper storage and disposal of the medication.

Not only do standards of practice from major pharmaceutical professional organizations concur that patient counseling is an essential component of pharmaceutical care, but legal regulations such as the Omnibus Budget Reconciliation Act of 1990 (OBRA 90) mandate pharmacists to offer counseling to patients. However, despite professional practice standards and even legal requirements, patient counseling is often absent [3].

Pharmacists can contribute to positive outcomes by educating, counseling and motivating patients to follow their pharmacotherapeutic regimens and monitoring plans. The pharmacist needs to determine whether a patient is willing to use a medication and whether he or she intends to do so [5]. In addition, pharmacists counseling patients who are prescribed long-term medications need to understand the serious effects that chronic illness has on the patient's lifestyle [3]. A recent survey [6] found that patients above the age of 60 tend to choose drugstores where a pharmacist actively guides them on how to use prescribed drugs. In that study, more than 80% of older adults claimed that the pharmacist's performance was an extremely important factor in determining their choice of a drugstore. In particular, patients were likely to patronize a drugstore where the pharmacist had a complete and up-to-date knowledge of prescription drugs, had earned their trust, and made sure they understood the instructions on how to use the drugs prescribed to them.

In a study conducted by Williford and Johnson [2] that focused on patient counseling by the pharmacist, many patients expressed appreciation that someone was interested enough to provide the information that they desired but were often reluctant to request. Moreover, the majority of patients asked further questions about their medications and showed interest in improving their knowledge following counseling by the pharmacist.

Although numerous studies on the subject of drug counseling have been published, no such study has been undertaken in Israel. This issue is of particular importance in view of the changed demographic picture of Israel as a result of the waves of immigrants from the former Soviet Union that arrived in the country in the early 1990s. According to the National Bureau of Statistics, the number of Russian immigrants exceeds 500,000 and represents more than 10% of the total Israeli population. Thus, the aims of our study were not only to evaluate patients' perceptions of drug therapy counseling by both the prescribing physician and the dispensing pharmacist, but also to determine whether a difference exists in patients' perceptions according to their place of birth and mother tongue.

Methods

The study was conducted in two community clinics of Israel's largest sick fund in Jerusalem (Kupat Holim Clalit), which gave prior consent to participate in the study. These clinics contained in-house pharmacies. A total of 810 randomly selected patients were interviewed shortly after receiving their medication from the pharmacist. Interviews were conducted during 2 months by fourth year undergraduate students from the School of Pharmacy of the Hebrew University of Jerusalem. The students spoke fluent Russian and Hebrew, enabling the interview to be carried out in the patient's mother tongue. The patients were interviewed according to a constructed questionnaire, which included demographic data on the patient, the

type of medication received, the patient's perceptions of prescription drug counseling given by the physician or the pharmacist, and the patient's perception of counseling by the pharmacist on non-prescription drugs ('over the counter' products).

Results and Discussion

Demographic background

Of the 810 patients enrolled in the study, 347 were males (42.8%) and 463 females (57.2%), and their average age was 53.9 years (range 16–96). The average number of years of education was 12.2. With regard to origin, 235 patients were Israeli-born (29.1%), 343 were born in the former Soviet Union (42.5%), 157 were born in the Middle East or Africa (19.4%), and 73 were born elsewhere (9.1%). The Hebrew speakers comprised 49.2% of the patients, 35% spoke Russian as their main language, and 15.7% spoke Yiddish. Of those who spoke Russian or Yiddish, 57.8% claimed to speak Hebrew as a second language.

Medications received

Overall, 64.9% of the study patients received at least two medications at each physician visit, and 31.7% of patients received at least three medications per encounter. As shown in Table 1, the main therapeutic classes of medications that were prescribed and dispensed were for neurological disorders (17.3%), cardiovascular diseases (16.5%), problems involving the gastrointestinal tract (13.3%), and respiratory diseases (11.4%). This finding correlates well with the most prevalent chronic diseases in Israel, namely hypertension, diabetes, asthma and peptic ulcers [8].

Counseling

While 99% of the patients claimed they had ample knowledge about how to use their medications, only 96% reported receiving an explanation either from their physician or pharmacist. The breakdown was as follows: 60.4% were counseled by both physician and pharmacist, 33.6% by their physician only, and 4.2% were counseled by the pharmacist only.

Table 2 compares the counseling given by physician and pharmacist. The table illustrates that information on the medication's indication for use was given to 93.7% by the physician compared to 13.1% by the pharmacist; 92% (by the physician) vs. 68.4% (by the pharmacist) were given instructions on the medication's daily dosage, 30.5% vs. 9.6% were counseled on possible adverse effects associated with the use of their medications, and 66% vs. 48.4% were given specific instructions on the use of the medications such as storage conditions and whether or not the medication should be taken with food.

Over the counter products were purchased by 446 patients (55.1%). The pharmacist advised the patient which brand to buy and counseled the patient on how to use the product in 41.5% and 60% of the purchases respectively. Counseling by the dispensing pharmacist as to whether the medication was a prescription-only medi-

Table 1. Type and number of medications prescribed according to ATC

ATC	Therapeutic category	Two in-house pharmacies of Israel's General Sick Fund, 1998	Private pharmacies in Israel, 1994*	Israel's General Sick Fund pharmacies, 1992*
A	Alimentary tract and metabolism	13.3%	16%	16%
B	Blood and blood-forming organs	10.0%	3%	7%
C	Cardiovascular system	16.5%	12%	24%
D	Dermatologicals	9.3%	11%	5%
G	Genitourinary system and sex hormones	3.2%	7%	5%
J	General anti-infectives for systemic use	7.7%	14%	16%
M	Musculoskeletal system	2.8%	5%	3%
N	Nervous system	17.3%	12%	6%
R	Respiratory system	11.4%	10%	6%
V	Various	8.5%	10%	12%

* Data from Shani and Shemer 1999 [7].

ATC = Anatomical, Therapeutic and Chemical Classification index of the WHO.

Table 2. Comparison of counseling given by health professionals

Category	Physician	Pharmacist
Any type of counseling	751 (94.0%)	509 (64.6%)
Medication's indication	748 (93.7%)	105 (13.1%)
Daily dosage	735 (92%)	547 (68.4%)
Adverse effects	244 (30.5%)	77 (9.6%)
Special instructions	527 (66%)	387 (48.4%)

cation or an OTC product occurred in 60% of patient-pharmacist encounters. This rate is higher than found in similar studies conducted around the world. According to Kimminau et al. [9], older participants in their study reportedly did not receive any counseling from health care providers regarding their prescription medications. A similar finding was published by Morris [10], where 72% of those surveyed said they had received no information about their medication from the pharmacy when their most recent prescription was filled. Further examples are given in a Kansas city survey in which only 50% of patients received counseling by their pharmacist [11], and in a recent study conducted in Finland where only 40% of patients were counseled by their pharmacist [12].

The quality of counseling was evaluated by the patients in our study on a scale from 1 to 5 where 1 was the lowest score and 5 the highest. Of the patients counseled by their physician, 50.6% ranked counseling to be excellent, 26.5% as very good, 15.9% as good, 3.7% as mediocre, and 2.8% as poor. Counseling by the pharmacist was ranked as excellent by 38.2%, very good by 25.1%, good by 20.5%, mediocre by 6.2%, and poor by 9.6%. In general, counseling was ranked above average by 75% for the physician and by 63% for the pharmacist.

The language in which the counseling was given by physicians was Hebrew for 69.4% of the patients, Russian for 27%, and Yiddish for 1%. The pharmacist's counseling was in Hebrew for 63.8%, Russian for 35%, and Yiddish for 0.6%.

Conclusions

Although the statistical analysis of the results is not yet complete, some conclusions can already be drawn. The major finding of this study is that patients value highly the counseling they receive from both physicians and pharmacists and that 99% believe that they have the requisite knowledge regarding the use of their medication. No difference was found in the perception of Russian immigrant and Israeli-born patients. This finding may be attributed to the fact that a third of all physician and pharmacist counseling was given in Russian, thus averting the language barrier of Russian-speaking patients enrolled in this study.

Collectively, these results indicate that pharmacist counseling exists in Israel and occurs at a higher rate than found in the international literature. Future studies should be undertaken to compare objective parameters of patient consultation with the subjective patient's perceptions, and to verify the findings of this study in private pharmacies for patients insured by other sick funds.

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