

Evaluation of Outpatient-Pharmacists' Counseling Behavior and Content in a Teaching Hospital in Jordan- An Observational Study

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ABSTRACT

Pharmacists do have a unique opportunity to educate patients about their medications in order to identify, prevent and manage any potential problems they may have faced. This study aimed to characterize and evaluate the counseling behavior and content by pharmacists and pharmacy assistants in a sample of outpatient pharmacies in a teaching hospital in Jordan. The study was conducted in 6 outpatient pharmacies at the participating hospital; Endocrinology, Cardiology, Respiratory, Pediatrics, Family Medicine and Emergency staff. The study consisted of observing 60 patient-pharmacist/assistant interactions behaviors and counseling content (if exists) in 6 different outpatient pharmacies at the participating hospital. Observations were conducted by a trained researcher using a pre-validated and piloted data collection form. Out of the 60 observed interactions, only 18 interactions involved patient counseling, the type of which was both verbal and written. The initiator of counseling in 44.4% of the cases was the patient. More than 2/3 (70.0 %) of provided information to patients in all interactions was conducted using written labels only. The overall observed rate of counseling at the participating hospital pharmacies is low. There is a need to train pharmacists to offer more counseling to patients and have better communication and counseling skills.

Keywords: Counseling, Hospital Pharmacy, Jordan, Observation, Outpatient, Pharmaceutical Care.

INTRODUCTION

Patients' well-being and their drug-related needs are the primary concern of the Pharmaceutical Care practitioners, or what is known now as clinical pharmacists¹. Drugs dispensed by the pharmacist are administered for the purpose of achieving definite outcomes that would improve the patient's quality of life. These outcomes are either curing the disease, reducing or eliminating symptoms, arresting or slowing disease progression, or preventing diseases or symptoms². On the

other hand, the use of drugs may lead to unpredictable adverse drug reactions, increases in morbidity, mortality or increases health care cost due to noncompliance or poor knowledge given to the patients³. Lack of patients' knowledge about their medication can lead to serious problems that can be avoided by appropriate patient education. Therefore, pharmacists do have a unique opportunity to maintain good health, to avoid ill health and to make the best use of medicines⁴.

One of the most important aspects of pharmaceutical care is counselling. It is the pharmacists' responsibility to counsel the patient before dispensing medications⁵. Counselling plays an important role, not only in enhancing the compliance but also, in reducing complications of non-adherence.

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The American Society of Health System Pharmacists (ASHP) defines patient counselling as: “*providing verbal or written information about medications to the patient or his/her caregiver. It also includes providing proper directions of use, advices on side effects, storage, diet and life style modifications*”⁶.

In Pharmacy Practice, counseling ranges from simply stating the dosage of a drug as it is dispensed to the patient, to giving advice with regard to lifestyle and health promotion issues, like smoking cessation, weight control, blood pressure control, sugar and cholesterol testing⁷.

The type and content of information provided to patients during the counseling session varies based on the specific patient’s needs and whether it is a new or refill prescription.

Counseling by providing written information is essential to supplement and reinforce verbal information whenever verbal interaction is insufficient in providing information^{6,8,9}.

Most guidelines provide recommendations to pharmacists to educate and counsel patients on both prescription and Over-The-Counter (OTC) medicines^{6,8}. In general, the minimal requirements for counseling must include: Pharmacist introducing him/herself, asking about any OTC medications been/being taken, history of any drug allergy, the medication’s trade name, generic name and if there is substitution by another company, the positive expectations of using the medication (i.e., curing the disease, eliminate or reduce symptoms, slow disease process, or prevent a disease or a symptom), the negative expectations of using the medication (i.e., medication side effects, alarming signs) including ways to prevent them and the action required if they do occur, dosage, dosage form, route of administration, and expected duration of drug therapy, special directions and precautions for preparation and storage, common/potential drug-drug or drug-food interactions and therapeutic contraindications that may be encountered, including ways to prevent them and the action required if they do occur, techniques for self-monitoring of drug therapy, actions to be taken in case of

missing a dose, verifying the patient’s knowledge and understanding, asking the patient if he/she has any question⁶. Also, the pharmacist can counsel the patient about the proper diet, encourage weight reduction, physical exercise, smoking cessation, and explain monitoring devices⁵.

In Jordan, pharmacists’ role has significantly grown and developed in the past few years¹⁰. It does not only include the traditional product-oriented role of the pharmacist (e.g. dispensing and formulating drugs), but has also extended to include the more patient-focused new clinical role of the pharmacist (i.e., patient education, in addition to preventing, identifying and solving treatment-related problems), or what can be summarised as providing *pharmaceutical care* to patients.

This is the first study of its kind in Jordan that aims at characterizing and evaluating the counseling behavior and content provided by pharmacists and pharmacy assistants in a sample of outpatient pharmacies at a teaching hospital in Jordan.

METHODS

Setting and Study Design

The study was conducted at 6 out of the 8 outpatient-pharmacies at the participating hospital (Endocrinology, Cardiology, Respiratory, Pediatrics, Family Medicine and Emergency pharmacy). Data collection took place between April to May 2011. The 6 departments were chosen based on the perceived counseling requirements of the most dispensed medications at that department. Emergency pharmacy was included since it is believed that it encounters different types of medical problems and patients of different age groups, the fact that would require pharmacist to be cautious about counseling patients in terms of duration of use or referral to a clinic.

A pre-determined schedule was prepared in order to visit each pharmacy. The researcher visited during these times at a random manner at different days of the week and different times of the day. The target sample was 60 patient- pharmacist/or pharmacist assistant interactions, 10 in each recruited pharmacy.

To minimize the observer effect details given to observed pharmacists about the study objective were limited to “wanting to evaluate the pharmaceutical care services provided by pharmacists and a drug utilization review”¹⁴.

The study was approved by the Administration, the Pharmacy Department and the Scientific Research Committee at the participating hospital. In addition, approval was also obtained from The Postgraduate Education Committee at The Faculty of Pharmacy/The University of Jordan.

Data Collection

- A predetermined schedule was prepared in order to visit each pharmacy in a random manner at different days of the week and different times of the day. Five consecutive patient-pharmacist/ pharmacist assistant interactions and counseling were observed in the assigned pharmacy everyday during the study. All observations were conducted by one trained researcher in order to minimize variability and improve internal consistency. The researcher observed the interaction between patients-pharmacists/ pharmacist assistants from inside the pharmacy, standing beside the pharmacist or pharmacist assistant on the dispensing counter. During the dispensing process, the researcher attempted to be as unobtrusive as possible and did not interfere with the interacting patients, pharmacists or pharmacist assistants during the dispensing/counseling session. The counseling process (if available) was evaluated using a validated data collection form (provided from authors upon request) that has been adopted from Montgomery, *et al.*, 2010; Tully, *et al.*, 2011¹⁵. The form had been pre-tested on a small pilot

scale (n=5) in order to check the feasibility, improve the design, and subsequently modify it accordingly in order to ensure that the data would provide reliable information. Pilot data were not included in the final data analysis. The data collection form was anonymous; no patients or pharmacists information were documented. Also, the time in seconds spent in interaction and counseling was measured and documented.

The last part of the form involved a free space was left for the researcher's own qualitative notes and any miscellaneous observations that did not fall within the above categories, like behaviors related to pharmacy practice.

Data Analysis

All data were coded and entered into the Statistical Package for Social Sciences (SPSS®) for Windows version 17. Frequency and percentage were calculated and presented. Chi-square test and Fisher's exact test were used to determine the difference in proportion of a categorical variable. Significance was defined as $p < 0.05$. The qualitative part of the data was analyzed using the Content-Analysis method. Content Analysis involves a structured examination of the text by identifying any grouping themes and coding, classifying and developing categories¹⁶.

RESULTS

Out of the 60 observed interactions, 42 (70.0%) of the dispensing was carried out by pharmacists, while 18 (30.0%) of dispensing was carried out by pharmacy assistants (Table1).

Table 1. Dispensing and counseling process provided by pharmacists and pharmacy assistants in all observed pharmacies (n=60)

| Acting Staff | Dispensing (%) | Counseling (%) |
|------------------------------------|----------------|----------------|
| The Pharmacist | 42 (70.0) | 17 (28.3) |
| Pharmacy Assistant | 18 (30.0) | 1 (1.7) |
| Total | 60 (100) | 18 (30.0) |
| No action provided by either staff | 0 | 42 (70.0) |

Initiation of The Patient-Pharmacist Interaction:

More than half (55.56%, n= 10/18) of counseling sessions were initiated by the pharmacy staff (i.e., pharmacists or pharmacists' assistants), while (44.44%, n= 8/18) of them were initiated by the patients themselves. The initiator of the counseling process was not significantly related to the dispenser of medication i.e., whether the pharmacist or assistant ($p > 0.05$). On the other hand, the initiator of counseling was significantly related to the type of outpatient pharmacy department ($p < 0.01$), where all initiations by pharmacist took place at the Emergency Department (ED) pharmacy.

Techniques of Counseling and Interaction:

More than 2/3 (n=42, 70.0 %) of the provided information to patients in all interactions (n=60) was conducted using written labels only. Providing information both verbally and in-writing was observed in 30% (n=18) of the counseling cases. Table (2) describes the observed interactions at the recruited pharmacies, overall and divided by specialty.

On average, the number of pharmacists and assistants available at one time in all recruited pharmacies was 4. The number of pharmacy staff was significantly affected the method of providing information ($p < 0.05$). Pharmacies with 4 or more members of staff (pharmacists and assistants) provided a higher percentage of written information (41.7 %) than pharmacies with less staff.

Table 2. Observed interactions at the recruited pharmacies divided by specialty (n=60)

| Pharmacy | Handing over medications without counseling (%) | Counseling about new medications (%) | Counseling about chronic medications (Refills) (%) |
|-----------------|---|--------------------------------------|--|
| Endocrinology | 10 (16.7) | 0 | 0 |
| Pediatrics | 8 (13.3) | 1 (1.7) | 1 (1.7) |
| Respiratory | 9 (15) | 0 | 1 (1.7) |
| Cardiac Center | 7 (11.7) | 0 | 3 (5) |
| Family Medicine | 8 (13.3) | 2 (3.3) | 0 |
| Emergency | 0 | 10 (16.7) | 0 |
| Total N (%) | 42 (70.0) | 13 (21.7) | 5 (8.3) |

Contents of Patient Counseling

During the counseling process, the pharmacist (or assistant) did not provide the patient with any additional information that had not been mentioned in the data collection form.

In the majority of the observed interactions (n= 42, 70%), patients were not provided with any of the information listed in the data collection form. On the other hand, in the counseling sessions (n=18, 30%), the frequencies of the provided content could be arranged in a decreasing order as follows: counseling about the dose, followed by indication, frequency of administration,

duration of treatment, and finally route of administration. The counseling behavior and content included in the data collection form used in the observational part were analyzed and the frequency for each theme was recorded in Table (3).

No information was offered about special directions for preparation (e.g. antibiotic suspensions), storage (e.g. insulin) or administration of medication (e.g. inhalers, nebulizers, and insulin), expectations of the drug taken (e.g. relieving pain or inflammation, checking blood pressure or glucose) , drug-drug/ food interactions and what to do in case of missing a dose.

Table 3. Counseling behavior and content for all observed pharmacist-patient interactions (n= 60)

| Counseling Behavior | If Counseling Provided: | | No counseling provided (%) ^b |
|--|-----------------------------|--|---|
| | Behavior was satisfying (%) | Behavior was not satisfying (%) ^a | |
| Pharmacist conveying respect, and care to patient ^c | 18 (30) | (0) | 42 (70) |
| Providing counseling about: <i>Dose</i> | 17 (28.3) | (0) | 43 (71.7) |
| <i>Frequency</i> | 16 (26.7) | (0) | 44 (73.3) |
| <i>Indication of the drug</i> | 15 (25) | 1 (1.7) | 44 (73.3) |
| <i>Duration (esp. Antimicrobials)</i> | 11 (18.3) | 1 (1.7) | 48 (80) |
| <i>Route of administration</i> | 9 (15) | 4 (6.7) | 47 (78.3) |
| <i>Explain generic substitutions</i> | 6 (10) | 6 (10) | 48 (80) |
| <i>common Side effects</i> | 5 (8.3) | 5 (8.3) | 50 (83.3) |
| <i>Refills</i> | 2 (3.3) | 8 (13.3) | 50 (83.3) |
| <i>self monitoring of drug therapy</i> | 1 (1.7) | 8 (13.3) | 51(85) |
| <i>precautions while using the drug</i> | 1 (1.7) | 8 (13.3) | 51(85) |
| <i>Special directions for preparation, storage or administration</i> | (0) | 9 (15) | 51 (85) |
| <i>Expectations of the drug used</i> | (0) | 9 (15) | 51 (85) |
| <i>Drug- Drug or Food interactions</i> | (0) | 9 (15) | 51 (85) |
| <i>What to do if missing a dose</i> | (0) | 9 (15) | 51 (85) |

^aCounseling was provided but these items were not included in the counseling process

^bNo counseling provided at all

^cGreet the patient, Calm voice, the pharmacist (or assistant) is polite, ending conversation properly

Duration of Pharmacy Staff-Patient Interaction and/or Counseling:

The researcher observed both interaction and counseling behaviors, and recorded the duration of each interaction and/ or counseling session. According to Merriam Webster Dictionary, interaction is defined as: "any mutual or reciprocal action or influence. While "counseling" as defined previously, by The American Society of Health System Pharmacists (ASHP) defines patient counselling as: "providing verbal or written information about medications to the patients or his/her caregiver. It also includes providing proper directions of use, advices on side effects, storage, diet and life style

modifications" ⁶. The average interaction duration between patient and pharmacist/assistant (in seconds) was 5.14 ± 4.036 (mean \pm SD). The average counseling time (in seconds) was 49.40 ± 34.329 . It is worth mentioning here that the pharmacist, who worked in the Emergency department pharmacy during the observation period, counseled all the patients who were observed by using both written and verbal information.

Pharmacist vs. Assistant Counseling

Out of the total number of counseling sessions (n=18), the majority 94.4 % (n= 17) was conducted by the pharmacist. The mean time of counseling provided by pharmacists was about 35.4 seconds. While only one case

of patient-assistant counseling was observed with duration of 26 seconds. However, counseling duration was significantly related to employment whereas interaction duration was not ($p > 0.05$). The mean average time of patient-pharmacist and patient-assistant interaction was 5 seconds, and 5.33 seconds, respectively.

DISCUSSION

This is the first study in Jordan to directly observe and constructively criticize pharmacists' counseling behavior. The used observational method is especially useful in studying quality issues as it allows researchers to uncover everyday behavior rather than only relying on interviewing accounts. It is increasingly used in the study of organization and delivery of care and can be especially useful in uncovering what really happens in particular healthcare settings¹¹.

Observational methods used in social science involve the systematic, detailed observation of behavior and talk: watching and recording what people do and say^{12, 13}. It is used to provide a description and understanding of a situation or behavior.

A. Counseling Process and Interaction Behavior:

1) Initiation of the patient-pharmacist interaction

The question of who is the initiator of counseling in the pharmacies is of great importance. The pharmacists seemed to be the initiator for counseling only in the emergency pharmacy. This can be explained by the fact that almost all medications are of newly diagnosed diseases, acute conditions or exacerbations^{17, 19}. Also, fewer medications dispensed per patient can be an explanation for the providing counseling to all the observed patients in the Emergency pharmacy. On the contrary patients' initiation of counseling in the other pharmacies was higher for newly prescribed medications especially in the pediatrics and family medicine departments. One US study showed that pharmacists judged the importance of counseling patients depending on their familiarity with the medications; they assumed that patients were less knowledgeable of new medications than refills¹⁹. However, in a study done by Gordon *et al*, (2007) in the

United Kingdom community pharmacies revealed that patients taking regular medications do not always understand how to use their medications properly²⁰.

In this study, the identity of the dispenser (i.e., whether a pharmacist or an assistant) did not affect the initiation of counseling session. It may be also due to the lack motivation to counsel patients that is present equally in both pharmacists and assistants. Moreover, it has been shown in some studies that patients rarely or never ask actively about their medication. This may be because patients are either uncertain that they need to do that or uneducated enough to know the relevant questions about their medications²¹.

2) Techniques of Counseling and Interaction:

In the five outpatient pharmacies included in the study (i.e. endocrinology, cardiac center, respiratory, pediatrics, family medicine) the medications were simply handed to patients (with no counseling) except in few cases. That may be a result of patients' turnover rate in each pharmacy and/or number of total pharmacy staff. It has been clarified, by seeing the monthly statistics of the number of dispensed prescriptions in all recruited pharmacies (Table 4), that patients' turnover in the Respiratory pharmacy was the highest during the month of conducting the study. This may explain the reason of handling patients their medications in all the observed cases without any counseling. Also, the number of Respiratory pharmacy's staff appears to be equal to the other pharmacies sections, despite the workload compared to the other pharmacies. Moreover, the total number of pharmacy staff (pharmacists and assistants) played an important role in determining the way of providing information. Results revealed that the majority (n=42, 70%) of the pharmacists and assistants used written instructions to provide information to their patients about their medications. In contrast, the emergency pharmacist provided the highest rate of both verbal and written counseling. This could be either due to personal factors of the working pharmacist herself (e.g. Knowledgeable and has proper communication skills to deal and contact with patients), in addition to relatively

few number of patients presented at the emergency department pharmacy, during the observing days, the fact that allows sometime between patients to provide counseling (not crowded) and finally the lower number of medications dispensed compared to other participating pharmacies.

The type of information provided to patients was "written only" in 70% of the cases and in the remaining 30% were both "written and verbal" information. For literate patients, written information has been shown to reinforce verbal instruction²². It gives the patient tangible information to refer to in case he/she forgets what the pharmacist had said. In addition, it can be used to promote more effective counseling. However, labels printed in the observed pharmacies did not include enough information to rely on especially that no verbal information had been provided. According to the Pharmaceutical Society of Australia (2006), labels must be clearly printed, legible and include the name of the patient; date of dispensing, the name, telephone number and address of the pharmacy, directions for correct use of the medication; name of prescriber; and the expiry date and or, directions for storage of medicines where appropriate; and any other information that may be required. Appropriate cautionary and advisory labels must be applied. Labels should be placed on containers of dispensed medicines in such a way that the manufacturer's information is not hidden⁸.

Table 4. Average number of prescriptions per pharmacy in May 2011 (per day)

| Pharmacy Dept. | Average number of prescriptions per day |
|-----------------------|--|
| Endocrinology | 171 |
| Pediatrics | 188 |
| Respiratory | 237 |
| Cardiac Center | 174 |
| Family Medicine | 153 |
| Emergency | 140 |

(Source: Administration of Pharmacy- PARTICIPATING HOSPITAL, 2011)

B. Contents of Patient Counseling

Written information provided by the pharmacy staff included; name of the medication, strength, dose to be taken, frequency and rarely the duration of use (e.g., antibiotics). The verbal counseling (if existed) was limited to stating the dose, frequency, indication, duration, route of administration (e.g. eye or ear drops, inhalers, nasal sprays), explaining generic substitutions, common side effects, to refill or not and self-monitoring during therapy. Several studies indicated that written information can be effective in improving patient compliance with therapeutic regimens i.e., antibiotics for example. However, for drugs used on a long-term basis, written information has not been shown to be sufficient for improving patient compliance²³. Telling patients the name of their medication helps them in identifying it. Stating the indication reinforces the diagnosis and creates confidence in the appropriateness of the therapy. While the route of administration often seems obvious, pharmacists sometimes encounter cases of patients taking a medication by the wrong route (e.g. swallow a suppository or effervescent tablet)²⁴.

It should not be assumed that printing this information on the label will cover these points. Many patients cannot read, and those who can read often do not. Patients should be told the dosage regimen in order to either reinforce what the doctor instructed or inform them for the first time. While a particular dosage regimen may seem straight forward or obvious, it may be interpreted incorrectly. For example, not everyone eats three meals a day. Patients with diabetes may eat six or seven mini-meals each day. Therefore, directions that state "Take one tablet after meals and at bedtime" may prompt some patients to take their medications more than the intended three times. The patients must be asked about what they have been told, and discuss it and/or fill in the gaps if necessary. Generally, patients are not aware that other medications, foods, or diseases may interfere with the drug they are taking or affect the condition for which they are being treated. Also, the storage recommendations must be discussed with the patients. Many patients still store their medications at room temperature, when it

needs to be stored in the refrigerator²⁵.

C. Duration of Interaction and/or Counseling

It is essential to invest an appropriate amount of time in proper counseling in order to achieve improved patient understanding and consequently therapeutic outcome¹. The amount of time spent generally depends on factors such as a patient's interest, the number of medications, the seriousness of the patient's condition, and the pharmacist's work schedule²⁶. It is also necessary to spend more time counseling certain patient groups, such as those who need multiple drugs (poly-pharmacy), those who have complicated drug regimens (i.e., because of comorbidity), and the elderly⁵. However, in the present study, the researcher did not select special patients' interactions (i.e., patients with multiple medications or special age group) to observe, rather the recruitment of cases was consecutive. The average mean time spent in counseling (i.e., communication with the pharmacist (or assistant) and the patient regarding education about the medications) in seconds was 49.40 ± 34.329 . In the current study, the pharmacists and assistants counseled patients only if they started to ask about their medications (i.e. reactive), except in emergency pharmacy the pharmacist initiated counseling (i.e. proactive) while she was writing instructions on the medication packets. The average time of counseling in this pharmacy was about 49.5 seconds (less than one minute), whereas in the other pharmacies the average time of counseling was about 10 seconds. The lack of interactions between patients and pharmacists could be due to environmental factors i.e., more pharmacists interaction if less people were waiting nearby. In this study, more counseling time was spent on new medications compared to refills. That can be due to the pharmacists/assistants expectations that the patients already understand all their chronic medications because they had been using it for a long period of time. The time of counseling spent by the pharmacy staff was not significantly affected by the number of medications dispensed. Rather, it depended on the type of pharmacy staff interacting with the patient and if the patient understanding his/her medications (i.e. refills). In

addition, it is the type rather than the number of medications that may have played role in the duration of counselling offered to patients. Whereas some medications (e.g. with narrow therapeutic index like digoxin and warfarin or special administration precautions like alendronate) need significant time spent in patient education, compared to some other medications like simple analgesics (e.g. paracetamol) with straight forward dispensing procedures. For example, patients using warfarin should be counselled to have stable diet and not to add any medications without pharmacists' or physicians' consultations, because it may influence the patient's response to warfarin. Patients must eat a normal, balanced diet maintaining a consistent amount of vitamin K and avoid drastic changes in dietary habits, such as eating large amounts of green leafy vegetables²⁷

Also, patients using alendronate must be educated about the techniques for administering it. To facilitate delivery to the stomach and thus reduce the potential for esophageal irritation, patients should take the drug with plenty of water and should not lie down for at least 30 minutes and until after their first food of the day²⁷. Such precautions are very important and it is the pharmacist's role to ensure patients' understanding

D. Pharmacist vs. Assistant Counselling:

In the recent study, counseling if available, was conducted by pharmacists in the majority of cases (n= 18/19) while only one case of counseling was done by assistants (n= 1/19). Although **assistants** are essential members of the **pharmacy** team, so far, there are no studies conducted in Jordan in the reviewed literature, to compare between pharmacists and assistants' interaction and counseling behavior. It is important to point out that pharmacy assistants are usually required to function under the supervision of a licensed pharmacist and to help in activities that do not require the judgment and skills of the 5 or 6 years of pharmacy profession training (e.g. dealing with narrow therapeutic index or controlled drugs, special counseling on drugs of abuse, private issues like sexual health etc)²⁸. The pharmacist role in Jordan had been extended lately to focus more on the

individual patient and assume a degree of responsibility for the care of that patient as it relates to medication use²⁹. Pharmacists did the majority of counseling ($p=0.002$). As stated previously, the number of pharmacists and assistants staff in the participating hospital pharmacies are almost equal ($n= 32$ pharmacist and 29 assistants). This means that the number of assistants does not always affect their willingness to interact directly with patients.

CONCLUSIONS

In this study, observations showed that pharmacists and pharmacy assistants in the participating hospital did not provide proper counseling pertaining to patients' drug therapy and well-being. The overall rate of counseling at the participating hospital is low. Pharmacists and assistants appeared to dispense medications without any patient education. However, basic written information is the common practice provided to patients observed in all recruited outpatient pharmacies. This written type of information, in most cases, was noticed not to be comprehensive or following any guidelines and was limited to include the name of medication, dose and frequency in most cases. Rarely, the duration and instructions related to meals were observed to be included.

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Limitations of The Study

- Generalization of the study is limited because the study was conducted at pharmacies and pharmacies' staff of the participating hospital.
- The sample size was relatively small. However, as the first study of its kind in Jordan, and bearing in mind the observational type of the study, it is considered as satisfactory to provide background data at this stage.
- Although every effort was made to minimize the human error during the observational part, yet, the human bias during observation still cannot be ignored.
- The results of the study are representative of staff at the participating hospital. Although researchers believe that pharmacy settings in Jordan are very similar. Yet, the findings may not be representative of the entire hospital pharmacy sector in Jordan.

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CONFLICT OF INTEREST:

All authors declare no conflict of interest with this project.

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دراسة رصدية لتقييم أسلوب ومضمون النصح والإرشاد المقدم للمرضى في صيدليات العيادات الخارجية بمستشفى تعليمي في الأردن

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ملخص

بعد الصيدلاني هو المصدر الأول و الأهم لتقديم النصح والإرشاد للمريض في ما يتعلق بالأدوية. تهدف هذه الدراسة الى وصف وتقييم مستوى النصح والارشاد المُقدّم من صيدليات العيادات الخارجية في مستشفى تعليمي في الأردن. شملت المرحلة الأولى من الدراسة التي تغطيها هذه الورقة العلمية (6) صيدليات من صيدليات العيادات الخارجية في المستشفى وهي على النحو الآتي: صيدلية الغدد الصماء، والقلب، والتنفسية، والأطفال، وطب الأسرة، والطوارئ. المنهجية هي دراسة رصدية، حيث تمت ملاحظة سلوكيات ومضمون النصح والارشاد (ان وجد) بين (60) تفاعلا بين المرضى والصيدلة ومساعدى الصيدلة في صيدليات العيادات الخارجية المذكورة سابقا. ستون تفاعلا بين المرضى والصيدلة والفنيين وتمت مراقبتهم، وكانت 70 % من هذه التفاعلات تشمل تقديم نصائح وارشادات مكتوبه لكن من غير أية نصائح شفوية. و 16.7% فقط من الحالات قام الصيدلة والفنيون بالمحادثة مع المرضى، اضافة الى ما سبق، فإن 70% من التفاعلات قام بها موظفو الصيدليات بمجرد تسليم أكياس الادوية للمرضى، و 21.67% من النصح كانت لعلاجات جديدة، بينما 8% لأدوية مكرره. وترتبت الارشادات لتشمل الآتي من الأكثر الى الأقل: الجرعه، دواعي الاستخدام، تكرار العلاج، مده الاستعمال، طريقة الاستعمال (فموي ، حقن، بخاخ... الخ)، البدائل التجارية، الأعراض الجانبية الشائع، تكرار العلاج، المراقبه الذاتية لتأثيرات الدواء، الاحتياطات الواجب مراعاتها في اثناء استعمال الدواء. أوضحت الدراسة أن متوسط الوقت المستغرق في نصح المرضى (بالتواني) كان يساوي 49.40 +/- 34.329. عدد العاملين في الصيدليات، وأثبت أن له تأثيرا على الوقت المستغرق بالنصح والارشاد والتفاعل مع المرضى. المرحلة الثانية: سبعة وأربعون (83%) من أصل 61 استبانة تم اكمالها من الصيدلة والفنيين العاملين بمستشفى الجامعة الاردنية، توزعت كما يأتي: ثلاثون (94%) صيدلانيا من أصل 31 و 17 (59%) هم فنيو صيدلة من أصل 29. أجاب حوالي 49% منهم انهم يقدمون النصائح للمرضى على الادوية المستخدمة. 75% ادعوا تقديم نصائحهم الشفوية للمرضى على الادوية الجديدة المستخدمة لأول مرة، بينما 25% على الادوية المكرره. تبين من خلال الدراسة بشكل عام، أن مستوى سلوك ومضمون النصح والارشاد المقدم من الصيدلة والمساعدين في مستشفى الجامعة الاردنية ليس بالمستوى المطلوب. و تعد المعلومات المكتوبة هي السائدة في تواصلهم مع المرضى. لذلك يجب العمل على تطوير مهارات الاتصال وأسلوب تقديم النصح من خلال الدورات التدريبية والبرامج التعليمية.

الكلمات الدالة: الإرشاد، صيدلية المستشفى، الأردن، رصد الممرضين في العيادات الخارجية، العناية الصيدلانية.

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