

Study on Patient's Perception on Medication Counseling at Community Pharmacy in Sub-urban Area of Nepal

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ABSTRACT

Background

Community pharmacists are the primary contact point in a healthcare system who provide medication information to the patients and enable them to make appropriate decision regarding their therapy. Hence, this study explored patients' perception of community pharmacist based on medication counseling.

Objective

To study patient's perception on medication counseling by community pharmacist at Manohara Municipality, Kathmandu, Nepal

Method

A cross sectional study was conducted from November 2020 to April 2021 in population visiting pharmacies of Kageshwori Manohara Municipality of Kathmandu valley. A total of 384 participants included in the study were surveyed using a structured questionnaire exploring the content of medication counseling, level of satisfaction on counseling and use of various means of counseling. Descriptive data were presented in frequencies and percentages using EXCEL 2016.

Result

This study enrolled 384 participants out of which 354, 92.19% received medication counseling. The main reason of pharmacy visit was to obtain over the counter medicines, 262, 68.23%. Majority of the participants rated satisfied with informations provided on use of medication 218, 56.77%, duration of therapy 261, 67.97%, about side effects 211, 54.95% and on action to be taken following side effects 246, 64.06%. Most of the participants rated satisfied with counseling on storage 189, 49.22% and for referral 250, 65.10% while 201, 52.34% participants rated highly satisfied with advice on lifestyle and dietary changes required.

Conclusion

This study concludes that the patients' perception regarding the medication counseling by community pharmacist was acceptable. Thus pharmacists should be encouraged to support patients with their medication to promote patient care.

KEY WORDS

Community pharmacy, Medication counseling, Patient perception

INTRODUCTION

A full benefit with medication mainly depends on its effectiveness but patients' adherence to medication as prescribed is equally an important factor to a successful pharmacotherapy. One of the factors contributing to poor medication include patients suboptimal health literacy and lack of involvement in treatment decision-making process and information about adverse effects.¹ Thus instructing and motivating patients about their condition and treatment by different means of counseling will help patients have control over their own care and therefore comply with their prescribed medication.²

Community pharmacists are one health care professionals selected to accompany patients during the treatment period.³ One of the important role of community pharmacist is patients' counseling regarding basic drug information in terms of appropriate drug usage, administration, dosage, side effects, storage and drug-drug interaction and drug-food interaction.⁴ Such pharmacist -led drug counseling has been associated with improved therapeutic outcomes.⁵ The goal of counseling is not only limited to giving advice or providing information on medication but to ensure that patients understand the optimal use of medications to improve their quality of life.⁵ It also provides patients with advice on safe, appropriate and effective use of medicine.⁶ Pharmacists thus are expected to ascertain that patients have gained clear and complete information.⁷

Evaluation of patients' perception is an important measure used to monitor the quality of service they receive from any kind of health care centers including community pharmacies.^{8,9} Thus our study aimed to explore the patients' perception on medication counseling in community pharmacy of Kageswori, Manohara, Kathmandu.

METHODS

A cross-sectional study was conducted from November 2020 to April 2021, at Kageswori Manohara Municipality, Kathmandu. An ethical approval was taken from Institutional Review Committee of Kathmandu University School of Medical Sciences (KUSMS IRC- 122/20). A total of 384 patients who visited community pharmacy and received medicines from pharmacies of Kageswori Manohara were included in this study. Sample size was calculated by using $z^2 p = (1-p)/d^2$ at 5% confidential interval where absolute precision or error (d) was taken at 5% type I error and previous prevalence of 50%.¹⁰

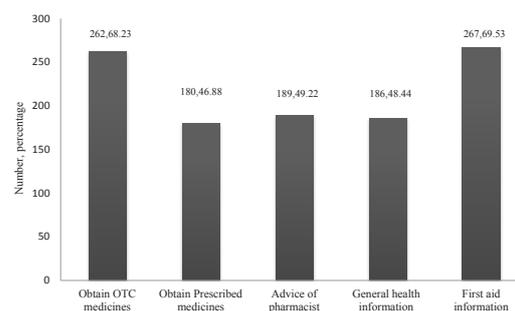
All the outpatients visiting pharmacies of Kageswori Manohara Municipality, aged > 18 years were included in the study while patients unwilling to participate, suffering from mental disorder, patients who needed emergency attention and patients who visited the pharmacies more than one time within the study period were excluded from this study.

Verbal and written informed consent was taken from all respondents. Patients were interviewed using structured questionnaire exploring the content of medication counseling, level of satisfaction on counseling and use of various means of counseling. A 5-point Likert scale was used to assess patient level of satisfaction in medication counseling.² Data collected were entered using excel 2016 and analyzed using SPSS version 20.0 software. The quantitative data was expressed in frequencies and percentages and presented with the help of relevant tables and bar graphs.

RESULTS

A total of 384 participants were enrolled in this study. Out of 384 participants, 179, 46.60% were male and 205, 53.40% were female. Among 384 participants 354, 92.19% were counseled regarding their medication.

A total of 262, 68.23% people visited the pharmacy for over the counter (OTC) drugs. The other reasons for pharmacy visit was to obtain prescribed drugs 180, 46.88%, to get advice of pharmacist 189, 49.22%, for general health information 186, 48.44% and for first aid information 267, 69.53% as shown in figure 1.

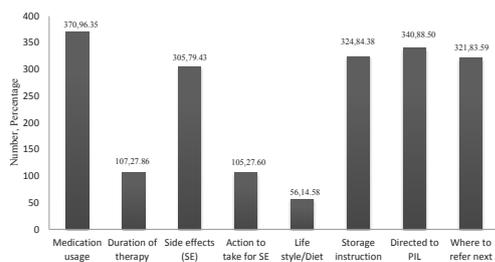


*Due to multiple responses, sum of percentage is more than 100.

Figure 1. Figure showing reasons for visiting the community pharmacy by participants at Kageswori Manohara Municipality, Kathmandu from November 2020 to April 2021

Different information during medication counseling was explored in the study. In this study, 370, 96.35% participants received an information on medication usage as what the medication is for and how and when to take while 107, 27.86% participants received information on duration of therapy. Of 384 participants, 305, 79.43% received information about side effects with only 105, 27.60% being informed about the action to be taken following the side effect. With regard to lifestyle and dietary advice, information was provided to only 56, 14.58% participants. Information on medication storage was provided to 324, 84.38% of the participants and patient information leaflets (PIL) was given to 340, 88.50% participants as shown in figure 2.

Regarding the medium of medication counseling, 205, 53.64% participants were given only verbal counseling with only 8, 2.08% participants receiving written information



*Due to multiple responses, sum of percentage is more than 100.

Figure 2. Figure showing informations included in counseling received by participants at Kageswori Manohara Municipality, Kathmandu from November 2020 to April 2021.

and 170, 44.27% participants received both verbal and written information about their medication.

The participants’ perception on medication counseling was perceived on different parameters rated as not satisfied, satisfied and highly satisfied, as shown in the table 1. Majority of the participants rated satisfied with information provided on use of medication 218, 56.77%, duration of therapy 261, 67.97%, about side effects 211, 54.95% and on action to be taken following side effects 246, 64.06%. Most of the participants rated satisfied with counseling on storage 189, 49.22% and for referral 250, 65.10%, while most of the participants rated highly satisfied with advice on lifestyle and dietary changes required 201, 52.34%.

Table 1. Perception of participants on medication counseling received by participants at Kageswori Manohara Municipality, Kathmandu from November 2020 to April 2021.

Pharmacological counseling			
	Not satisfied, n (%)	Satisfied, n (%)	Highly satisfied, n (%)
Use of drugs	14 (3.65)	218(56.77)	152(39.58)
Duration	16 (4.17)	261(67.97)	107(27.86)
Possible adverse effects	91(23.60)	211(54.95)	82(21.35)
Action for Adverse effect	79(20.57)	246(64.06)	59(15.36)
Non-pharmacological counseling			
Storage	60(15.63)	189(49.22)	135(35.16)
Lifestyle and Dietary	46(11.98)	137(35.68)	201(52.34)
Referral	63(16.41)	250(65.10)	71(18.49)

DISCUSSION

The necessity of counseling regarding drug therapy has been an important part of pharmacy practice.¹¹ It is the responsibility of the pharmacists to counsel the patients while dispensing the medicines and to believe this as their own duty.^{11,12}

Results from this study demonstrated that majority of participants received counseling. This could be because pharmacist nowadays know that counseling is one of their important duties specially because patients these days are mostly educated and enthusiastic.¹² In contrast to this study, only 48% of the participants received medication counseling in a study conducted in North and South London.²

The most common reason for visiting pharmacy was to get the OTC medicines while less than half of the participants visited to get the prescribed drugs. This shows the practice of self-medication among the participants in the community. Self-medication is widely practiced specially in developing countries as many drugs are prescribed OTC without the guidance of physician.¹³ The reasons behind the frequent use of OTC medications include: the desire to save money, presence of mild health problem, previous experience with drug efficacy and long waiting time at physician clinic or hospitals.¹⁴

Almost all the participants were informed about the medicine usage which coincides with the finding from previous study conducted in London.² This could be because pharmacists are becoming more aware and understand the importance of proper use of medicines for the best clinical outcome. This is possible only when patients understand the information clearly.

The information regarding duration of therapy was given to only more than one fourth of participants, majority were informed about the side effects but only more than quarter were counseled on action to take following the side effects. The variation in medication counseling may be because of pharmacist’s business attitude and motive of profit making only. One of the study showed that financial bonus, free samples, and brochures were used promotional activities for the community pharmacies which promotes for the unnecessary dispensing of drugs.¹⁵ The new young pharmacist may respond better but experienced pharmacist who are more focused on business, seem to show least interest and give less time on counseling missing out some of the important informations.¹⁶ A good number of participants were directed to PIL indicating this seem to be the easiest and quick way to inform the participants as well as save their time. The purpose of PIL is to inform patients about the medication regarding its administration, precaution and potential side effects.¹⁷ Thus pharmacist could assume large population today being educated can read and understand the PIL.

Similarly, more than half of the participants were given advice on lifestyle changes. People nowadays are more concerned about their health and thus their lifestyle and dietary patterns. It might be possible if the pharmacist thinks people would take their lifestyle advices more seriously. Regarding the information on storage, 84% of participants were counseled. The reason could be concerns about child safety besides the drugs shelf life.

According to a study by Bjerrum et al. patients tend to forget or ignore nearly half of what they are told by their health care professionals, leading to noncompliance.¹⁸ In this study, it was found that more than half of the participants received only verbal counseling, 2% received written information but 44% received counseling in both verbal as well as written form. This indicates that most of the participants could recognize the PIL they were provided.

The result contrasts with the finding from previous study, in which participants did not recognize PIL as source of written information.^{2,19}

The level of satisfaction with overall medication counseling was positive with more than half of the participants rating satisfied. This result was inconsistent with that found in the study by Yang et al. where only about one third of the participants were satisfied.²⁰ The contrast in the findings could be due to the different study settings, selection of the patient population and use of different method and survey content. The reason for dissatisfaction could be inadequate information provided, language barrier, lack of resources, difficulty in recalling counseling and also insufficient time spent in counseling.

In this study, access to the survey may have been limited for elderly people who may visit pharmacy less often since other family member help them get the medicine. They may have a different experience and perception of the service, which this study might have missed. Besides, the responses of patients relied on their ability to recall information and experiences of medication counseling practices, which could have resulted in recall bias. Moreover, this was a monocentric study, with small sample size and single community, so the result cannot be generalized. Follow

up studies or multicentric studies on larger population are needed to understand clearly about the patients views on pharmacists' medication counseling.

CONCLUSION

In this study, the patients' perception on medication counseling by a community pharmacist was positive despite some information being missed required for the evaluation of patients' perception. The result indicates improvement in pharmacy practice and encourages so for better clinical outcome in future.

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REFERENCES

- Brown MT, Bussell JK. Medication adherence: WHO cares? *Mayo Clin Proc.* 2011 Apr;86(4):304-14.
- Kayyali R, Marques Gomes A, Mason T, Naik M. Patient perceptions of medication counselling from community pharmacies. *Pharm Pharmacol Int J.* 2016 Apr 7;4(2):00071.
- Miller R, Goodman C. Performance of retail pharmacies in low- and middle-income Asian settings: a systematic review. *Health Policy Plan.* 2016 Sep;31(7):940-53.
- Hämmerlein A, Griese N, Schulz M. Survey of drug-related problems identified by community pharmacies. *Ann Pharmacother.* 2007 Nov;41(11):1825-32.
- Al Aqeel S, Abanmy N, AlShaya H, Almeshari A. Interventions for improving pharmacist-led patient counselling in the community setting: a systematic review. *Syst Rev.* 2018 May 2;7(1):71-1-3.
- Chua SS, Ramachandran CD, Paraidathathu TT. Response of community pharmacists to the presentation of back pain: a simulated patient study. *IJPP.* 2006 Sep;14(3):171-8.
- Ali S, Shimels T, Bilal AI. Assessment of Patient Counseling on Dispensing of Medicines in Outpatient Pharmacy of Tikur-Anbessa Specialized Hospital, Ethiopia. *Ethiop J Health Sci.* 2019 Nov;29(6):727-36.
- Aziz MM, Wajid M, Yu F. A societal perception about community pharmacies in Pakistan: An outline of prospective investigation. *Res Soc Adm Pharm.* 2017;3(13):e7.
- Kabba JA, Bah AJ, James PB, Chang J, Kitchen C, Jiang M, et al. Patients satisfaction with free healthcare pharmaceutical services in Sierra Leone: a national cross-sectional study. *Int J Clin Pharm.* 2021 Jun;43(3):556-65.
- Daniel WW. Biostatistics: A Foundation for Analysis in the Health Sciences. 7th ed. New York: John Wiley & Sons;1999.
- Shapiro AK, Morris LA. The placebo effect in medical and psychological therapies. *Handbook of psychotherapy and behavior change.* 1978;2:369-409.
- Poudel A, Khanal S, Alam KA, Palaian S. Perception of Nepalese community pharmacists towards patient counseling and continuing pharmacy education program: a multicentric study. *J Clin Diag Res.* 2009;3(2): 1408-13.
- Shah H, Patel R, Nayak S, Patel HR, Sharma D. A questionnaire-based cross-sectional study on self-medication practices among undergraduate medical students of GMERS Medical College, Valsad, Gujarat. *Int J Med Sci Public Health.* 2018; 7 (4) 249-54.
- Pal J, Ahmad S, Pal P, Chatterjee D. Prevalence and pattern of self-medication among undergraduate students in a medical college of Kolkata. *Int J Community Med Public Health.* 2017 Oct;4(10):3619-24.
- Koju P, Rousseau SP, Van der Putten M, Shrestha A, Shrestha R. Advertisement of antibiotics for upper respiratory infections and equity in access to treatment: a cross-sectional study in Nepal. *J Pharm Policy Pract.* 2020 Dec;13(1):1-7.
- Adepu R, Nagavi BG, Kumar BM. Patient counseling; practicing community pharmacists' perceptions from two South Indian states. *Indian J Pharm Sci.* 2004;66(1): 44-8.
- Herber OR, Gies V, Schwappach D, Thürmann P, Wilm S. Patient information leaflets: informing or frightening? A focus group study exploring patients' emotional reactions and subsequent behavior towards package leaflets of commonly prescribed medications in family practices. *BMC Fam Pract.* 2014 Dec;15(1):1-8.
- Bjerrum L, Foged A. Patient information leaflets-helpful guidance or a source of confusion? *Pharmacoepidemiol Drug Saf.* 2003; 12(1): 55-9.
- Kayyali R, Naik M, Ugbekile I. Investigation of adherence measures provided to patients with newly prescribed medications prior to their discharge from secondary care. *Int J Pharm Practice.* 2012;20(2):23-4.
- Yang S, Kim D, Choi HJ, Chang MJ. A comparison of patients' and pharmacists' satisfaction with medication counseling provided by community pharmacies: a cross-sectional survey. *BMC health services research.* 2016 Dec;16(1):1-8.