

AN ETHNOGRAPHIC STUDY OF PHARMACIST - PATIENT INTERACTIONS IN COMMUNITY PHARMACIES IN NIGERIA

Babalola O. O.

Department of Clinical Pharmacy and Pharmacy Administration
Obafemi Awolowo University, Ile - Ife, Nigeria.

ABSTRACT

Professional interactions between the pharmacist and patient (customer) during the dispensing of prescription and over the counter (OTC) drugs were video recorded in 25 purposely selected community pharmacies in south western Nigeria.

In each pharmacy, a two hour period was recorded both in the morning and the evening during the peak period of customer patronage. Informed consent was sought from the pharmacies and access was granted. In total, 180 interactions were recorded on video and both pharmacists and patients filled questionnaires after the encounter.

Result showed that the pharmacist took the initiative in the consultation by asking question and the most frequently used type of question was open question while the commonest verbal initiative was to inform the customer about the dosage. The nonverbal cues, exhibited by the pharmacists were body movement (56%), interpersonal space (23%), and body contact (12%). Of the body movements demonstrated, 41% are gestures, 39% eyes contact and leg and arm movement 14%, all of which were considered appropriate for consultations in community pharmacy settings.

There was a significant difference between type of information given in prescription and over the counter drug consultations. ($t = 0.337, p > 0.01$) but no difference in the type of questions employed in the two types of consultations.

Video recording of pharmacy encounter seem to provide a more reliable method of data collection than audio or natural observation because it showed the nonverbal cues deemed essential for effective communication.

INTRODUCTION

During the past two decades, there has been an ever increasing appreciation of the importance of interpersonal dimension of work undertaken by a health care professional and its contribution to patient well being. Health care professionals, pharmacists inclusive, constitute a subset of what is known as the interpersonal profession (1). This nomenclature is applicable and suitable, especially when the major proportion of the professional's working day is spent in face to face interaction with a variety of others and where the fundamental objectives of the services offered are largely achieved by this means. Studies have shown that much of the health care is

communication centered and the pharmacist is expected to counsel, offer reassurance, provide consolation, commiserate, interpret, receive information, direct and carry out directives (2, 3).

Interpersonal communication in the health profession is affected by a myriad of personal and situational factors which may be as a result of patient perception of their illness/diseases as well as the layout of the pharmaceutical premise and the attitude of the health professional (4, 5). There is also observed variation between institutional and community pharmacist - patient communication as well as differences in prescription and OTC consultations (4,6,7,8). This underscores the need for the pharmacist to be a highly knowledgeable professional. In pharmacy practice, there has been reported dissatisfaction with the pharmacist's communication with patients especially in community pharmacies. (9). Consultations on medication use is one of the most fundamental and important activities of the pharmacist especially in community practice setting. Consumer expectation and satisfaction studies have also confirmed that there is a clear public demand for

pharmacists to devote more time to patient consultation in which psychosocial as well as biological needs are addressed (10, 11).

The study attempts to examine the pattern of information exchange in community pharmacy consultations and to analyze the interactive behavior and pattern of communication skill usage in prescription and over the counter (OTC) consultations by community pharmacists.

MATERIALS AND METHODS

Pharmacist - customer interactions during the dispensing of prescription and non-prescription drug were video recorded in 25 purposively selected community pharmacies in Osun State, Nigeria between the months of January to March 1999. Ten out of the 25 premises were located in Osu, Ipetumodu and Ifewara which were rural communities while the remaining fifteen pharmacies were situated in urban areas of Ile-Ife, Ilesha, and Osogbo, the State capital. In the sampled pharmacies, two video cameras were used for recording the interactions between the pharmacist and customers. One camera was focussed on the pharmacist and the other on the customer. Generally recordings were made between 10.00 a.m. and 12 noon or 6.00 pm and 8.00 pm. When pharmacy managers reported that their pharmacies were mostly likely to be busy.

The recording covered both front end areas and the

prescription areas of the premises. Written permission was sought before the recording events and information that video recording was taking place was given by notice boards and poster on walls and another message stressing that participation was voluntary conspicuously displayed. A total of 180 pharmacist-customer consultations were recorded. The pharmacist and customers involved in the interaction were asked to fill separate questionnaires which were designed to collect information on personal, situational and medication factors which might have affected the dyad interactions. Video transcript of the events was analyzed using constitutive ethnography method (12). The method is concerned with documentation of the interaction of behavior of the pharmacist and customers at a micro level and subsequently, identification in details, all behaviors demonstrated and delineation of behaviours deemed essential for effective communication. The nonverbal elements of the behaviour here also identified and specific area which control and facilitate interactions were elicited. The video recording transcripts were then subjected to peer review by two lecturers each in the departments of Pharmacy Administration and Educational Technology. These lecturers were used as source of expert knowledge for data analysis thereby allowing an inside and outside view of practice. The reviewers used a

structured inventory of key behaviour categorised into eleven main skill areas developed in a previous study. (13).

RESULT

The pharmacist asked an average of four to six questions in non-prescription and prescription drugs consultations respectively. The forms of questions asked are shown in Table 1. The pharmacists employed all types of questions but employed more of leading, prompting and open questions in prescription drug consultation, than in OTC drug consultation.

The most frequently asked question in both consultations is concerned with whether the patient had used the drug before and the most frequent verbal initiative was to inform the customer about the dosage.

The most exhibited non-verbal cue in the consultation was body movement (56%). The patterns of body movement are 41% gestures, 39% eye contact and 14% leg movement. (Tables 2 & 3).

There was a significant difference between the type of information given by the pharmacist in prescription and over the counter drug consultations. ($t = 0.337, p > 0.01$). The information types involved in the interactions are psychosocial, clinical and technical information. Consultations between the pharmacist and patient focuses mainly on symptom and medication related information.

(Table 4). In the case of consultations in the prescription area, the focus and on medication related information while the open counter consultation was essentially on symptoms presented by customers. There was no observed difference between the type of questions employed in prescription and non-prescription drug consultation. ($t = 1.866, p > 0.01$).

The symptoms presented by customers to the community pharmacists are fever, (18%) pain (21%), fatigue (14%) and gastrointestinal problem & anorexia (10% each), anemia & others (8% and 13% respectively) which are common symptoms presented to the community pharmacist.

The pharmacist identified barriers to effective consultation, in both OTC and prescription drug consultations in community pharmacies. These are: lack of time, patient preconceived idea, consultation performed on behalf of the third party, and lack of knowledge on customer's past medication history (Table 4).

DISCUSSION

Interactions involving both prescription and over the counter (OTC) medicines took place in the front end area of the premises in most of the community pharmacies in rural and urban areas. Consultations in the prescription area or private consulting room involved the pharmacist taking the initiative and the patient taking less active role in the discussion.

Professional domination was common in prescription drug consultation and were particularly more common in rural pharmacies than in urban pharmacies. It was found that the pharmacist usually initiated the discussions whether in the rural or urban area. (14). However in the counter area, the customer most of the time, usually initiated the discussion while in the prescription area, the pharmacist initiated the discussion. It is reported that pharmacist's initiated discussion should make less demand on the repertoire of communication skill of the pharmacist (13). This study however showed that prescription drug consultation places much demand on the pharmacist's repertoire of communication skills because of the peculiar nature of prescription drugs and consequently the need for patients to use them under strict supervision of the pharmacist. This can be seen from the differences in the number and types of questions employed in prescription drug consultations compared with that of over the counter drugs as well as the differences in the type of information exchange, in which prescription drug consultations involved more clinical, psychosocial and technical information than non-prescription consultations. The finding contradicts that of a previous study which showed that OTC consultations are more likely to task the pharmacist's communication skills (13). The reasons adduced for this was

that, in OTC consultation, the customers come to the pharmacist "armed" with their experience of drug use and preconceived idea about the dosage, dosage form and regimen of the medication they want to purchase. It seemed obvious therefore that in OTC consultations, negotiation with the patients becomes important because in this scenario, the pharmacist is playing the role of the doctor (11). This is unlike the case of prescription drug consultations in which the patients are expected to have had previous contact with the physician and are likely to be informed about their medication thus reducing the consultation time between the pharmacist and the patient.

It stands to be proven, however which of OTC or prescription drug consultation will task the pharmacist's repertoire of communication skill more and also which of these influences, the lay-referrals, traditional beliefs or physician will affect the future negotiation power of the patients with the pharmacists. This may well be a focus for empirical research. The management of pharmacist-patient interface in community pharmacy setting demands effective application of good communication skills on the part of the pharmacist more especially when it has been shown in a previous study that patients do not seek advice from the pharmacists (15). Reasons given by the customers for not consulting the pharmacist for advice are; products have been

used with good result, no difficulty selecting products, symptoms not serious enough for advice and buying the product for someone else. (15) This is in agreement with the findings of this study which gave similar reasons for this behaviour. The apparent non-seeking behaviour or refusal to ask for information by the customer in both OTC and prescription drug consultation places great responsibility on the pharmacist to ask questions and to get feedback from the customer in every consultation in community pharmacies in order to encourage patient participation in drug therapy. In this study, the pattern of questions types utilised in the interactions showed that leading question was employed mostly next to open questions and the latter was also found to be less suited for prescription drug and over the counter drug consultations because it leads the patients to an expected response. This finding is supported by a study which found deficiencies on questions asked by the community pharmacist (16).

Non-verbal cues especially body movements were employed to complement verbal communication and the types of body movements mostly demonstrated were gestures, leg and feet movements which are not under the conscious control of the pharmacist and facial movement which to a large extent is controllable. Uncontrollable non-verbal cues are reported to be more appropriate and more

believable in communication than controllable cues (17). Leg and feet movements and gestures are known to complement verbal communication more than facial movement and high demonstration of use of these noncontrollable non-verbal cues portend higher rating of communication effectiveness (17).

Prescription drug consultation seems to involve more of the exchange of all types of information; technical, clinical and psychosocial than in OTC drug consultation. In this study, technical information was mostly employed in OTC and prescription drug consultations while psychosocial and clinical information were least exchanged between the two parties in both consultations. A linkage is being suggested between the pharmacist's ability to address general health problems and their ability to meet the psychosocial needs of patients in both OTC and prescription drug consultations. Most of the pharmacists response to symptoms focuses essentially on symptoms and medication related information and less on general health problems which are in agreement with the findings of a previous study (18)

Personal Factor: The non-professional appearance of both the pharmacists and pharmacy assistants in community pharmacies is evident in this study. This may result in patients inability to identify the

pharmacist when they patronize the premises and this may frequently give rise to consultation with less qualified personnel in pharmacies.

This confirms the concern expressed in a study about the extent to which responding to symptoms is left to counter assistants which was considered an issue of continuing concern (16, 19). Appearance is a non-verbal type of communication and is not being used to advantage by the pharmacist in developing countries especially Nigeria, compared to the practice norm in developed countries in which there is a dress code for community pharmacist.

Situational factors: There was no sequence of behaviour in all community pharmacies that were sampled. There was no formal sequence of behavior for patients consulting with the pharmacist. This implies that customers may consult whosoever is on the sales counter who may refer or not refer them to the pharmacist. The absence of pharmacist most of the time from their premises has contributed in no small way to this behavior. This behavior may reduce the opportunity and consequently the will for pharmacists to expand their patient oriented services which will ultimately affect the image of the community pharmacist as a caring health professional (11).

MEDIATION FACTORS

The lack of knowledge of most customers on the problems associated with the drug and its

use coupled with the experience in their use of medicines, the cultural beliefs on the mechanism of drug action, the non-acceptance of drug substitutes and patient's medicalisation of their illnesses in order to prevent diseases has affected the length and the quality of interactions between the pharmacist and the patients.

Limitation of Methodology: Video recording, an observation method, is a more reliable method of data collection in pharmacists-customer interactions because it helps in the analysis of large number of skills especially non-verbal cues which are not readily observed using audio or natural observation methods. This categorization method is however, a subjective method which is limited to re-enacting the cues exhibited in these consultations and the analysis of events. Video recording may have affected the behaviour of participants in the interaction to some extent. The questionnaire administered serves to augment the finding from the observation method.

CONCLUSION

The pattern of communication skills between the pharmacists and patients in community practice showed that all types of questions and non-controllable non-verbal cues were extensively utilised. The pattern of information exchange showed that medication related information were more utilized in prescription consultation than OTC consultation while

symptom related information were more utilised in over the counter consultation than prescription drug consultation. Although psychological information were less exchanged by both actions compare to technical and clinical information, psychosocial information were addressed more by the pharmacist in prescription consultation than in OTC

consultations. Concerted efforts should be directed towards the training of community pharmacist in communication skill especially in meeting psychosocial needs of the patients as well as responding to general health information. Efforts should be made by community pharmacist to counsel patients that come into the pharmacy for either prescription or non-prescription

Table 1: Types of questions employed by the pharmacists in prescription and OTC Drug consultations.

Type of Question	Prescription Drug Consultation %	OTC Drug Consultation %
Leading Question	36	32
Probing question	24	30
Prompting question	20	16
Open question	46	40
Closed question	22	24
Mean	15.80	14.30
Standard Deviation	1.07	2.18
$t=1.866p>0.01$		

Table 2: Non-verbal cues & body movement by pharmacist during interaction

Types of N-V Comm	%	Types of body Movement	%
Body Contact	12	Gestures	41
Body movement	56	leg and feet	14
Interpersonal space	23	Eye Contact	39
Appearance	4	Head/Shoulder	6
Vocal	5		

Table 3: Types of Information Exchange & Enquiries in Prescription & OTC Consult

Type of Informal	Prescription %	OTC %	Enquiries/Info.	Counter %	Prescription %
Clinical	34	29	Symptom related	28	26
Technical	40	37	Medication related	34	46
Psychosocial	28	16	General Health	23	27
Mean	34	27.3			
Std. Deviation	2.05	1.62		N=180	
$(T = 0.337, P > 0.001)$					

Table 4: Barriers to Pharmacist - patient consultations

1. Not having sufficient time
2. Patient with preconceived knowledge and attitude
3. Third party representing or acting on behalf of the patients.
4. Lack of background information on patient situation.
5. Inability to express pharmaceutical/medical terminologies in local language.

drugs since customers often do not ask for advice on their medication. Effective information exchange in the pharmacist - patient interface will improve the image of

community pharmacist.

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