



# The Nigerian Journal of PHARMACY

VOL. 48, NO 2, 2014

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ISSN 0331 - 670X

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## ORIGINAL RESEARCH

# BARRIERS TO MEDICATION COUNSELING

## in Community Pharmacies in Lagos South west Nigeria.

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**ABSTRACT****Background**

The provision of medication counselling has the potential to improve both the selection and use of OTC medications, and the use of prescription medications in the community pharmacy. Studies have demonstrated deficiencies in provision of medication in community pharmacies in developing countries but most of the studies did not identify factors responsible for the observed practice. The aim of this study was to identify community pharmacists' perceived barriers to medication counselling and strategies that can be used to improve the practice.

**Methods**

Self-completed questionnaires were distributed to 265 community pharmacists in 224 selected community pharmacies in Lagos State South West Nigeria.

**Results**

A response rate of 84.5% was obtained. Most of the respondents (52%) had more than 10 years post-graduation experience and few (19%) possessed postgraduate education. Workload in the pharmacy followed by lack of medication counselling aids and lack of appropriate drug information sources were rated high

as barriers to medication counselling. Rating of two of the barriers to medication counselling were related to pharmacists background- Pharmacists with post-graduation education significantly rated 'lack of compensation for medication counselling' higher than their colleague with basic education ( $p=0.003$ ). The topmost strategies recommended by community pharmacists for improving medication counselling included practical training on medication counselling and provision of counselling area.

**Conclusion**

Workload and lack of medication counselling aids are major barriers to medication counselling practice in community pharmacies.

**Keywords:** medication counselling, barriers, community pharmacists, community pharmacy

**INTRODUCTION**

The provision of medication counselling has the potential to improve the selection and use of both prescription and OTC medications in the community pharmacy. Medication counselling is an avenue through which the pharmacist can help the patient maximize benefits of

medication by improving adherence and reducing drug related problems<sup>1</sup>. The therapeutic and economic benefits of medication counselling are well documented<sup>2,3</sup>. Community Pharmacists have the responsibility to protect the public from the dangers of self medication through provision of adequate medication counselling. The WHO recognizes the key role of community pharmacists in use of medicines and public health. It emphasizes their responsibility to provide informed and objective advice on medicines and their use.<sup>4</sup>

In Nigeria, community pharmacies are present in most urban communities where they serve as the point of call on health related issues for a greater percentage of the population. Previous studies on professional practice in community pharmacies in Nigeria have identified deficiency in advice provision and supply of medicines.<sup>5,6</sup> However, little is known about what constitute barriers to medication counselling practice in community pharmacies, especially from the perspective of community pharmacists. The opinion of practitioners is an important data source that could be used to develop appropriate intervention to improve service delivery.<sup>7</sup>

The aim of this study was to examine



community pharmacists' perception of what constitute barriers to medication counselling in the community pharmacy. Suggestions on strategies to improve counselling practice were also explored.

#### METHODS

This study was conducted in Lagos State, the commercial capital of Nigeria. A list of registered

community pharmacies in Lagos State was obtained from the Pharmacists' Council of Nigeria, which showed that a total number of 448 pharmacies were registered. No comprehensive list of community pharmacists and their place of work was available hence pharmacies were taken as the unit of sampling. Sample size of 207 pharmacies was estimated from a target population of 448 at 95% confidence interval using the

Fischer's formula.<sup>8</sup> The pharmacies were then selected using simple random sampling method. A self completed questionnaire was developed after thorough literature search. The questionnaire included a list of barriers to medication counseling and strategies to improve medication counselling practice. Pharmacists were expected to rate each of the barriers on a scale of 1-5 with 1 representing 'no influence' and

**Table 1: Demographic profile of community pharmacists**

| Demographic data                           | Frequency (Percentage) |
|--|------------------------|
| <b>Years of experience</b>                 |                        |
| 1 – 10 years                               | 101 ( 48 )             |
| 11 – 20 years                              | 53 ( 25 )              |
| = 21 years                                 | 58 ( 27 )              |
| <b>Pharmacists Status</b>                  |                        |
| Pharmacy Owner                             | 152 (70)               |
| Staff pharmacist                           | 48 (22)                |
| Locum pharmacist                           | 16 (8)                 |
| <b>Location where pharmacists practice</b> |                        |
| Rural                                      | 37 ( 16 )              |
| Urban                                      | 187 ( 84 )             |
| <b>Pharmacy Type</b>                       |                        |
| Independent                                | 177 (79)               |
| Multiple ( = 2 )                           | 47 (21)                |
| <b>Educational qualification</b>           |                        |
| 1 <sup>st</sup> Degree (B.Pharm) only      | 177 (81)               |
| Postgraduate qualification(s)              | 43 ( 19 )              |

## ORIGINAL RESEARCH

Table 2: Pharmacists' rating of barriers to medication counseling practice

| Barriers To Medication Counselling                          | Mean Rating $\pm$ SD |
|---|----------------------|
| Workload in the pharmacy                                    | 3.30 $\pm$ 1.236     |
| Lack of medication counseling aids                          | 2.90 $\pm$ 1.376     |
| Lack of appropriate drug information source/reference books | 2.89 $\pm$ 1.514     |
| Lack of private counseling area                             | 2.83 $\pm$ 1.484     |
| Lack of expertise in medication counseling                  | 2.78 $\pm$ 1.148     |
| Low expectations or lack of patient demand for counseling   | 2.66 $\pm$ 1.467     |
| Lack of compensation for counseling service                 | 2.49 $\pm$ 1.417     |
| Lack of interest in medication counseling                   | 2.45 $\pm$ 1.257     |

Rating of two barriers to counselling (lack of demand by patients and lack of compensation for counselling) were significantly related to pharmacists' background. Community Pharmacists practicing in rural areas considered lack of patient demand for counselling to be barriers more significantly than their counterparts in urban areas (3.00 vs 2.34;  $p=0.003$ ). Pharmacists with postgraduate education perceived lack of compensation for counselling as a barrier to counselling more than their counterparts without postgraduate education (3.02 vs 2.36;  $p=0.007$ ).

Table 3: Pharmacists' rating of strategies to improve medication counseling practice

| Strategies To Improve Medication Counselling Practice                              | Mean Rating     |
|--|-----------------|
| 1. Practical training on medication counseling                                     | 4.28 $\pm$ 0.98 |
| 2. Provision of counseling area  | 4.20 $\pm$ 1.06 |
| 3. Availability of drug specific counseling guide/aids                             | 4.08 $\pm$ 1.07 |
| 4. Greater support from pharmacy management for counseling activities              | 3.97 $\pm$ 1.07 |
| 5. Stricter regulation that makes it mandatory for pharmacists to counsel patients | 3.74 $\pm$ 1.21 |
| 6. Increased staffing in pharmacy  | 3.60 $\pm$ 1.34 |
| 7. Compensation for counseling   | 3.42 $\pm$ 1.44 |



## ORIGINAL RESEARCH

higher rating to this barrier compared to their counterpart in urban area. This may suggest that clients in rural areas usually do not demand for counselling or show no interest in receiving it from the pharmacists. Community pharmacists with postgraduate education considered lack of compensation for counselling more as a barrier than their counterpart with basic pharmacy education. This may be due to a general believe that the more educated you are the more your earning should be. Additional education may also have posited these pharmacists to be more apt to provide medication counselling, hence affirming their position that this effort should be compensated. There seems to be consistency in the way pharmacists with postgraduate education rated the issue of 'compensation for counselling' both as a barrier to counselling and as a strategy to improve counselling. Pharmacists with postgraduate education still rated 'compensation for counselling' as a strategy to improve medication counselling higher than their counterpart with basic education. This may suggest that compensation for counselling is an issue that could be looked into by regulated authorities to improve medication counselling in the community pharmacies.

Topmost strategies to improve medication counseling mentioned by pharmacists include practical training on medication counseling, provision of counseling area and availability of drug specific counseling guide/aid. This result is consistent with that obtain by O'Donnell<sup>14</sup>, and also shows consistency in what pharmacists cited as barriers and what they also think will be the

strategies to improve medication counseling practice in community pharmacies, especially with respect to the availability of medication counselling aids which can be used as source of reference when counseling patient. The use of Standard Treatment Guideline (STGs), Clinical Policies, Treatment Protocols or Best-Practice Guidelines, all have considerable potentials to promote rational drug use<sup>15</sup>.

This study being the first to obtain perspective of community pharmacists in Nigeria on barriers to medication counseling and strategies to improve it should provide a baseline data for action by all relevant stakeholders. The call for practical training on medication counseling by community pharmacists is an important issue that should be considered by pharmacy regulatory bodies concerned with the basic and continuing education of pharmacists. The result from this study supports the need to revisit the basic pharmacy education curriculum, with emphasis on incorporating more practical training on medication counseling. The result also supports the establishment of procedures for development, dissemination, and utilization of national (community pharmacy specific) standard treatment guidelines/best practice guidelines. This will go a long way to enhance community pharmacists' confidence in providing medication counseling to their clients.

## CONCLUSION:

Workload in the pharmacy, lack of counselling guide and lack of appropriate information sources are major barriers to medication counselling in community pharmacies.

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The rating of one of the strategies to improve counselling practice was related to pharmacists' background. Community pharmacists with different educational qualification rated 'compensation for counseling service' differently. Pharmacists with postgraduate education rated this strategy significantly higher than their counterpart with basic pharmacy education (3.83 vs 3.31;  $p=0.036$ ).

#### DISCUSSION:

The result of this study shows that workload in the pharmacy, followed by lack of medication counseling aids, and lack of appropriate drug information sources/references were the top most barriers to medication counseling practice in community pharmacies. This is consistent with the report of Nasir et al.<sup>9</sup> and Tully et al.<sup>10</sup> Workload is a frequently cited factor influencing practitioner-patient relationship.<sup>11,12</sup> However,

community pharmacists did not perceive 'lack of patient demand for counseling' as a major barrier as it received the lowest rating compared to other barriers. This is different from the report by Katajavuori<sup>13</sup> who said most pharmacists perceived 'lack of patient demand' as a barrier to medication counseling. Pharmacists in the rural areas significantly differ in their perception of 'lack of patient demand for counseling' as a barrier to medication counseling practice. They gave a

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