

*Full Length Research Paper*

# Knowledge, attitudes and participation of community pharmacists in Lagos State, Nigeria towards primary health care (PHC)

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The general objective of this study was to evaluate community pharmacists' participation in primary health care as well as to assess community pharmacists' knowledge of primary health care and determine their level of participation in health promotion, disease prevention and curative primary health care activities in Lagos, Nigeria. A total of 120 community pharmacists were used for this study. Data was collected through the use of a self completion questionnaire given to community pharmacists in their premises and collected on the spot or after some time. Analysis was done through the use of Microsoft SPSS Version 10. This study revealed that most of the community pharmacists are aware of primary health care (95.8%), even though they do not know much of its history (26.6%). Participation in the different components of primary health care i.e. in health promotion, disease prevention and in curative primary health care services was very high. However, participation in immunization services was very low (14.1%) and many of them agreed that their participation in PHC could further be improved through continuous education and training in primary health care programmes (91.6%). Community pharmacists participate actively in primary health care activities in Lagos State, Nigeria. A large number of community pharmacists are aware of primary health care and have undergone training in primary health care activities mostly at the undergraduate level, though only a few have undergone refresher course in primary health care. The community pharmacists participate actively in health promotion mostly in the provision of drug information services, tobacco/alcohol cessation services as well as other health promotion services as well as in disease prevention activities. The community pharmacists also participate actively in disease treatment as a first contact health care provider.

**Key words:** Community pharmacy, primary health care, community pharmacists, participation.

## INTRODUCTION

A community pharmacy is the place where most pharmacists practice the profession of pharmacy. It is the

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community pharmacy where the dichotomy of the profession exists; health professionals who are also retailers. Some community pharmacists provide specialized services to help patients with conditions such as diabetes, asthma, smoking cessation, or high blood pressure; others are also trained to administer vaccines.

The World Health Organization (WHO) defined primary health care as the principal method of delivering health care at the most local level of the system. It is the health care provided to a patient at first contact with the health care system. For a successful primary care, it is essential that it should fully involve all members of the health care team, of which the pharmacist is an integral part (Canadian Pharmacist Association, 2004).

The role that many people associate with pharmacists is with the dispensing of medications. However, pharmacists have a more important role in meeting the needs of their patients as medication management experts (Canadian Pharmacist Association, 2004). Pharmacists do provide integrated, accessible, accountable health care services in a variety of areas. They are capable of developing and sustaining partnerships with patients and other health providers and practicing in the context of the family and the community. Pharmacists are the most accessible and trusted of all health care providers (Commission on the future of Health Care in Canada, 2002).

In a survey undertaken to document the primary health care roles of pharmacists in London, the volume of primary contacts, the types of problems handled and the advice given by the pharmacists were of particular interest (Bass, 1975). The contribution of pharmacist in primary care was found to be large, with neighbourhood pharmacies being the most active.

An independent enquiry into pharmacy practice has concluded that pharmacists are underutilized resource. A wide-ranging role development was therefore recommended (Oparah and Arigbe-Osula, 2001).

Community pharmacists in Nigeria perform primary health care roles without an official acknowledgement. A survey of their involvement in primary health care programmes in Benin City revealed a marginal, slightly satisfactory involvement of the community pharmacist in primary health care services with quality of care being fair (Oparah and Arigbe-Osula, 2001).

The present study and its findings will be beneficial in the cost effective delivery of pharmacy based primary health care services at the community level. Also, policy makers may find it useful in developing and formulating appropriate policies to ensure effective utilization of the untapped potential of the pharmacists. The general objective was to evaluate community pharmacists' participation in primary health care in Lagos State Nigeria. The specific objectives are to assess the community pharmacists' knowledge of primary health care and determine their participation in health promotion, disease prevention and curative primary health care activities, respectively.

## MATERIALS AND METHODS

### Setting

The investigation was carried out in Lagos State Nigeria. There are 2028 registered pharmacists in Lagos State according to the Pharmacists Council of Nigeria (PCN) as at the time of this research spread across numerous hospitals (local, state and federal hospitals), private clinics and medical centres as well as in the academia, industries and the community pharmacies.

The concept of primary health care entails first contact health care. This served as the inclusion criteria. The exclusion criteria entail non participation in first contact health care services. Based on this, pharmacist in the academia, industries, private hospitals as well as clinics, secondary and tertiary institutions are excluded. This thus left the community pharmacist as the ideal pharmacist for this research.

### Survey Instrument

A 30 item stem consisting of 3 points response scale was developed for the survey questionnaire. It was a questionnaire developed from a modification of the questionnaire used for a similar study carried out in Benin City, Edo State in South-South Nigeria. Items included in the instrument covered different aspect of primary health care programme such as knowledge/awareness about primary health care, history and components of primary health care, health promotion, disease prevention and curative service, enabling structures for further improvements of community pharmacists' participation in primary health care. The questionnaire was prefaced: Yes, No and Not sure.

### Samples

A total of 120 community pharmacists were included in the study using the convenience sampling method. A self completion questionnaire was administered to the community pharmacists in their premises and collected either on the same day or some days later.

### Data analysis

The retrieved copies of the questionnaire were entered on Microsoft excel computer package for sorting and analyzed with SPSS version 10.0. Statistical analysis was done through the use of descriptive statistics

## RESULTS

Table 1 shows community pharmacists' response to their knowledge about primary health care. Questions asked from participants ranged from knowledge of history of primary health care, levels of primary health care, perception of community pharmacists' ability to provide primary health care as well as training/update lectures on primary health care. Table 2 shows community pharmacists' response to participation in health promoting primary health care activities. Participation is very satisfactory as shown by a high percentage of positive

**Table 1.** Item analysis of community pharmacists' response to knowledge about primary health care.

Item	Participation (%)
What level of healthcare services do you provide in your pharmacy?	81.7 (Primary Health Care)
Have you ever heard of Primary Health Care?	95.8 (YES)
Primary Health Care became prominent with the Alma-Ata declaration of 1978?	26.6
Primary Health Care is the first contact health care a patient receives?	94.3
Primary Health Care could either be promotive, preventive or curative in nature?	96.7
The pharmacist can provide Primary Health Care services?	97.5
Were you taught Primary Health Care as part of your undergraduate curriculum?	71.7
Have you ever gone for a refresher course on Primary Health Care?	28.3

**Table 2.** Item analysis of community pharmacists' response to participation in health promoting primary health care activities.

Item	Participation (%)
Health education/leaflet provision	89.1
Tobacco cessation advice	83.3
Alcohol cessation advice	84.2
Promotion of healthy lifestyle on individual/community basis	95.8
Emergency contraception services	86.7
Provision of regular patient advice on diet, nutrition as well as the Body Mass Index (BMI)	87.5
Detection of Adverse Drug Reaction	80.8
Counseling services to patients	95.8

**Table 3.** Item analysis of community pharmacists' response to participation in disease preventing primary health care activities.

Item	Participation (%)
Provision of routine immunization services of routine immunization services	14.1
Health screening of at risk patients for diabetes, hypertension, etc.	70.8
Medication screening for possible drug interactions	84.1
Routine laboratory test request	88.3

**Table 4.** Item analysis of community pharmacists' response to participation in curative primary health care activities.

Item	Participation (%)
Diarrhoea management in children with oral rehydration salts	96.7
Supply of essential medicines and dressings	85.8
Assessment and treatment of common diseases e.g. malaria, cold and catarrh and sore throat	95
Referral of patients to appropriate health care provider after the provision of first aid services	94.2
Patient monitoring for detection of possible adverse drug reaction	68.3
Syndromic management of sexually transmissible diseases	81.7
Assessment and treatment of minor soft tissue injuries	80.8

positive response in each of the items. Table 3 shows community pharmacists' response to participation in disease preventing primary health care activities.

Participation is very satisfactory. Table 4 shows the community pharmacists' response to participation in curative primary health care activities.

## DISCUSSION

### Knowledge of primary health care

Many of the respondents are aware of the level of health care services that they provide, that is, primary health care (81.7%). This is in agreement with their response to whether the community pharmacist can provide primary health care services (97.5%); however, 7.5, 0.8 and 1.7% wrongly believed that they (community pharmacists) provide self care, secondary and tertiary health care services, respectively. There was a non response of 8.3% which could be interpreted to mean that they were not sure of the level of health care service that they provide.

With respect to the history of primary health care, while a large number of the respondents have heard of primary health care (95.8%), only 26.6% of the respondents knew that the primary health care concept became prominent with the Alma-Ata declaration of 1978. Many of the respondents despite not knowing about the Alma-Ata declaration however agreed that primary health care is the first contact health care service that a patient receives (97.5%), that it has health promoting, disease preventing as well as curative components (96.7%). These large number of respondents could be explained by the fact that many of the respondents were taught primary health care at the undergraduate level as part of their academic curriculum (71.7%), though only a few have gone for a refresher course in primary health care (28.3%) after qualification. Adequate knowledge of primary health care by community pharmacists will have an effect on their participation in the provision of primary health care services.

### Participation in health promotion

The importance which pharmacists attach to vital health promoting behaviours and their health promotion beliefs have been shown to affect their practices.

The participation of the community pharmacists in health promotion was assessed on the basis of their participation in activities directed towards ensuring people and the community increase control over their health and determinants, and thereby increases their health. A large number of the respondents participate in patient education on health matters as well as the provision of drug information services (89.1%), this confirms the importance of the community pharmacists' role as a drug information provider. Most of the health promoting services which the community pharmacists provide includes the provision of tobacco cessation advice to patients (83.3%), participation in the provision of alcohol cessation advice (84.2%), participation in the provision of emergency contraception services (86.7%), participation in the provision of health based advice on

diet, nutrition and body mass index (BMI, (87.5%), detection of adverse drug reaction (80.8%) and the provision of counseling services to patients (95.8%). Community pharmacists' participation in health education and the provision of drug information leaflets to patients as well as medication counselling services could contribute to the prevention of drug abuse as well as drug misuse. The participation of the community pharmacists in the provision of patient medication counseling services is in line with modern pharmacy practice where emphasis have shifted from a product oriented pharmacy practice to a form of practice (pharmaceutical care) where much emphasis is now on the patient. Their participation in health promotion could also help in improving and maintaining the quality of life of patients and also to prevent death, disease and disability.

### Disease prevention

The result of the participation of community pharmacists in the provision of immunization services showed that only a few (14.1%) of the respondents participate in the provision of immunization services. This corroborates an earlier research by Igwilo and Aderemi-Williams (2008) which revealed the unwillingness of parents/care givers to use community pharmacies for routine immunization of their wards. This is an area where the community pharmacists can work on by virtue of the proximity of community pharmacies to the people as well as their accessibility. More than half of the respondents however participate in the screening of at risk patient for the diseases, e.g. hypertension (70.8%), a large number of the respondents are also involved in screening for possible drug interactions (84.1%) and also request for laboratory tests, e.g. malaria parasite test, Widal tests before the provision of pharmaceutical care services in such situations (88.3%).

### Curative services

In response to participation in curative primary health care services, most of the respondents (96.7%) reported participation in diarrhoea management in children with oral rehydration salts (ORS). This response in addition to showing that community pharmacists do participate in curative health services also shows that primary health care services which community pharmacists provide is not limited to adults. Also a large number of the respondents participate in the provision of essential medicines and dressings (85.8%) which is an important feature of pharmacy practice and also in the assessment and treatment of cold and catarrh, sore throat, diarrhea (95%). Many are also involved in patient referral to appropriate health care provider (after the provision of the first contact services) (94.2%). Many also reported to

participate in patient monitoring for possible adverse drug reaction (68.3%), as well as in the syndromic management of sexually transmissible infections (STIs) (81.7%) as well as in the treatment of minor soft tissue injuries (80.8%). The participation of community pharmacists in disease treatment may raise some legal/ethical questions as to the function of the pharmacists in health care delivery. In Nigeria, the existing laws governing pharmacy practice are yet to incorporate this aspect of pharmacy practice (Oparah, 2009).

## Conclusion

Community pharmacists participate actively in primary health care activities in Lagos State. A large number of them are aware of primary health care and have undergone training on primary health care activities mostly at the undergraduate level, though only a few have undergone refresher course on primary health care.

The community pharmacists participate actively in health promotion mostly in the provision of drug information services, tobacco/alcohol cessation services as well as other health promotion services.

The community pharmacists participate also in disease prevention, however, participation in the provision of immunization services is very low, and this is an area which the pharmacists should strive to participate more in. Continuous education is important for all cadres of health personnel. The subject of immunization reveals from this study shows the underutilization and participation of community pharmacists in immunization services. Immunization as a specific protection in the primary level of disease prevention is an important area where community pharmacists can be much better utilized than

it is at present allowed through the forensic pharmacy practice of Nigeria. The community pharmacists also participate actively in disease treatment as a first contact health care provider.

## Conflict of Interest

The authors have no conflicts of interest to declare.

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