

Evaluating the Involvement of Community Pharmacists in Health Promotion Practices after Educational Intervention in Oyo State, Nigeria

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Abstract

The study evaluated the involvement of community pharmacists in health promotion services in Oyo State, Nigeria after an educational intervention with the view of comparing it to service delivery before the training.

A post-intervention evaluation study was conducted among 48 community pharmacists after exposure to training in health promotion in 2016. Data were analysed with appropriate descriptive statistics while Paired T-test was used to determine significant differences among the study variables after comparing it to the baseline study earlier conducted.

Response rate was 87.5%. The level of involvement in health promotion services before and after training was not significant ($p > 0.05$). However, respondents (88%) embarked on health promotion initiatives after the training while 90.5% of them documented the services provided. On-the-spot observation revealed that respondents extended the periods of their stay on their premises, gave the practice a facelift to attract customers and provided more space for patient counselling, documented health promotion activities, held outreaches on international health days and other days as scheduled by the pharmacists.

The study concluded that the community pharmacists indicated a favourable attitude towards health promotion services and showed improvement in the services offered in their pharmacies after training.

Keywords: community pharmacists, involvement, health promotion, training.

Introduction

Currently, healthcare systems including community pharmacies around the world are changing to respond to medical, social, and economic challenges. The factors driving this change are the economic crisis, the increase in healthcare expenditure, the ageing of the population, with the consequent increase in chronicity and polypharmacy patients, patients' new socio-sanitary needs, and the evolution of pharmacotherapy towards more customized treatments (GPhCS, 2015).

Community pharmacists are expanding patient care services to enhance their role as pharmaceutical care providers through the provision of health promotion services (WHO, 1986; WHO, 1994; Brock *et al.*, 2006; WHO, 2011; Anderson, 2020) and previous reports have

shown that training of community pharmacists enhance the provision of these services (Coggans *et al.*, 2001; Jaffray *et al.*, 2007; Oseni & Afolabi, 2020). Pharmacists gave broader definitions of health after health promotion training (Anderson, 1998), knowledge scores significantly improved over time after training intervention (Sarayani *et al.*, 2012), and reported less time in the dispensary and more on proactively advising clients after training. Some selected community pharmacists who had also been involved with training programmes were clear about their health education role as it related to prescribed medicines (Benson & Cribb, 1995). Evidences of improvement in pharmacy practice was also seen after training intervention in previous studies (Currie *et al.*, 1997; Coggans *et al.*, 2001; Calop *et al.*, 2002; Jaffray *et al.*, 2007; Willis *et al.*, 2016).

Evaluation of health promotion training programme by community pharmacists in previous studies revealed that respondents were satisfied with the course contents in helping them to improve services and their relevance to practice (Cerulli & Briceland, 2004; Aslani, *et al.*, 2006; Bajorek *et al.*, 2015; Oseni & Afolabi, 2020). Also, previous studies have shown that respondents' ability to make positive changes in their respective practice and implement every aspect of the topic covered will be achieved when the right resource persons and training experts in specific areas of health promotion are engaged (Cervetto & Keene, 1996; Oseni & Afolabi, 2020) and preference to relevant health topics covered (Saini *et al.*, 2006; Bajorek *et al.*, 2015). Sufficiency of the training in providing health promotion services, in terms of length of the training programme, need to allow more time for interaction and sharing of experiences by participants and application of hand-on practice during training had been found to improve practice change in previous studies (Aslani, *et al.*, 2006; Roberts *et al.*, 2015).

Documentation is a critical component of enhanced patient care services. It is a fundamental cornerstone of a pharmacy professional's responsibilities and is a standard of practice (Pharmacy Connection, 2018). A pharmacist must be able to provide a clear record of the care provided to the patient at each encounter (Currie, 2003). Accurate documentation allows the pharmacist, other health care providers, and third-party payers to assess the quality of the care provided and track the effect of pharmaceutical care on clinical, humanistic, and economic outcomes (MacKinnon & MacKinnon, 2008). Documentation of quality patient care and improved outcomes provide justification for payment of pharmaceutical care services (Dunkin & Dumont, 2013).

In Nigeria, few published studies have evaluated community pharmacy-based involvement in health promotion activities and their value while some of them had recommended the need for continuous education training to improve services (Awad & Abahussain, 2010; Offu *et al.*, 2015; Soyemi & Hunponu- Wusu, 2015; Adje & Oparah, 2017; Osemene & Erhun, 2018; Oseni & Afolabi, 2018). The researchers, therefore, developed and implemented a health promotion training programme for community

pharmacists in 2016 and evaluated the training itself (Oseni & Afolabi, 2020). However, no study to the knowledge of the researchers, have evaluated the effects of training on the provision of health promotion services in community pharmacies in Nigeria. To address this gap, we developed health promotion training interventions for community pharmacists and evaluated the effects of the training on their level of involvement in health promotion practices.

The objective of this study is to evaluate the health promotion services provided by community pharmacists in Oyo state, Nigeria after exposure to a training programme. The study will investigate whether those who participated in the health promotion training (intervention) programme have been able to improve their practice.

Implications for practice and policy

This research is a novel study that can serve as a reference for future research in this area and from which another study can be developed. The outcome of this study will be used to propose a model for the development of health promotion in community pharmacy and means to improve community pharmacy practice in Nigeria.

Methods

This study was conducted in Oyo State, Nigeria. Oyo State is one of the 36 States of the Federal Republic of Nigeria. It was created in 1976. It is homogenous, mainly inhabited by the Yoruba ethnic group who are primarily agrarian but have a predilection for living in high-density urban centres. It covers approximately an area of 28,454 square kilometres and is ranked 14th by size in Nigeria. Located in the South-West geopolitical zone of Nigeria, Oyo State consists of 33 Local Government Areas (LGAs); eleven (11) of which are situated in Ibadan metropolis (the State capital) consisting of five (5) LGAs in Urban area and six (6) LGAs in semi-urban areas tagged as lesser city (Oyo State Government, 2015).

Study design

This study is a cross-sectional and post-training evaluation study of the community pharmacy-based health promotion activities after the delivery of the services. The survey was conducted in May 2016, three (3) months after the health promotion training programme was

delivered to the same respondents. The study followed the outcome of a baseline study conducted among ninety-one (91) community pharmacists from sixty-two (62) community pharmacies in Oyo State, Nigeria (Oseni & Afolabi, 2018) and training interventional study conducted among same respondents of eighty (80) community pharmacists working in Pharmacists Council of Nigeria (PCN) registered premises (Oseni & Afolabi, 2020). It evaluated the impact of the training on community pharmacy practice in Oyo State, Nigeria using the same participants. Respondents who had participated in the baseline survey (BL) of December 2016 to January 2017 (Oseni & Afolabi, 2018) and the health promotion training programme of February 2017 (Oseni & Afolabi, 2020) were the eligible and target participants. The aim was to assess the effect of the training on practice and to allow for comparison. An observational study was also conducted to the community pharmacies to observe on-the-spot health promotion services being provided. Documentation of practice was analysed to appraise the translation of knowledge gained (if any) to service delivery.

Sample

The participants for this study consisted of community pharmacists working in registered premises as at December 31, 2014 (PCN, 2014). At the time of this training, the PCN Register revealed that there were 105 community pharmacies registered in the State. The community pharmacies were stratified according to their location within the 33 Local Government Areas (LGAs) of the State. After this, simple random sampling of one in every two premises from each LGA was carried out. Sixty-two (62) community pharmacies were randomly selected. All the ninety-one (91) community pharmacists from 62 pharmacies who were issued the questionnaire during the baseline survey constituted the sample while eighty-nine (89) responses were received. Out of 89 respondents surveyed in the baseline study, 88 (98.9%) who were willing to participate in the training were invited for the training (Oseni & Afolabi, 2018). In all, eighty (80) community pharmacists were in attendance for the training programme while 58 of them completed the evaluation form (Oseni & Afolabi, 2020). Forty-eight (48) respondents who participated in both the baseline survey and

training interventional study constituted the sample size.

Research instrument

Questionnaire similar to the baseline questionnaire (Oseni & Afolabi, 2018) and in accordance with previous studies was designed to ascertain perceived usefulness and relevance of the training (Coggans *et al.*, 2001; Jaffray, *et al.* 2007; Laliberté *et al.*, 2012). The questionnaire sought to ascertain their level of involvement and effects of the training on health promotion services provided by the community pharmacists on practice. The survey instrument consists of seventeen (17) questions divided into three (3) sections. Section A consists of six (6) questions that were centred on the socio-demographic characteristics of the respondents such as sex, age, qualifications, job status, years of practice, and participation in the baseline survey and training programme. Section B was centred on the community pharmacy involvement in eleven (11) health promotion services earlier identify in the baseline survey. Questions rated the level of involvement on a five-point Likert scale of 1-5 ranging from 'very involved = 5, involved = 4, not sure = 3, little involvement = 2, not involved at all = 1. They were also requested to specify activities provided in each of the health promotion services vis-à-vis distribution of leaflets, personalised counseling while dispensing, screening, referral to external resources, and personalised follow-up or private consultation. The section also consists of open-ended questions on details of health promotion initiatives in the pharmacy after the training, positive impact of the training on their community pharmacy practice, and their feelings about their involvement with the health promotion activities. Section C consists of barriers encountered in integrating health promotion services in the community pharmacy practice (if any), further suggestions to government and policymakers to improve health promotion services in community pharmacy practice in Nigeria.

Documentation form designed from standard form of a previous study (MacKinnon & MacKinnon, 2008), was earlier distributed during the training programme to document health promotion services that would be provided in the pharmacies (Oseni & Afolabi, 2020). Information required includes the patient history, purpose of

visit, health promotion service provided, advice, and recommendation to patient/customer and time taken to attend to patient and document the service provided. Twenty copies of documentation forms were given to each participant during the training and the use was explained to them during the training.

Data collection

The questionnaire was administered to the respondents at their pharmacies three months post-training with the help of research assistants. Respondents were reminded of the need to fill the documentation forms when attending to clients and patients while providing health promotion services. They were followed up periodically through text messages and phone calls to ascertain their involvement. Respondents were also followed up after seven days of delivery of the questionnaire for completion. Both the documentation forms and questionnaires were retrieved afterward.

Data analysis

On a 5-point scale, '5' represented the highest mean score while '1' represented the lowest mean score. Lowest and highest scores were obtained while neutral points were assumed as the midpoint between the lowest and highest scores. Scores above midpoints were taken as positive. Descriptive statistics used to analyse data included percentage, frequency, mean and standard deviation. Comparative analysis of the level of involvement in health promotion services in community pharmacies before and after the training programme was ascertained. Inferential statistics used to analyse the data collected included a Paired t-test used to compare the level of involvement on all the items in the instruments and barriers to integrating the health promotion services in the practice before and after the training programme. The alpha value of 0.05 was used to test statistical significance. Documentation forms collected during on-the-spot observation were similarly analysed to triangulate results received from the questionnaire.

Ethical Clearance

Ethical clearance was obtained from the Oyo State Research Ethical Review Committee with reference number AD13/479/1064. Respondents had earlier given their consent in writing during

the baseline survey and when answering the evaluation form during the training. They also gave their consent when responding to this questionnaire.

Results

Forty-eight (48) respondents who participated in baseline survey and training evaluation after the training programme was issued the post-training evaluation questionnaire in their premises. Forty-two (42) participants responded giving a response rate of 87.5%.

Table 1 shows a comparison of the level of involvement in health promotion services before and after the training programme. There was no significant difference in the health promotion services offered before and after the training programme except for the smoking cessation programme offered ($p=0.013$).

Respondents (59.5%) still encounter some barriers to integrating health promotion services to practice after training but this had considerably reduced in proportion after the training as shown in Table 2 with significant differences in only 3 out of the 11 barriers identified. Likewise, 57.1% of the respondents concur they need further training in providing health promotion services three (3) months after the training.

Table 3 shows the specific health promotion activities carried out by community pharmacists after the training. Most of the respondents were involved in personalised counseling while carrying out health promotion services. They were also involved in the distribution of leaflets, referral services and personalised follow-up when screening for hypertension, diabetes, and dyslipidemia.

Table 4 shows that 88% of the respondents had embarked on health promotion initiatives after training which include screening for hypertension by 40.5% of respondents, screening for diabetes (35.7%), personalised counselling (19.0%) and outreach programmes/observation of international health days by 14.3% of respondents. New initiatives gaining acceptance also include patient profile documentation (9.5%), distribution of health promotion leaflets (7.1%), and referral to other health professionals (4.8%).

Respondents observed a remarkable positive impact of the training on their community pharmacy practice as shown in Table 5. These include high turnout of patients (38.1%), the

confidence of their clients in them (30.9%), improved relevance and pharmacy image in the community (26.2%), financial gain (14.3%), and referrals to their pharmacy (11.9%). They felt good and positive about the practice (26.2%), developed self-confidence, became respected and relevant in the community they serve (23.8%), among others.

Respondents rated factors that will facilitate the development of health promotion in a community pharmacy to include awareness and publicity of the services in the community (33.3%), more space and competent manpower in the pharmacy (23.8%), training and retraining of pharmacists (16.7%). Others include the use of health promotional materials, acquisition and subsidised clinical tools, financial compensation on service rendered by 9.5% of the respondents respectively.

Thirty-eight (38) community pharmacists out of 48 targeted participants completed the documentation forms giving a response rate of 79.2%. A total number of 362 forms out of 760 forms were retrieved from the 38 respondents.

Data triangulation of Tables 1 and 4 revealed that the results obtainable were similar to the level of involvement of the respondents in health promotion practices.

Respondents in Table 6 further revealed some activities engaged in their pharmacies and time-taken to provide such services as retrieved from the documentation forms. Triangulating these activities with Tables 1 and 4 also showed similar results. About forty-six percent (46%) of the respondents used 11-20 minutes to attend to their patients/clients while 84.4% spent 1-10 minutes to document the services.

On-the-spot observation done to various pharmacies revealed that pharmacists now stay for longer hours on their premises, face-lift their premises to attract customers, and provide more space for patient counseling, document health promotion activities, hold outreaches on international health days and other days as scheduled by the pharmacists.

Discussion

This study evaluated the involvement of community pharmacists in health promotion practices after educational intervention in Oyo State, Nigeria. The study revealed that most of the respondents engaged in health promotion initiatives after the training. It was concluded that

continuous training of community pharmacists is an innovative strategy to improve practice.

There was no significant difference in the level of involvement health promotion services offered before and after the training programme ($p > 0.05$), except for smoking cessation services ($p = 0.013$). However, the study showed that the training had impacted positively on the respondents in many ways. The study however indicated that the community pharmacists engaged more in health promotion services through various initiatives embarked upon by them. They now saw the reasons to stay more often in their premises and dedicate more time to the clients in providing these services including checking of blood sugar and blood pressure, documentation of patient records, follow-up to patients through phone calls, and provision of counselling services. The effect of the training was such that respondents felt better equipped to serve their community, have more confidence to face the patients and to get involved in the health of their patients. Respondents enjoy more patronage from the community, built better customer relationships, and improved professional image.

Above is in line with the findings of Coggan *et al.* (2001) whereby activities carried out six months after training in health promotion included more use of health promotion leaflets, more involvement in health campaigns, and more awareness and confidence in terms of health promotion issues. Participants also provided customers with useful information, took more account of customers' broader health needs and showed significant improvement in providing patient care, in line with other studies (Cerulli & Briceland, 2004; Sarayani *et al.*, 2012; Bajorek *et al.*, 2015) where the confidence of pharmacists to provide services increased after training.

The respondents' perceived role was increased which gave them reasons to stay more often in their premises and dedicate more time to their clients in providing these services was in line with Kristina *et al.* (2015)'s study where participants perceived role, self-efficacy, and ability to perform smoking cessation increased after the assessment of a one-day workshop on smoking cessation among community pharmacists in Indonesia.

Most of the respondents had implemented health promotion initiatives three months after the training in line with Willis *et al.* (2016)'s

study where about half of the respondents had implemented one of the targets behaviours two months after completion of a two-day training for community pharmacists in assessment and management of urgent cases.

The sufficiency of the training indicated by most of the respondents and need for further training by over half of them, three (3) months after the training was similar to a previous study (Jaffray *et al.*, 2007) where 65% of the respondents found the training sufficient to deliver the CHD services in their community pharmacies six months after completion of all the training events while 30% of the pharmacists still felt they needed further training despite already seeing patients. The need for further training also suggested that continuous training is essential to the provision of health promotion services (Sinclair *et al.*, 1999).

To further assess the impact of training on practice, monitoring of activities after training was considered paramount, such as on-the-spot visits and the use of documentation form to record activities performed. Documentation of health promotion services was emphasised during the training programme with the distribution of documentation forms to participants (Oseni & Afolabi, 2020). Unless pharmacists in all practice settings document their activities and communicate with other health professionals, they may not be considered an essential and integral part of the healthcare team. Quality documentation therefore provides justifies the payment of pharmaceutical care services.

Study had shown that accurate, appropriate, and concise documentation is an essential component of ensuring that the patient care provided is evidence, not only for patient safety and continuity but also for cases where reimbursement and quality of care are being challenged contractually or legally (Zierier-Brown *et al.*, 2007; Dunkin & Dumont, 2013). Documentation of pharmacy services can be time-consuming; however, it facilitates the delivery of pharmaceutical care of which health promotion is a component (de Bittner & Michocki, 1996; MacKinnon & MacKinnon, 2008). Respondents in this study used paper charts to document patient care services, hence the observed time-taken to attend to clients. However, previous study has shown that computerized systems appear to offer advantages over paper charts and this will make the

documentation system more comprehensive, easy and efficient to use, and affordable (Brock *et al.* 2006).

Regardless of this improvement, over half respondents still had some constraints to practice health promotion services to their satisfaction, though some observed barriers had been reduced drastically. They made further suggestions that will facilitate health promotion activities in their pharmacies which are in line with the observations of a similar study in Greater Glasgow (Coggans *et al.*, 2001). These included engaging additional staff, greater use of health promotion materials e.g. posters and leaflets, acquiring more space for the pharmacy to display materials, and closer link with the neighborhood.

In a similar vein, research has shown that successes in health promotion in Australia relied on a multidisciplinary approach in incorporating organizational, economic, policy, and educational initiatives (Andrew, 2007). A further solution to barriers included continuing training to improve the knowledge and skill of community pharmacists and marketing/advertisement of health promotion services in pharmacies. Sinclair *et al.* (1999) monitored the effects of training duration on pharmacy personnel and time to determine for refresher training, revealed that significant difference was not felt after 24 months of training, hence the need for continuous training. This is also in line with a previous study by Willis *et al.* (2016) on the need for continuous development of community pharmacy workforce through training in clinical skills for effective management of urgent cases and in other study which emphasised educational interventions targeted towards public health issues (Offu *et al.*, 2016). Another approach included the provision of incentives for public health services rendered to increase engagement by community pharmacists in public health services (Offu *et al.*, 2016).

Limitations of the study

To the best knowledge of the researcher, this study assessing the involvement of community pharmacies in health promotion services after an educational intervention is novel in Nigeria. However, the study was conducted only in one state (Oyo State) out of 36 States in Nigeria which may affect the generalisability of the result. Only community pharmacists' views were studied before and after the educational

intervention while pharmacy users' views on health promotion services provided were not evaluated in the study. Also, there was no control group which may make the researchers attribute the changes completely to the training programme.

Conclusion

The study concluded that exposure of community pharmacists to health promotion training will increase their level of involvement in health promotion and reduce barriers to integrating health promotion into practice. Finally, it was concluded that community pharmacists showed improvement in health promotion services offered in their communities after the training as observed from the health promotion initiatives, specific health promotion activities engaged in, and documentation of service rendered. Hence, training is an innovative strategy to practice change of health promotion services in community pharmacies.

Recommendations

The government and policymakers need to improve health promotion practices in community pharmacies by reviewing the pharmacy laws, and regulations to incorporate health promotion into community pharmacy practice and incorporation of community pharmacy into the PHC system in Nigeria. Also, incorporation of health promotion and clinical studies into schools of pharmacy circulation and continuous professional development (CDP) of pharmacists in health promotion and clinical pharmacy should be emphasised by the regulatory body which should lead to licensure of community pharmacists in HP.

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Table 1. A comparison of the level of involvement in health promotion services before and after training

Health promotion services	Before N=42 Mean (S.D.)	After N=42 Mean (S.D.)	p- value
Lifestyle modification			
Smoking cessation programme	3.86(1.117)	3.12(1.310)	0.013*
Promotion of physical activity	4.26(0.701)	4.02(0.975)	0.208
Healthy eating	4.29(0.835)	4.07(0.894)	0.246
Weight management	4.14(1.117)	4.19(0.862)	0.836
Alcohol consumption in moderation	4.14(0.872)	3.74(1.149)	0.081
Screening for			
Hypertension	4.60(0.828)	4.64(0.821)	0.803
Diabetes	3.81(1.502)	4.29(1.175)	0.120
Dyslipidemia	2.88(1.502)	2.40(1.449)	0.142
Sexual health			
Emergency oral contraception	3.93(1.314)	3.90(1.226)	0.942
Contraceptive devices	3.21(1.554)	2.98(1.554)	0.479
Counseling with partners when initiating treatment for STDs/ HIV/AIDS	4.05(1.229)	3.88(1.273)	0.520
Mean total	43.17(12.665)	41.23(12.688)	

Scale 1-5 of level of involvement: very involved =5, involved = 4, Not sure = 3, little involvement=2, not involved at all = 1

S.D. = standard deviation

Significant at * $p \leq 0.05$ for the difference between the surveys

Table 2. Barriers to integrating health promotion services to community pharmacy practice before and after health promotion training

Barrier	Before training (BL) N=42 (%)	After training (PT2) N=42 (%)	p- value
Inadequate knowledge on health promotion services	6(14.3)	2(4.8)	0.160
Lack of information or training	13(31.0)	2(4.8)	0.001*
Lack of time	13(31.0)	6(14.3)	0.109
Lack of collaboration with other health care professionals	24(57.1)	9(21.4)	0.002*
Lack of staff resources	11(26.2)	5(11.9)	0.135
Absence of financial compensation	10(23.8)	7(16.7)	0.412
Lack of clinical tools	13(31.0)	12(28.6)	0.812
Lack of space/inadequate physical design of the pharmacy	10(23.8)	4(9.5)	0.057
Lack of knowledge or clinical skills	3(7.1)	2(4.8)	0.660
Patients are not interested in prevention activities	11(26.2)	6(14.3)	0.200
Patients generally have more urgent medical conditions	12(28.6)	1(2.4)	0.001*
Adequacy of the training programme 3 months wafter training	Training was sufficient	Need further training	
	40(95.2)	24(57.1)	

Significant at * $p \leq 0.05$ for the difference between the surveys.

Table 3. Specific health promotion activities carried out in community pharmacies after the training

Health promotion services	Distribution of leaflets N(%)	Personalised counseling N(%)	Screening N(%)	Referral to external resources N(%)	Personalised follow-up or private consultation N(%)	Others N(%)	None N(%)
Lifestyle							
Smoking cessation programme	7(16.7)	34(81.0)	0(0)	4(9.5)	10(23.8)	0(0)	5 (11.9)
Promotion of physical activity	5 (11.9)	36(85.7)	3(7.1)	4(9.5)	9(21.4)	2(4.8) ^{ac}	1(2.4)
Healthy eating	9 (21.4)	40(95.2)	2(4.8)	5(11.9)	6(14.3)	2(4.8) ^{ab}	0(0)
Weight management	7 (16.7)	35(83.3)	10(23.8)	6(14.3)	10(23.8)	1(2.4) ^a	0(0)
Alcohol consumption in moderation	7 (16.7)	37(88.1)	2(4.8)	4(9.5)	11(26.2)	1(2.4) ^a	2(4.8)
Screening for							
Hypertension	15(35.7)	40(95.2)	27(64.3)	18(42.9)	22(52.4)	1(2.4) ^a	2(4.8)
Diabetes	13(31.0)	35(83.3)	25(59.5)	19(45.2)	18(42.9)	1(2.4) ^a	1(2.4)
Dyslipidemia	7(16.7)	22(52.4)	9(21.4)	14(33.3)	10(23.8)	0(0)	11(26.2)
Sexual health							
Emergency oral contraception	7(16.7)	36(85.7)	4(9.5)	12(28.6)	9(21.4)	0(0)	3(7.1)
Contraceptive devices	6(14.3)	28(66.7)	2(4.8)	18(42.9)	7(16.7)	0(0)	7(16.7)
Counseling with partners when initiating treatment for STDs/ HIV/AIDS	5(11.9)	36(85.7)	5(11.9)	14(33.3)	18(42.9)	0(0)	4(9.5)

a= counselling while consulting, b= organisation of seminar, c= recommendation of exercise

Table 4. Health promotion initiatives in the community pharmacies after training

Health promotion initiatives	Frequency(N=42)	%
Screening for hypertension/Measurement of blood pressure	17	40.5
Screening service for diabetes/ measurement of blood glucose	15	35.7
Personalized counselling	8	19.0
Outreach programmes / health days	6	14.3
Weight measurement scheme/ BMI	4	9.5
Documentation of patient profile	4	9.5
Distribution of leaflets	3	7.1
Referral to other health professionals	2	4.8
Introduction of malaria parasite diagnostic testing	2	4.8
Specialised seminars on management of hypertension, oral health, drug abuse/misuse	1	2.4
Advice on smoking cessation	1	2.4
Advice on moderate alcohol consumption	1	2.4
Introduction of consent form before treatment	1	2.4
Personalized follow up	1	2.4
Questionnaire distribution to assess health awareness of the community	1	2.4
None	5	11.9

Note: question was an open-ended one, hence summation was based on multiple responses received.

Table 5. Positive impact of health promotion services on community pharmacy practice

Positive impact on community pharmacy practice	Frequency(N=42)	%
High turnover of patients	16	38.1
Improved confidence in pharmacists by customers	13	30.9
Improved relevance and pharmacy image	11	26.2
Improved sales	6	14.3
Referrals to pharmacy by previous customers/patients	5	11.9
Services improved and patient appreciated our services	4	9.5
Expanded knowledge and services delivery	4	9.5

Increased awareness of community pharmacists' role in the community	3	7.1
Patients were more willing to be informed	2	4.8
Improved management of patient diseases	1	2.4

Note: question was an open-ended one, hence summation was based on multiple responses received

Table 6. Specific health promotion (HP) activities provided in community pharmacies and time taken

Health promotion activities	No. of respondents n=38	%
Distribution of HP leaflets	11	28.9
Personalised counseling while dispensing	32	84.2
Screening	13	34.2
Referral to external resources	15	39.5
Personalised follow-up	17	44.7
Private consultation	8	21.1
Others:		
Display of health-related poster	1	2.6
Time range (minutes)	No. of respondents (%)	
Time taken to:	Attend to patient/client n=35 (%)	Document services n=32 (%)
1 - 10	8 (22.9)	27(84.4)
11 -20	16 (45.7)	4 (12.5)
21-30	8 (22.9)	1(3.1)
31-40	3 (8.6)	

Source: Documentation forms.