

AN ASSESSMENT OF THE CONTRIBUTIONS OF COMMUNITY PHARMACISTS TOWARDS PUBLIC HEALTH SERVICES IN SIERRA LEONE (FREETOWN, WESTERN AREA URBAN)

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ABSTRACT

Background: The World Health Organization (WHO) defines health as “A state of complete physical, mental and social wellbeing, and not merely the absence of infirmity. Donald Acheson in 1988 defined public health as: “the science and art of preventing disease, prolonging life and promoting, protecting and improving health through the organized efforts of society”. Community pharmacists are the health professionals most accessible to the public (WHO 2019). They supply medicines in accordance with a prescription or, when legally permitted, sell them without a prescription. In addition to ensuring an accurate supply of appropriate products, their professional activities also cover counselling of patients at the time of dispensing of prescription and non-prescription drugs, providing drug information to health professionals, patients and the public, and participation in health-promotion programs. They maintain links with other health professionals in primary health care WHO (2010). This study was conducted to assess the role of community pharmacists in public health to determine the level of community satisfaction on the services provided by community pharmacists, to determine community perception on the services provided by community pharmacists. **Method:** This study was a Descriptive Cross-Sectional study with a convenience sampling method of Pharmacist working in community pharmacies using a self-administered questionnaire giving a total of 125 community pharmacists working in this study setting. The study also included community people using a P value of 0.85 from a previous study by Al-Arifi MN, (2012) giving a sample size of 196. The outcome measured were demographics, role in public health services, perception and satisfaction. The data was analysed using SPSS and Microsoft Excel to produce Figures and Tables. **Result:** The results of the study points towards the fact that community pharmacists are contributing towards public health in the areas of screening and health promotion as 76(60.8%) are involved in promotion of smoking cessation, 61.2% are very involved promotion of weight management. 72.0% very involved in screening for hypertension whilst 64.8% are very involved in screening for diabetes. 64.8% of community people strongly agree that pharmacists are integral part of the health system. 59.2% and 64.3% of community people strongly agree that community pharmacists should provide blood pressure and blood sugar monitoring services respectively. 71.2% are very involved in counselling on treatment for STDs whilst 47.2% are very involved in counselling on emergency and other contraception

KEYWORDS: Community Pharmacists, Contributions, Public Health Services.

INTRODUCTION

According to WHO (2019), Community Pharmacists are the health professionals most accessible to the public and are a cornerstone of primary healthcare. They supply medicines in accordance with a prescription or, when legally permitted, sell them without a prescription. In addition to ensuring an accurate supply of appropriate products, their professional activities also cover counselling of patients at the time of dispensing of prescription and non-prescription drugs, providing drug information to health professionals, patients and the public, and participation in health-promotion programs. They maintain links with other health professionals in primary health care (WHO 2010). Community pharmacies and pharmacists have the potential to contribute to the public's health. The position of community pharmacies straddles both public and private sectors, the former primarily to dispense prescriptions. Pharmacies' dual health and commercial roles offer a unique opportunity to target activities towards healthy people as well as those with existing health problems.

The Pharmacist can take part in health promotion campaigns, locally and nationally, on a wide range of health-related topics, and particularly on drug-related topics (e.g., rational use of drugs, alcohol abuse, tobacco use, discouragement of drug use during pregnancy, organic solvent abuse, poison prevention) or topics concerned with other health problems (diarrhoeal diseases, tuberculosis, leprosy, HIV-infection/AIDS) and family planning. They may also take part in the education of local community groups in health promotion, and in campaigns on disease prevention, such as the Expanded Programme on Immunization, and malaria and blindness programmes (WHO 2010).

Recently, there has been an increased interest in broadening community pharmacists' functions toward playing a greater role in public health (Paluck *et al.*, 2010). Community pharmacies are often considered an ideal site for credible counseling for a large segment of the population because pharmacists are accessible, have frequent contact with the public, have extended opening hours, and are widely distributed geographically. Given the increasing stresses on the health care system due to an aging population and the consequent rise in the prevalence and incidence of chronic diseases, the shift toward a wider public-health role for pharmacists should be accentuated.

Health-promotion refer to public health services, which relate to the improvement of the general health of the population through interventions aiming at promoting health and wellbeing (e.g. nutrition, physical activity), preventing diseases (e.g. smoking cessation, immunization, travel health), identifying ill individuals (e.g. screening and case finding) and maintaining health of those with chronic conditions (e.g. diabetes, hypertension). Public health interventions act on factors influencing the health of the population as a whole or

subgroups of this population rather than separate individuals, and generally take place before the onset of health problems (O'Loughlin *J et al.*, (2012).

According to the International journal of Pharmacy Practice, Community pharmacies have great potential as a setting in public health owing to their location in the heart of the community. This characteristic feature provides a platform for more proactive contribution in solving gaps in public health services and programs including health-promotion and a variety of preventive services

According to a study by Anderson and others (2007), many countries have demonstrated the benefits of pharmacy services on a wide range of important public-health issues notably in smoking cessation, diabetes, hypertension, dyslipidemia, contraception, osteoporosis, and immunization.

For pharmacists, a collaborative approach to combat today's public health challenges should be viewed as an opportunity for the profession to assume previously inaccessible service roles and, in the process, reinforce their professional image.

When public health was in its infancy, when it was confined to sanitation and good housing with special attention on the use of clean water, there was little for pharmacists to get involved in. However, with the changing scope of public health to include addressing current challenges and the provision of quality services, pharmacists should seize the opportunity and take their place at the table. The onus is on them to demonstrate to professional peers and policy makers that their special skills in medicines management are unique attributes of the profession that makes them an integral part of the healthcare system (Anderson, *et al.*, 2007)

METHODS

Study Setting

The study was conducted in community pharmacies in the western area urban district in Freetown. This part of Freetown has more community pharmacies than other parts of Freetown according to the Pharmacy Board Gazette 2019.

Study Design

The study design is a Descriptive Cross Sectional Study of Community Pharmacists in the western area of Sierra Leone.

Study Population

The study involved all registered pharmacists working as community pharmacists in the western area urban district and also Community people who visit a community pharmacy to either fill in prescriptions or go there to see their pharmacists.

Sample Size Determination and Sampling Technique

The study included all community pharmacists working in community pharmacies in the western area urban area in Freetown. Based on the yearly gazette from the pharmacy board of Sierra Leone there are 125 community pharmacies in this area of Freetown and therefore all 125 Pharmacists working in those pharmacies responded to the questionnaire.

For the public Cochran formula was used to calculate the sample size from a previous study that was done in Riyadh, Saudi Arabia in 2012 titled patients perception, views and satisfaction with pharmacist role as a health care provider in the community pharmacy setting.

The P-value obtained from this study was 0.85. This gave a sample size of 196.

A convenience sampling technique was used for community pharmacists.

Data Collection

The data collection process involved explaining to respondents the rationale of the study and also seeking their consent to be involved in the study.

The data was collected using a questionnaire assessing the contributions of community pharmacists towards public health services. All 125 community pharmacies were visited and in cases where these professionals were absent subsequent visits were made until they were met and the questionnaire filled.

Ethical Consideration

Ethical clearance was obtained from the Sierra Leone Ethics and Scientific Review Committee and permission was given by the National Medicines Regulatory agency (Pharmacy Board of Sierra Leone) to conduct the study. All information obtained in the study was kept confidential during the collection and processing of data and used only for this study.

Outcome Measures

The outcome measured were demographics, role in public health services, perception and satisfaction.

Data Analysis

The data collected was cleaned, coded, and entered into Statistical Package for Social Scientists (SPSS) version 20 (IBM Statistics, Armonk, NY, USA).

The data was put into SPSS and analysed using descriptive statistics using tables and graphs.

Some data were also analysed using Microsoft excel to bring out graphs and table.

RESULTS

Community Pharmacists Demographic Information

The study included a total of 125 respondents – 81(64.8%) males and 44 (35.2%) females (**Figure 1**).

42.4% of the respondents had between 5-10 years of experience in community pharmacy practice. **24.8%** had between 2-4 years of community practice experience, **5.6%** has less than a year of experience in community practice. (**Figure 2**)

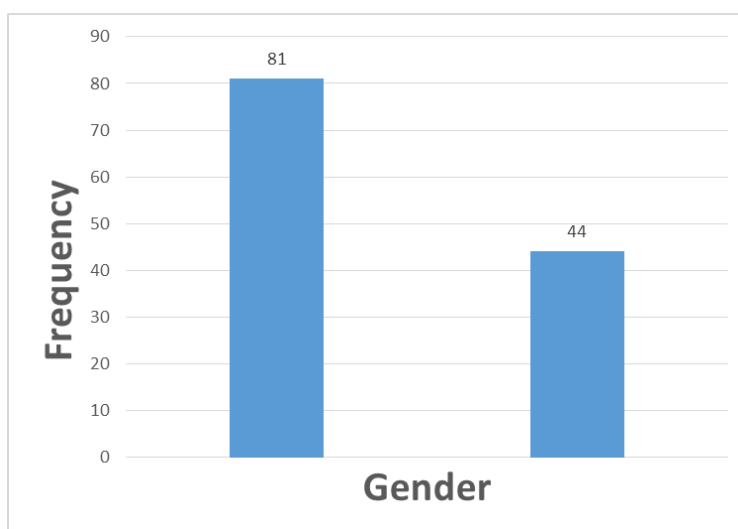


Figure 1: Gender of Respondents (PHARMACISTS).

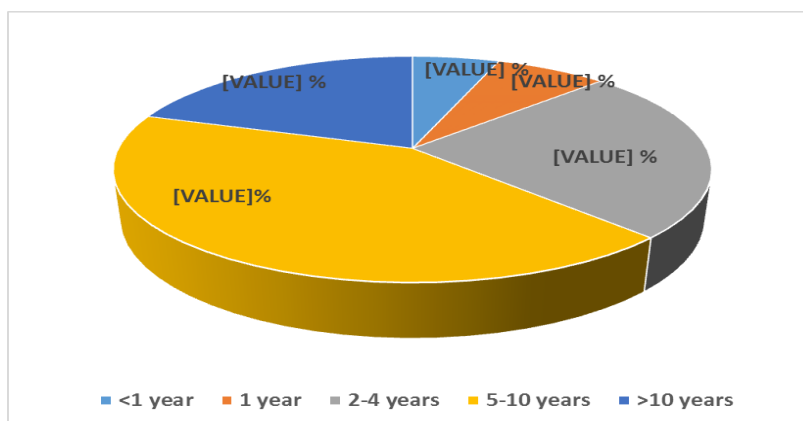


Fig. 2: Years of Experience.

Average Number of Prescriptions Filled Per Day

Only 2(1.6%) of respondents fill more than 20 prescriptions per day. 61(48.8%) fill between 6-10 prescriptions per day, 3(2.4%) fill one prescription per day. (Table 1)

Table 1: Average Number of Prescriptions Filled Per Day.

Number of prescriptions	Frequency	%
1	3	2.4
2-5	25	20.0
6-10	61	48.8
11-15	23	18.4
16-20	11	8.8
>20	2	1.6

Respondents Roles/ Contributions to Public Health Services

76(60.8% of community pharmacists are involved in counselling patients on smoking cessation, 37(29.6) are

very involved in smoking cessation counselling and 3(2.4%) are not at all involved.

70(56.0%) are involved in promotion of physical activity, 33(26.0%) are very involved and 4(3.2%) are not at all involved.

62(49.6%) are involved in promotion of eating healthy diet, 35(28.0%) are very little involved in this public health activity.

64(61.2%) are very involved in promoting weight management. 90(72.0%) are very involved in screening for hypertension. 81(64.8%) are very involved in screening for diabetes and 7(5.6%) are not at all involved in such screening.

Only 6(4.8%) are very involved in screening for dyslipidemia and 67(53.0%) are not at all involved in screening for dyslipidemia.

Table 2: Public Health Services.

Public Health Services	Level of Responses			
	Very involved No (%)	Involved No (%)	Little involved No (%)	Not at all involved No (%)
Counseling on Smoking cessation	37(29.6%)	76(60.8%)	9(7.2%)	3(2.4%)
Promotion of physical activity	33(26%)	70(56.0%)	18(14.4%)	4(3.2%)
Promotion of eating healthy diet	28(22.4%)	62(49.6%)	35(28.0%)	0.00
Promotion of weight management	64(61.2%)	51(40.8)	10(8.0%)	0.00
Screening for hypertension	90(72.0%)	29(23.2%)	6(4.8%)	0.00
Screening for diabetes	81(64.8%)	31(24.8%)	6(4.8%)	7(5.6%)
Screening for dyslipidemia	6(4.8%)	11(8.8%)	40(32.0%)	67(53.0%)

Respondents Involvement in MINOR/Miscellaneous Public Health Services

65(52.0%) of respondents are very involved in management and screening for infections and only 3(2.4%) are not at all involved. 51(40.8%) are involved in antimicrobial stewardship whilst 37(29.6%) are very much involved. (Table 3).

89(71.2%) are involved in counselling on treatment of STDs. 59(47.2%) are very involved in counselling on emergency and other contraception.

36(28.8%) of respondents conduct needs assessment for health needs of patients and 7(5.6%) are not at all involved in this activity.

Table 3: MINOR/Miscellaneous Public Health Services.

Miscellaneous Public health services	Level of Responses			
	Very involved No (%)	Involved No (%)	Little involved No (%)	Not at all Involved No (%)
Management and screening for infections	65(52.0%)	42(33.6%)	15(12.0%)	3(2.4%)
Antimicrobial stewardship	37(29.6%)	51(40.8%)	31(24.8%)	3(2.4%)
Counselling on treatment of STD	89(71.2%)	31(24.8%)	4(3.2%)	0.00
Counselling on emergency and other contraception	59(47.2%)	56(44.8)	10(8.0%)	0.00
Conducting needs assessment for health needs	36(28.8%)	46(36.8%)	36(28.8%)	7(5.6%)

Demographic Information of Community People

Out of the 125 respondents 111 of them were male and 85 were female (Figure 3).

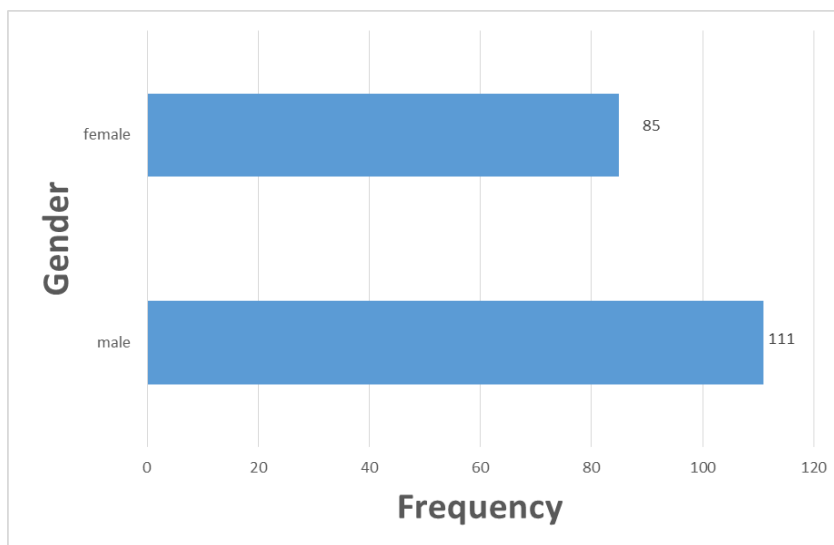


Figure 3: Gender of Respondent (COMMUNITY PEOPLE)

Number of Visits to the Pharmacy

60 people made between 4-5 visits and more than 10 visits to pharmacies within the last year respectively. 23 people made between 2-3 visits. (Figure 4).

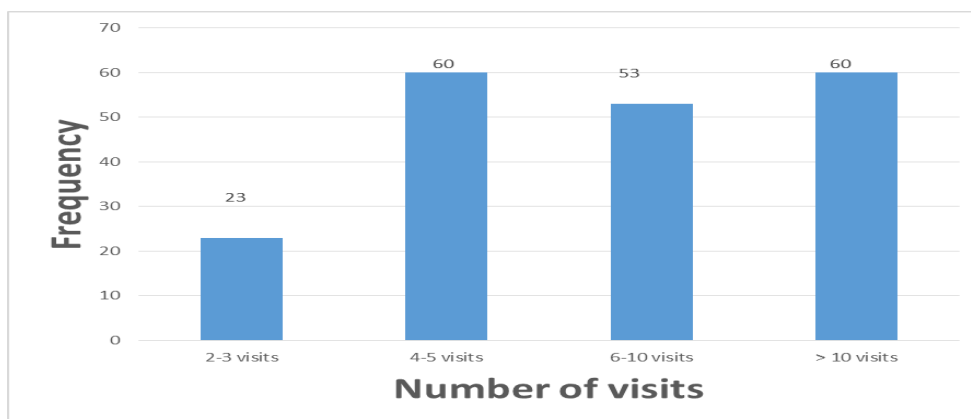


Figure 4: No. of visits to the Pharmacy.

Respondents Perception about Community Pharmacists

151(77.0%) strongly agree that pharmacists are expert in drug matters and 4(2.0%) are not sure. 129(65.8%) strongly agree that pharmacists are expert in suggesting

treatment whilst 2(1.0%) strongly disagree and 4(2.0%) are not sure.

53(27.0%) disagree that pharmacists are mere vendors or dispensers and 38(19.4%) agree.

127(64.8%) strongly agree that pharmacists are integral part of the health system whilst 2(1.0%) disagree.

116(59.2%) strongly agree that pharmacists could provide services such as blood pressure monitoring.

126(64.3%) strongly agree that pharmacist could provide services such as blood sugar monitoring.

110(56.1%) strongly agree that patients should seek advice from pharmacists for non-serious conditions.

86(42.9%) strongly agree that pharmacists should advice patient on general health issues apart from drugs whilst 51(26.0%) of respondents are not sure and agree respectively.

Table 4: Community Perception.

Perception	Level of Responses				
	Strongly agree No (%)	Agree No (%)	Not sure No (%)	Disagree No (%)	Strongly disagree No (%)
Pharmacist as expert in drugs matters	151(77.0%)	41(20.9%)	4(2.0%)	0.00	0.00
Pharmacist as expert in suggesting treatment	129(65.8%)	56(28.6%)	4(2.0%)	5(2.6%)	2(1.0%)
Pharmacists as mere vendors/dispensers	18(9.2%)	38(19.4%)	74(37.8%)	53(27.0%)	13(6.6%)
Pharmacists as integral part of health system	127(64.8%)	62(31.6%)	5(2.6%)	2(1.0%)	0.00
Pharmacists should provide services like B.P monitoring	116(59.2%)	63(32.1%)	11(5.6%)	2(1.0%)	0.00
Pharmacists should provide services like Blood sugar monitoring	126(64.3%)	60(30.6%)	6(3.1%)	0.00	4(2.0%)
Patient would seek advice from pharmacist for nonserious conditions	110(56.1%)	82(41.8%)	0.00	2(1.0%)	2(1.0%)
Pharmacist should advice patients on general health issues other than about drugs	86(43.9%)	51(26.0%)	51(26.0%)	4(2.0%)	4(2.0%)

Community Satisfaction about Community Pharmacists

97(49.55%) of respondents strongly agree that they are satisfies with the type of information discussed by pharmacists on drug related matters and 95(48.5%) agree. (Table 5)

93(47.4%) strongly agree that they are satisfies with the questions asked by their pharmacists before dispensing and 94(48.0%) agree.

103(52.6%) strongly agree that they are satisfied with the level of knowledge that pharmacists demonstrate whilst 87(44.45) also agree.

80(40.8%) strongly agree that they are satisfied with the kind of information the pharmacist provide and 95(48.5%) also agree.

112(57.1%) agree that they are satisfied with the language used by the pharmacist.

46(23.5%) are not sure they are satisfied with the level of privacy maintained when discussing with the patient.

130(66.3%) strongly agree that that they are satisfied with the kind of responses pharmacists provide on questions related to drugs.

Table 5: Community Satisfaction.

Satisfaction	Level of Responses				
	Strongly agree No (%)	Agree No (%)	Not sure No (%)	Disagree No (%)	Strongly disagree No (%)
I am satisfied with the type of information discussed by the Pharmacist on drug related	97(49.5%)	95(48.5%)	2(1.0%)	0.00	2(1.0%)
I am satisfied with the questions asked by my pharmacist before dispensing	93(47.4%)	94(48.0%)	9(4.6%)	0.00	0.00
I am satisfied with the level of knowledge that Pharmacists demonstrate	103(52.6%)	87(44.4%)	2(1.0%)	4(2.0%)	0.00
I am satisfied with the kind of information the Pharmacist provide	80(40.8%)	95(48.5%)	19(9.7%)	2(1.0%)	0.00
I am satisfied with the language used by the pharmacist	72(36.7%)	112(57.1%)	4(2.0%)	2(1.0%)	6(3.1%)
I am satisfied with the privacy maintained by pharmacist while	20(10.2%)	44(22.4%)	46(23.5%)	34(17.3%)	52(26.5%)

discussing with a patient					
I am satisfied with the kind of response pharmacists provide on questions related to drugs.	130(66.3%)	60(30.6%)	4(2.0%)	0.00	2(1.0%)

DISCUSSION

Community Pharmacists Demographic Information

From figure 1, there were more male (81) community pharmacists than female (44) community pharmacists. This is consistent with the pharmacy board gazette which shows more male than female pharmacists in the western area urban area. This is in line with a similar study by Erku DA et al., (2017) wherein 68.9 % of the community pharmacist were male and 31.1% were female. This however is in contrast with a study by Laliberté, M. et al., (2012) in which there were more female (36) than male (21)

From figure 4.2, 42.4% of the respondents had between 5-10 years of experience in community pharmacy practice, 24.8% had between 2-4 years of community practice experience and 5.6% had less than a year of experience in community practice. In the study by Erku DA et al., (2017), 60.9% had less than 5years experience and 39.1% had greater than 5 years of experience. Pharmacy profession in Sierra Leone is relatively new and therefore you expect less Pharmacists to have quite a high number of experience years under their belt. Also most pharmacist leave community practice for other fields in Pharmacy no sooner they get a year or two years' experience in community practice as community pharmacy is not as developed and organized in Sierra Leone.

Average Number of Prescriptions Filled Per Day

From table 4.1, 2(1.6%) of respondents fill more than 20 prescriptions per day, 61(48.8%) fill between 6-10 prescriptions per day and 3(2.4%) fill one prescription per day. There are a lot of people who got to pharmacies to get drugs without having a prescription. From this study we see that only 1.6% of the pharmacies fill more than 20 prescriptions per day. In a similar study by Laliberté, M. et al 2012 , 22% of community pharmacies fill more than 500 prescriptions per day and 14% fill <250 prescriptions per day. From the results of the study by Erku DA, et al., (2017) 40.8% of community pharmacies fill less than 250 prescriptions

Community Pharmacists role/contribution to public health services

From table 4.2, 76(60.8%) of community pharmacists are involved in counselling patients on smoking cessation, 37(29.6) are very involved in smoking cessation counselling and 3(2.4%) are not at all involved. In a study done in Northern Ireland to evaluate the role of a community pharmacies in smoking cessation, the involvement of community pharmacy professionals was especially low (19%) (Maguire TA, et al., 2001). In formal clinical trials where the level of involvement of pharmacists in specific public-health activities may be

considered as ideal, beneficial impacts have been identified, namely in the area of smoking cessation (Dent LA, Harris KJ, et al., 2009).

Similarly to the present study, the results of a cross-sectional mail survey of community pharmacists in British Columbia published in 1994 showed that pharmacists are mostly involved in activities directly related to the dispensing or selling of medications and have less intense involvement in health education and disease prevention (Paluck EC, et al., 1994).

From the results, 70(56.0%) are involved in promotion of physical activity, 33(26.0%) are very involved and 4(3.2%) are not at all involved.

Similar studies show that 16.6% are very much involved in promotion of physical activity.

Although the beneficial effect of involving community pharmacy professionals in public-health activities such as smoking cessation, hypertension, diabetes, and sexual health has been confirmed in different clinical trials (Eades CE, et al., 2011).

62(49.6%) are involved in promotion of eating healthy diet, 35(28.0%) are little involved in this public health activity. A 1996 cross-sectional mail survey of community pharmacists practicing in the province of Quebec found that, although only few pharmacists reported routinely performing prevention activities, over 90% believed that integrating prevention into their practices was important.

Similarly, a Web-based survey of pharmacists across Canada reported that, although pharmacists currently spend most of their time on dispensing duties, over 60% believed it was time to assume new responsibilities, and more than 70% wanted to expand their roles in various fields including public health outreach (e.g. working with communities and patients to focus on health promotion, disease prevention and chronic disease management) within five years.

64(61.2%) are very involved in promoting weight management. 90(72.0%) are very involved in screening for hypertension. 81(64.8%) are very involved in screening for diabetes and 7(5.6%) are not at all involved in such screening.

Only 6(4.8%) are very involved in screening for dyslipidemia and 67(53.0%) are not at all involved in screening for dyslipidemia.

In formal clinical trials where the level of involvement of pharmacists in specific public-health activities may be considered as ideal, beneficial impacts have been identified, namely in the area of smoking cessation Dent LA, et al., (2009) hypertension Snella KA, (2006) dyslipidemia, diabetes and sexual health Anderson C, et al., (2006).

Respondents Involvement in Miscellaneous Public Health Services

From the results, 65(52.0%) of respondents are very involved in management and screening for infections and only 3(2.4%) are not at all involved. 51(40.8%) are involved in antimicrobial stewardship whilst 37(29.6%) are very much involved.

89(71.2%) are involved in counselling on treatment of STDs. 59(47.2%) are very involved in counselling on emergency and other contraception.

36(28.8%) of respondents conduct needs assessment for health needs of patients and 7(5.6%) are not at all involved in this activity.

Similar studies conducted elsewhere also reported a higher involvement of community pharmacy professionals in sexual health including emergency contraception, treatment for vaginal candida infection, information on hepatitis B and HIV and sexual health promotion (Watson L, et al., 2003). Similar studies by Hassell K, and others (2004) demonstrated similar result. In the study by Laliberté, M. and co. (2012), 34.2% are involved in counselling on treatment of STDs. And 63.7% are involved in counselling on emergency and other contraception.

Demographic Information of Community People

Out of the 125 respondents 111 of them were male and 85 were female.

In a similar study looking at Patients' perception, views and satisfaction with pharmacists' role as health care provider in community pharmacy setting at Riyadh, Saudi Arabia, Male (67.5%) Female (32.5%).

Number of Visits in the last year to the Pharmacy

60 people made between 4-5 visits and more than 10 visits to pharmacies within the last year respectively. 23 people made between 2-3 visits. Most people go to pharmacies because they are accessible and for most minor ailments people regularly visit community pharmacies.

In a similar study public perception, expectations and views of community pharmacy practice in Kuwait 54.5 % visit the pharmacy at least once every few month, 34.4% two to three times a month, 6.2% once or more a week and 4.9% once a year.

Respondents Perception about Community Pharmacists

The results revealed that a large percentage (77.0%) agree that pharmacists are expert in drug matters. This quite contrasts studies done in Qatar, Khmour MR, (2004), Saudi Arabia (2004) and Palestine (El Hajj MS, 2011). The findings from these studies indicate that over half of the respondents indicated the physician as the first person to consult regarding medication-related issues. This result is similar to the findings of the study conducted by Eades and others (2011) which showed that the customers perceived community pharmacists as drug experts.

110(56.1%) strongly agree that patients should seek advice from Pharmacists for non-serious conditions. This is consistent with a study in the uk wherein the community pharmacy was seen as the most appropriate place for the treatment of minor illness (Hassell K et al, 1997).

Results of a study conducted in Malta indicated that the Maltase consumers would seek advice from a community pharmacist for a number of minor ailments and when their condition was not serious enough to visit a physician (Wirth et al., 2011).

This contrasts to studies in Welsh School of Pharmacy, John DN, (1997) only a small percentage of consumers stated that they would ask a pharmacist for advice regarding minor ailments, as they believed that pharmacists do not know enough about their individual health.

34(19.4 %) of the respondents agree that Pharmacists are mere vendors /dispensers. In a similar study.

A qualitative study exploring public perceptions on the role of community pharmacists in Dubai ten (10) of the participants mentioned that pharmacists are medicine sellers.

According to a study, Community pharmacy in the United Arab Emirates: characteristics and workforce issues, some of the factors that can be studied are the effect of media, the patient's background, previous experience, and/or the pharmacist's interpersonal skills.

The results are inconsistent with previous study regarding the patients' perception about the community pharmacists as only vendor/dispenser. (Bawazir, 2004). Bawazir found that 56.1% thought pharmacists were more concerned with the business while our study shows 44.3% of the respondents perceived that the pharmacists are not merely as vendor/ dispenser of prescription drug.

64.8% of respondents strongly agree that pharmacists are integral part of the health system. Similar results were found in the study by Al-Arifi in Saudi Arabia and Perepelkin J in Canada (Al Arifi, 2012, Perepelkin,

2011). Similarly a study by Mohamed N et al 2012 indicates that 44.6% of respondents felt that pharmacist is indispensable and an effective part of the health care system while 33.6% gave negative response. 59.2% and 64.3% of respondents strongly agree that pharmacists should provide services like B.P monitoring and blood sugar monitoring. Peterson G in his study of public perceptions on the role of Australian pharmacists in cardiovascular diseases reported a similar finding (Peterson et al., 2010)

Community Satisfaction about Community Pharmacists

80(40.8%) strongly agree that they are satisfied with the kind of information the pharmacist provide and 95(48.5%) also agree. On the other hand 103(52.6%) strongly agree that they are satisfied with the level of knowledge that pharmacists demonstrate whilst 87(44.45) also agree. In a study in Qatar the results were quite damning where only 37% of the public agreed that Qatar's pharmacists were knowledgeable enough and were always ready to answer questions (Hajj et al., 2011) 112(57.1%) agree that they are satisfied with the language used by the pharmacist 46(23.5%) are not sure they are satisfied with the level of privacy maintained when discussing with the patient.

In the Qatar study, communication in the native language was an important quality expected by 72% of participants (Hajj et al., 2011).

130(66.3%) strongly agree that that they are satisfied with the kind of responses pharmacists provide on questions related to drugs. This also speaks to the findings from this study that people are also strongly agree that they are satisfied with the level of knowledge that Pharmacists demonstrate.

CONCLUSION

In conclusion this study provided a broad representation about Community Pharmacists roles and contribution towards public health services and also the public's perception and satisfaction on the services provided by these pharmacists.

The results of the study points towards the fact that community pharmacists are contributing towards public health and the public had a good perception on the roles and responsibilities of the pharmacists although they were moderately satisfied with the various services provided.

Contributions to public health in the areas of smoking cessation, weight management, health education and promotion, disease screening and prevention, vaccination and immunisation, alcohol and drug misuse, and sexual health.

This study showed that Pharmacists contribute to public health in the areas of smoking cessation, weight

management, health education and promotion, disease screening and prevention, alcohol and drug misuse, and sexual health.

However, given the many organizational barriers limiting their current public health activities, a wide gap exists between their ideal and actual levels of involvement.

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