



# IMPACT OF PROFESSIONAL QUALIFICATION ON PRACTICE

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## Background

Pharmacists are healthcare professionals whose responsibilities include seeking to ensure that patient derive maximum therapeutic benefit from their treatments with medicines.

New therapies, drugs and legislation dictate that pharmacists and other health professionals keep abreast of developments, and that their practice reflects these developments. Keeping knowledge and skills up to date and addressing new concepts in the delivery of pharmaceutical services have been major challenges for pharmacists. Over the years, pharmacists have responded to this challenges with continuous education with some degree of success.

The objective of this study was to determine the impact of academic qualifications on the attitude and practice of community pharmacists in Port Harcourt city, Rivers state, Nigeria.

## Methods:

Data were collected by the use of pre-tested structured questionnaires which consisted of two sets. Ninety-five questionnaires for community pharmacists and three hundred and twenty questionnaires were administered to consumers in Port Harcourt City, Rivers State, Nigeria.

## Results:

Eighty-three percent (83%) of the

pharmacists with B.Pharm and Pharm D do counsel. But one hundred percent of the pharmacists that had B.Pharm with WAPCP fellowship did counsel the consumers. Equal percentage of pharmacists with B.Pharm degree dispense both optimal and sub optimal dosages of antibacterial drugs while fellows of the West African Postgraduate College of Pharmacists (WAPCP) do not dispense sub-optimal dosages.

## Conclusion:

Generally, professional qualifications would enhance the knowledge and practice of pharmacists.

Keywords: Pharmacists, Antibacterial drugs, Professional qualification

## Introduction

Qualifications are usually a mixture of study and on the job-training; putting theory into practice and allowing one to naturally excel in his or her job. The intellectual challenge is a great motivator. Specialization is the process by which a graduate builds on a broad base of professional education and practice to develop a greater depth of knowledge and skills related to a particular area of practice. Whichever industry you choose to get into, it's unlikely you'll be able to put your feet up and expect your degree to carry you into retirement. Getting ahead in your career will require continued personal development to

keep your knowledge and skills up to date and ahead of other keen graduates.

Professional qualifications are a good way to secure your professional standing and make your curriculum vitae attractive in an increasingly competitive market. Your commitment will be evident to any employer and will demonstrate to them that you have achieved excellence in your chosen field.<sup>1</sup>

Continuing professional development (CPD) can be defined as "the process through which pharmacists continuously enhance their knowledge, skills, personal qualities throughout their professional careers"<sup>2</sup>

Keeping knowledge and skills up to date and addressing new concepts in the delivery of pharmaceutical services have been major challenges for pharmacists. Over the past forty years, pharmacists have responded to these challenges with continuous education with some degree of success.<sup>3</sup>

The European Universities Continuing Education network defines continuing education as "any form of education, vocational or general resumed after an interval following the continuous initial education."<sup>4</sup>

Pharmacists are healthcare



professionals whose responsibilities include seeking to ensure that people derive maximum therapeutic benefit from their treatments with medicines. This requires them to keep abreast of development in pharmacy practice and the pharmaceutical sciences, professional standards requirements, the laws governing pharmacy and medicines and advances in knowledge and technology relating to use of medicines.<sup>5</sup>

The pharmacist is one of the most trusted professions by the public. In fact, year after year, pharmacists score the highest when it comes to polls about who people trust even above medical doctors, clergymen and bankers. For the past twenty-seven years, pharmacists have been rated in the top three according to Gallup polls. In 2006, seventy-three percent of respondents said that pharmacists are "high" or very "high" in terms of honesty and ethics. The reason on why public trusted pharmacists so much is that pharmacists are available around the clock, have a clear understanding of the drugs they dispense, and also know how much the drugs cost, the later of which is always not the case for modern day physicians.<sup>6</sup>

There are different categories of pharmacists in Nigerian Pharmacy practice. Some are diploma holders, majority are Bachelor of Pharmacy degree holders, while only a few have the Doctor of Pharmacy degree.<sup>7</sup>

For all these pharmacists to operate at the same level of competence despite the obvious educational trainings, means that they would have to be involved in continuous learning. In any profession, the knowledge we have when we leave university or college is quite likely to be out of date, perhaps irrelevant, three to five years later. However, some pharmacists have additional qualifications such as

master degree while others have professional qualification such as consultant fellowship honours which is being conferred by West African Postgraduate College of Pharmacists. Maintaining competence throughout a career during which new and challenging professional responsibilities will be encountered, is a fundamental ethical requirement for all health professionals.<sup>8</sup> The antibacterial drugs considered in this study are ampicillin-cloxacillin, ampicillin, tetracycline, metronidazole, trimethoprim-sulphamethoxazole. A substantial proportion of the total budget in many countries is dedicated to antibacterial drugs and they are often the largest single group of drugs purchased in developing countries. It was also reported that dispensing professionals spent less time with their patients in consultation yet prescribed more drugs, more antibacterial drugs and more injections.<sup>9,10</sup> Antibacterial drugs are overused in self-medication for the treatment of minor disorders such as simple diarrhea, cough and colds, when antibacterials drugs are used too often in sub-optimal dosages, bacteria become resistant to them. In any profession, the knowledge, we have when we leave university or college is quite likely to be out of date, perhaps even irrelevant, three to five years later. In law or accountancy, new legislation often requires these professionals to change the way they practice. Similarly, new therapies, drugs and legislation dictate that pharmacists and other health professionals keep abreast of developments, and that their practice reflects these developments. Lifelong learning, continuing education, is an integral part of developing one's career to achieve greater fulfillment and provide a better service.<sup>11</sup> This indicate the need for pharmacists to participate in continuing education programmes so as to continually update their knowledge and skills. Pharmacists in each practice setting

should accept personal responsibility for maintaining and assessing their own competence throughout their own professional working lives.<sup>8</sup> Therefore pharmacists must be equipped for the roles they have to undertake in community and hospital practice. There has been an increasing appreciation of the importance of interpersonal dimension of work undertaken by a healthcare professional and it's contribution to patient well being. Studies have shown that much of the health care is communication centered and the pharmacist is expected to counsel, offer reassurance, provide consolation, commiserate, interpret, receive information, direct and carry out directives.<sup>12,13</sup>

Therefore, this study aims at evaluating the impact of professional qualifications on the practice of community pharmacists by examining the pattern of sale and pharmacist-patient communication regarding the use of ampicillin-cloxacillin, ampicillin, tetracycline, metronidazole, trimethoprim-sulphamethoxazole in Port Harcourt, a metropolitan city in the South-South region of Nigeria.

#### MATERIALS AND METHODS

The instruments for this study consisted of two sets of questionnaires, ninety-five questionnaires for community pharmacist and three hundred and twenty questionnaires distributed to consumers in Portharcourt city. The questionnaires covered the demography of respondents, pattern of purchase, frequency of sale, frequency of communication and counseling. Seventy-five questionnaires were correctly filled and returned by the community pharmacists. This represents approximately seventy-nine percent (79%). Three hundred questionnaires were returned by the consumers. This represents approximately ninety-four percent (94%). All data were entered into a computer using ▶

the SPSS version 11 software package. Data analyses were done with the same software package.

**RESULTS**

**Sex Distribution**

Sixty-three percent (63%) of the community pharmacists were males and thirty six percent (36%) were females while one percent (1%) did not indicate their sex.

**Location of Pharmacy**

It was observed that (91%) of the pharmaceutical premises were located in the urban area.

**Pharmacists professional qualification**

Seventy-five percent (75%) of the community pharmacists had B-Pharm degree but only one percent (1%) had B-Pharm/MSc degree. Eight percent (8%) of them had WAPCP fellowship and B-Pharm with Pharm.D degree. Forty (40) out of the seventy-five (75) respondents had at least ten years of practice. Thirty (30) of the respondents had about twenty years (20) years experience but only six (6) had above twenty years (20) years of practise. Thirty-six percent (36%) of the respondents sold ampiclox and fifty percent (50%) sold other antibacterial drugs. Only one percent (1%) of the respondents indicated that they usually sell

**Metronidazole.(Table 1).**

Thirty-six percent (36%) of the pharmacists did not indicate how the consumers responded to counseling, however thirty-two (32%) of the consumers were reported to accept counseling while thirty-two percent (32%) of the consumers refuse counseling and walk away.(Table 5) Fig 1 below shows the relationship between the professional qualifications of pharmacists and the frequencies at which the sub-optimal dosage of antibacterial drugs were dispensed. The statistical analysis showed that the chi square (X<sup>2</sup>) is 2.288 and the significant p value is 0.683.

The relationship between the years of experience of the respondents to the rate at which sub-optimal antibacterial drugs were dispensed is illustrated in fig.2

A greater percentage of pharmacists with five years and below years of experience did not dispense sub-optimal dosage of antibacterial drugs while pharmacists with eleven to twenty years of experience dispensed more sub-optimal dosage than the optimal dosage of the drugs. The chi square (X<sup>2</sup>) is 3.72 with a p value of 0.445.

Figure 3 show the relationship between pharmacists' professional qualifications and the frequency of counseling of consumers at the point of sales. It was observed that by considering each group with different qualifications, sixty-seven percent (67%) of pharmacists with Diploma only counsel consumers always, pharmacists with B. Pharm only counsel eighty-six percent (86%). Pharmacists with B. Pharm and Msc/M.Pharm were very few and only one person responded. Eighty-three percent (83%) of the

pharmacists with B. Pharm and Pharm D do counsel. But one hundred percent of the pharmacists that had B. Pharm with WAPCP fellowship did counsel the consumers. The chi-square (X<sup>2</sup>) is 31.57

**Relationship between pharmacists' years of experience and the frequency of counseling at the point of sale.**

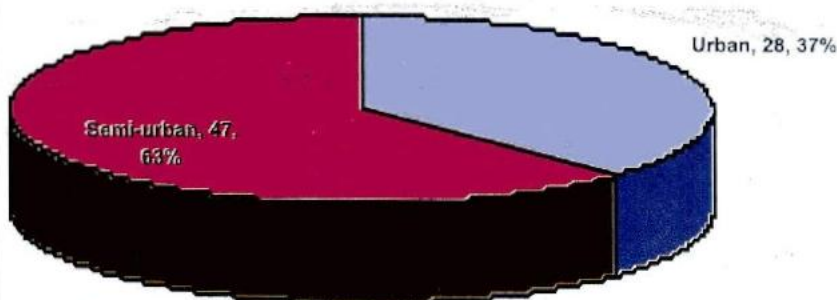
It was also noticed in figure 4 by considering the years of experience independently that the frequency of counseling of the consumers at the point of sale increases with the years of experiences of the pharmacists but declined to fifty percent (50%) for pharmacists with twenty years and above experience. The chi square(X<sup>2</sup>) is 11.19

**Relationship between pharmacists professional qualifications and the effectiveness of counseling.**

The effectiveness of the counseling at the point of sale was also considered. The bar charts show that most of the counseling done at the point of sale by the pharmacists was occasionally effective.

**Table 1: Dosage of antibacterial sale**

Dosage mode	Frequency	Percentage
Urban	28	37.3
Semi-urban	47	62.7
Total	75	100



**Fig.1 Dosage of antibacterial drugs.**



Table 2: Professional qualification versus dispensing of sub -optimal dosage

Professional qualification	Dispense sub-optimal dosage	Not dispensing sub-optimal dosage	Total
Dip.Pharm	3	3	6
B.Pharm	29	27	56
B.Pharm/Msc/M.Pharm	1	0	1
B.Pharm & Pharm D	4	2	6
B.Pharm &WAPCP	2	4	6
Total	39	36	75

$\chi^2 = 2.288$  P value = 0.683

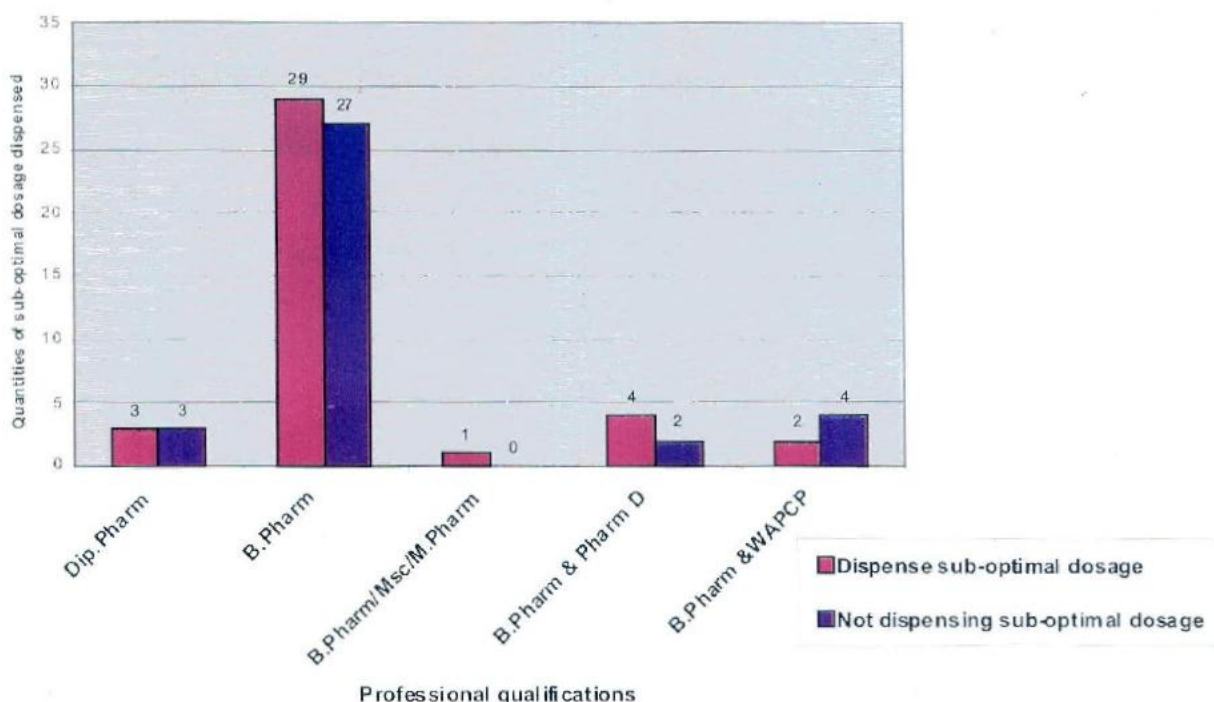


Fig. 2 Professional qualification versus dispensing of sub-optimal dosage

Table 3; Years of practice versus dispensing of sub –optimal dosage.

Years of practice	dispensing of sub-optimal dosage		Total
	Yes	No	
1 to 5	5	9	14
6 to 10	12	12	24
11 to 15	7	3	10
16 to 20	10	6	16
20 and above	5	6	11
	39	36	75

$\chi^2 = 3.72$  P value = 0.445

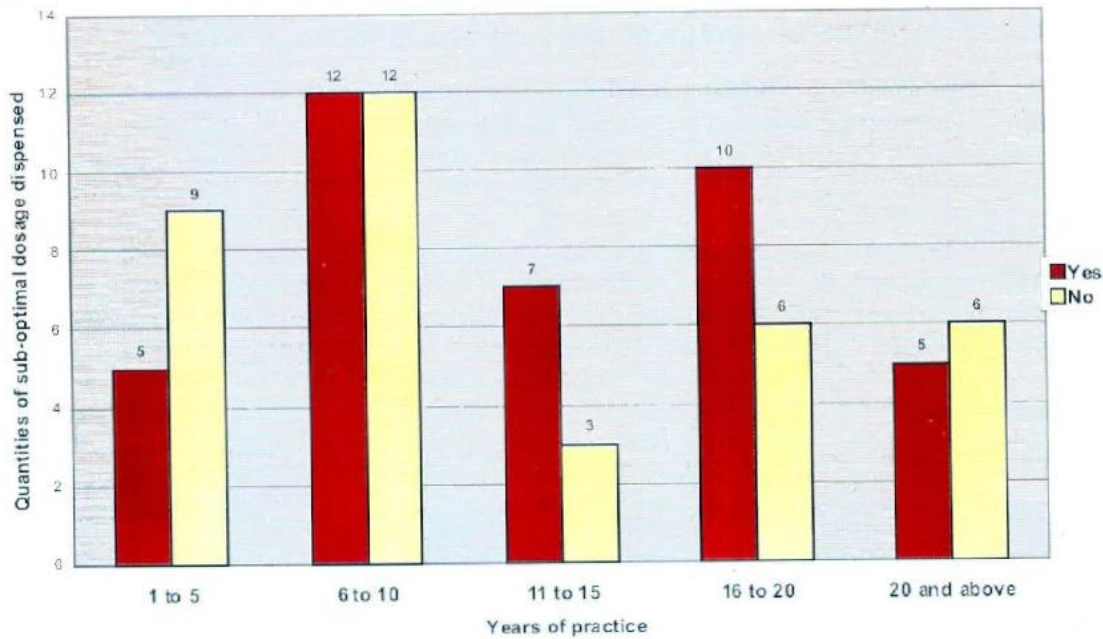


Fig.3 Years of practice versus dispensing of sub-optimal dosage

Table 4; Pharmacists professional qualification versus frequency of counseling.

Professional qualification	Always counselling	Occasionally counselling	Not counselling	Total
Dip.Pharm	4	0	2	6
B.Pharm	48	8	0	56
B.Pharm/Msc/M.Pharm	0	1	0	1
B.Pharm & PharmD	5	1	0	6
B.Pharm & WAPCP	6	0	0	6
Total	63	10	2	75

$\chi^2 = 31.57$  P value = 0

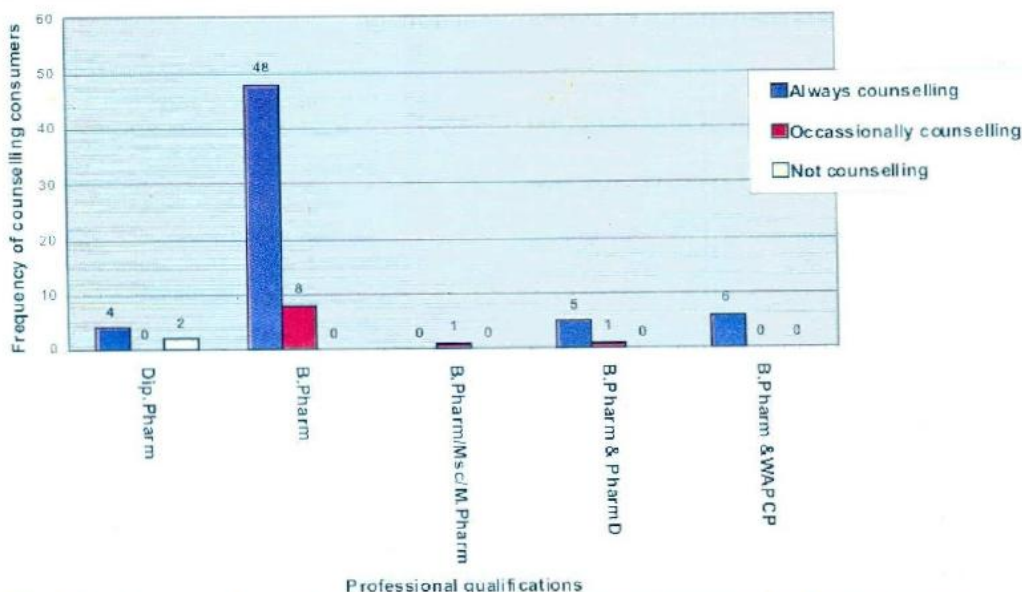


Fig.4. Professional qualification versus frequency of counseling consumers



Table 5; Years of practice versus frequency of counseling.

Year of practice	Always counselling	Occasionally counselling	Not counselling	Total
1 to 5	10	2	2	14
6 to 10	19	5	0	24
11 to 15	9	1	0	10
16 to 20	15	1	0	16
20 and above	3	3	0	6
Total	56	12	2	70

$\chi^2 = 11.187$  P value = 0.19

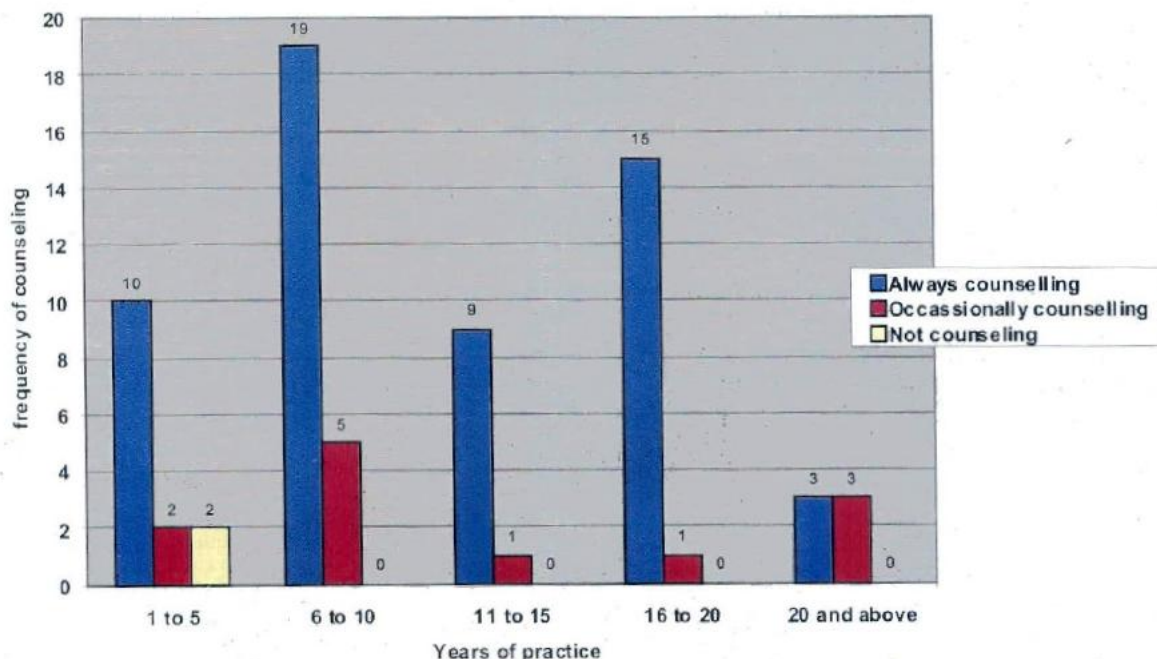


Fig. 5. Years of practice versus frequency of counseling

Table 6; Years of practice versus effectiveness of counseling.

Year of practice	Always effective	Occasionally effective	Not effective	Total
1 to 5	3	7	4	14
6 to 10	8	16	0	24
11 to 15	2	7	1	10
16 to 20	7	9	0	16
20 and above	8	3	0	11
Total	28	42	5	75

$\chi^2 = 12.95$  P value = 0.005

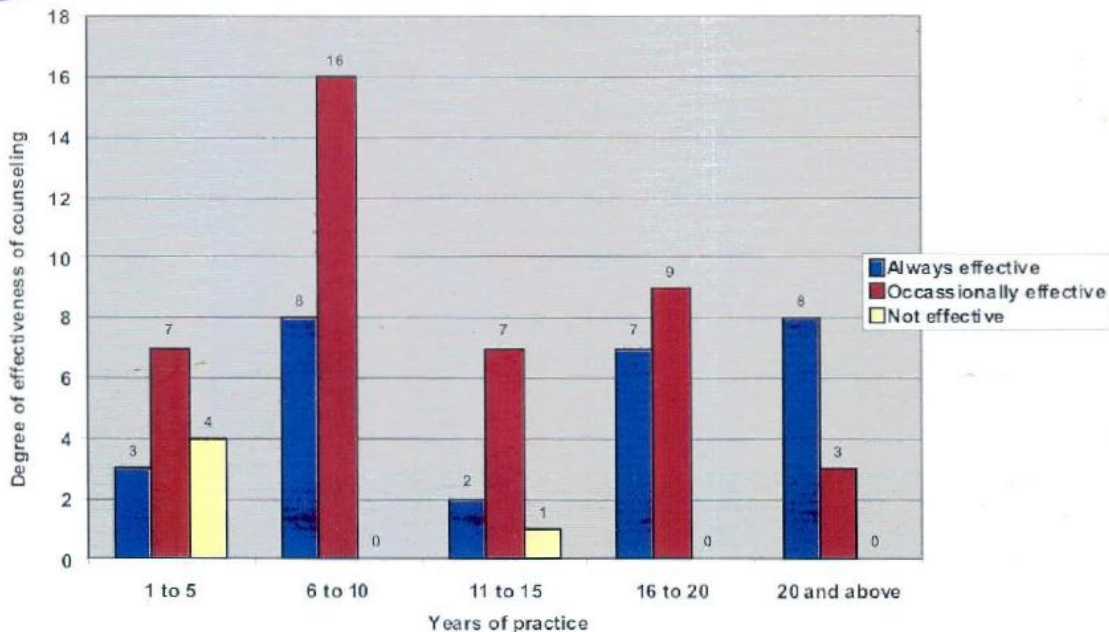


Fig. 6. Years of practice versus degree of effectiveness of counseling

Table 7; Professional qualification versus effectiveness of counseling.

Professional qualification	Always effective	Occasionally effective	Not effective	Total
Dip.Pharm	1	3	2	6
B.Pharm	23	31	2	56
B.Pharm &Msc/M.Pharm	0	0	1	1
B.Pharm &PharmD	1	5	0	6
B.Pharm &WAPCP	3	3	0	6
Total	28	42	5	75

$\chi^2 = 24.727$  P value = 0.002

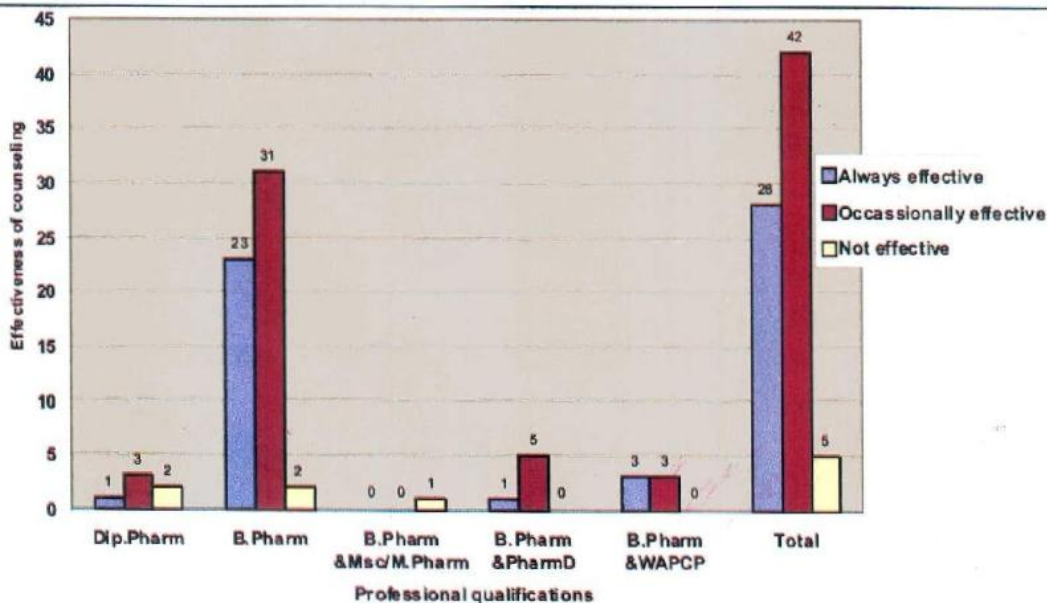


Fig. 7. Professional qualifications versus effectiveness of counseling

## DISCUSSION

A greater percentage of community pharmacists with WAPCP fellowship did not dispense sub-optimal dosage of anti-bacterial drugs. Meanwhile, approximately equal percentage of the pharmacist with only B-Pharm degree qualification dispensed both optimal and sub-optimal dosage of the drugs. Also, from the research findings, it was discovered that the counseling done by the pharmacists were occasionally effective irrespective of the years of their experiences. It was also noticed by considering the years of experience independently that the frequency of counseling of the consumers at the point of sale increases with the years of experiences of the pharmacists but declined to 50% for pharmacists with 20 years and above experience.

Pharmacists with B.Pharm and M.Sc/M.Pharm were very few and only one person responded. Eighty-three percent of the pharmacists with B.Pharm and Pharm D: do counsel. But a hundred percent of the pharmacists that had B.Pharm with WAPCP fellowship counsel the consumers.

Another study also found that three-fourths of those surveyed indicated that specialist certification positively affected patient care. These certified specialists also reported an increase in prestige in a clinical setting (83%), an academic setting (68%), a professional association (67%), and a community setting (44%). Personal reward associated with specialist certification included an increase in self confidence (86%), sense of personal achievement (96%), and a more interesting and fulfilling career. (72%).<sup>14</sup>

The above is in agreement with the reports of a survey carried out to determine the impact of specialist certification on professional practice which suggested that physician cognitive skills, as measured by a maintenance of certification are linked with higher rates of performing processes of care in Medicare patients e.g care for diabetes and mammography screening.<sup>15</sup> Another research study also observed that specialty certification and competence of registered nurses are related to patient safety.<sup>16</sup> In a study carried out by the American Board of Nursing Specialties

(ABNS) on the perceptions of nurse managers on nursing certifications, it was found that 86% indicated that they would hire a certified nurse over a non-certified nurse if all else were equal because of proven knowledge base in a given specialty and professional commitment to lifelong learning.<sup>17</sup>

Professional qualifications can also act as a seal of approval when it comes to finding work overseas. Business is increasingly conducted on a global scale, so securing a qualification that is recognised across Europe, or worldwide, can be incredibly useful. It reassures an employer that you are familiar with the same practices as local business people and adhere to the same rules and regulations. So, if you see yourself working anywhere from Düsseldorf to Dubai, professional qualifications can be the key.<sup>1</sup>

## CONCLUSION

It is evident from the study that pharmacists with WAPCP fellowship did not accept to dispense sub-optimal dosage of antibacterial drugs to the consumers and increase in number of such qualified professionals will affect the counselling of consumers at the point of sale effectively. The most consistent finding in studies of specialists is the intrinsic benefits of increased knowledge and satisfaction of attaining a professional goal while extrinsic benefits include enhanced credibility, economic benefit, greater employment opportunities and more competitiveness in the job market.

## RECOMMENDATIONS

We suggest that West African Post-graduate College of Pharmacists (WAPCP) programme should be made mandatory to all Pharmacists to promote the ethics of drug dispensing in Nigeria.

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