

**A SURVEY OF CAREER IDENTITY AMONG RETAIL AND HOSPITAL PHARMACISTS IN A DEVELOPING COUNTRY**

Sandeep Maharaj^{1*}, Sureshwar Pandey¹, Arti Maharaj¹, Bonnilyn Berkeley¹, Ceema Ramnarine¹, Crissanne Ramoutar¹, Jadeine Joseph¹, Omphemetse Basinyi¹, Fazal Ali², Robin M. Antoine³, Isaac Dialsingh³ and Ashok Sahai³

¹School of Pharmacy, Faculty of Medical Sciences, The University of the West Indies, St Augustine Campus, Trinidad and Tobago

²University of Trinidad and Tobago, O'Meara Campus, Arima, Trinidad and Tobago

³Department of Mathematics and Statistics, The University of the West Indies, St Augustine Campus, Trinidad and Tobago

***Corresponding author e-mail:** sandeepmaharaj@hotmail.com

ABSTRACT

The purpose of this study was to investigate how retail pharmacists view themselves versus hospital pharmacists. This was explored in terms of self perception, workload, salary, technology and responsibilities. Questionnaires were distributed to thirty full time pharmacists. Fifteen were hospital pharmacists from the North Central Regional Health Authority and the fifteen retail pharmacists from along the North east-west corridor in Trinidad. The differences noted in perception corresponded to the areas of salary (benefits) and working conditions. Retail pharmacists felt that hospital pharmacists would be paid better and have more favourable working conditions (responsibilities; autonomy; technology; reporting relations). This investigation showed that hospital pharmacists basically had a relatively good perception of themselves as compared to their counterparts.

Keywords: Career-Perception, Personal Job-Satisfaction & Retail vs. Hospital Pharmacists

INTRODUCTION

Pharmacists play a major role in the health sector worldwide. The role of the pharmacist has shifted from the classical "lick, stick, and pour" dispensary role one of being an integrated member of the health care team directly involved in patient care. Historically, the fundamental role of pharmacists as a healthcare practitioner was to distribute drugs that had been prescribed to patients. In more modern times, pharmacists advise patients and health care providers on the selection, dosages, interactions, and side effects of medications, and act as a learned intermediary between a prescriber and a patient. Pharmacists monitor the health and progress of patients to ensure the safe and effective use of medication. The work of pharmacists varies according to the field they work in. The most

common pharmacist positions are: that of a community pharmacist (also referred to as "retail pharmacist" or "dispensing chemist"); and a hospital pharmacist. Pharmacists instruct and counsel on the proper use and adverse effects of medically prescribed drugs and medicines. Some studies have been conducted to illustrate the differences between hospital and retail pharmacists.

In a study conducted to investigate the career identity of young hospital pharmacists in China^[1], claimed that young hospital pharmacists were generally satisfied with their current job; however they showed low career identity.

In another study^[2] concluded that hospital pharmacists have been neglected for a long time, their role as professionals have been undervalued

both by physician and patients. In eyes of the patients, hospital pharmacists are only considered to be dispensers.

According to ^[3], a lot of change has occurred in education of hospital pharmacists. Young hospital pharmacists are the main force in the future of hospital pharmacy. Their career identity affects the development of hospital pharmacy and professional psychological status, to discover the dilemmas and to solve them.

Approximately 24% of respondents were not too happy with their work pay and 11% of respondents would not change profession had they got more work pay from other jobs. About 76% of young hospital pharmacists were satisfied with their work pay. This suggested that monetary reward could contribute to greater job satisfaction. The satisfaction with work pay was increased as the age increased. Many young hospital pharmacists were unsatisfied with their work pay, not because of salary itself, but because of unequal treatment ^[1].

On the impact of gender factor on job satisfaction, more female young hospital pharmacists were satisfied with work pay than their male co-workers. On the impact of academic degree factor on job satisfaction, young hospital pharmacists with bachelor's degree showed less satisfaction of working environment, work pay and utilization of skills as compared with hospital pharmacists with associate degree or with master' or doctoral degrees. There was difference of satisfaction with work pay between hospital pharmacists working in a first class hospital compared to those working in a second class one.

Workload can be described as the amount of work done in a day. Pharmacists in leading positions worked more hours than other pharmacists^[4]. Retail pharmacists were found to work more hours compared to community pharmacists. Workload also contributes to stress. An association between significant amount of stress and a high workload among pharmacists^[5].

The top three job situations that community and hospital pharmacists perceived to be most stressful were: being interrupted by telephone calls or others while performing job duties; excessive/increased workloads and not having enough staff. Other situations contributing to stress for community pharmacists included keeping up with new developments to maintain professional competence and having too much work to do. Heavy workloads

also increased the chances of errors such as drug interactions and wrong prescriptions.

Different aspects of community pharmacists' current work environment and practice can be used to describe their perception of themselves in the field of pharmacy^[6]. The equipment and technology available and used at the job site, whether retail or hospital is one marker that can be used to translate to daily job satisfaction. What pharmacists accomplish in their practices is affected by the environment in which they work and the resources available to assist or facilitate the activities they undertake.

This idea is further supported by a study consisting of 208 retail pharmacists and 203 hospital pharmacists were sampled and found that in both instances, pharmacists felt that the use of technology allowed them to spend more time with their clients/patients, improved accuracy and enhanced efficiency, for example, in tracking patients' medical history. These all translated to job satisfaction and an improved feeling of accomplishment at the end of the day. On the other hand, 47% of hospital pharmacists versus 63% of retail pharmacists felt that even though technology generated job satisfaction, it also made their jobs harder, not easier particularly when the system goes down or malfunctions. They further felt that in some areas it was a help and in others it was a hindrance^[7].

Generally, however, a large majority in both settings (77% of hospital pharmacists and 82% of retail pharmacists) describe the technology they use as helpful in providing drug information, adverse interactions and tracking patients' medical history^[7].

While both retail and hospital pharmacists share similar clinical responsibilities, research has shown that their roles tend to differ depending on the needs of their practice setting.

A study revealed that community pharmacists' responsibilities in healthcare can be broken down into six categories^[8]. These include technical (dispensing, maintaining patient records) checking (drug dose, interactions, and contraindications), counselling (appropriate use, benefits, side effects of medications), monitoring (compliance, adverse drug reactions, and drug effectiveness), advice to prescribers (being a source of drug information and clinical advice to physicians) and prescribing roles (dosage change, discussing alternative therapy). This study incorporated the opinions of both physicians and community pharmacists, on their perceptions on what the role of a community pharmacist should

include. There has been no work done in this field in developing nations like Trinidad and Tobago.

The purpose of this research is to gather descriptive information from both retail and hospital pharmacists on the twin island of Trinidad and Tobago concerning their perception, salary, workload, technology and responsibility. Trinidad is a country situated at the Southern end of the Caribbean - Northeast of Venezuela; measures 5,128 square kilometres and comprises a population of 1,229,953^[9]. We describe the methodology employed then we give a table of the results.

METHOD

Thirty pharmacists were chosen using non-proportional quota sampling. The target population consisted of pharmacists who worked full-time (30 hours or more per week). Fifteen pharmacists chosen were from the North Central Regional Health Authority (a public sector entity) and the remaining fifteen were retail pharmacists from along the north (east- west) corridor.

Five variables were chosen to reflect the constructs of job satisfaction and self-value. The five variables are:

- how they view themselves in the profession
- use of technology
- workload
- salary
- responsibilities

Under each of these core categories, questions were formulated to acquire feedback using the 5 point Likert scale ranging from Strongly Agree to Strongly Disagree. The pharmacists, in each of the settings, hospital and retail, were given a week to complete the questionnaires.

RESULTS AND DISCUSSIONS

Results are in the form of Tables and are lodged in Appendix 1. From the data collected, questions 1,4,5,6 and 11 tackle the first issue of self-perception in profession. We see that, collectively the majority of both public and retail pharmacists feel that the pharmacy setting does not allow them to effectively utilize their skills (60% in public and 80% in retail). 60% in public also feel that they do not make a big impact on the patients' Quality of Life (QoL) and 93.4% feel the same in retail pharmacy. 80% of public pharmacists feel that their profession is not a valuable asset to healthcare followed closely by 73.3% in retail. Noteworthy is the comparison of how pharmacists perceive their colleagues in the

healthcare profession as valuing their contribution; 40% in public pharmacy disagree that their colleagues value their opinion as compared to 66.6% in retail pharmacy; indicating that pharmacists in hospital settings feel more valued in this sense than their counterparts working in retail. Also noteworthy is that 86.6% of retail pharmacists feel that their benefits are lower compared to hospital pharmacists (supported by 60% of hospital pharmacists) yet still remain in the retail setting.

It is evident from the data shown in the chart that the majority of Retail Pharmacists perceive themselves negatively in that profession. Concerning variable 2, the use of technology, 86.6% of retail pharmacists in retail feel that the availability of technology does not have an impact on their accomplishment and 60% of their counterparts in public settings agree. The majority of pharmacists in public (46.6%) agree that their institution offers the technological means to increase level of productivity, quality of care for patients and makes the job more satisfying whereas only 13.3% agree with this in retail. 80% of retail pharmacists feel that their organisation does not see the value of utilising technology while 40% of public pharmacists are in agreement with this.

From the overall data, we can see that more pharmacists in the hospital setting see technology as a factor contributing to their accomplishment and that the hospitals offer them the technological means for this. An anomaly exists in the case of their perception in how their organisation sees the value of technology; where even though retail pharmacists claim they are not technologically equipped, they say their organisation sees the value of technology to assist their duties. Variable 3, workload, is perceived as more in the retail setting than in the public setting. 80% of retail pharmacists believe that there is need for more pharmacists to satisfy the pharmacist/patient ration whereas 40% feel the same in public pharmacy. 80% of retail pharmacists are not satisfied with the daily prescriptions filled while 86.7% in public pharmacy feels the same. It is evident from the data that Public Pharmacists are more satisfied with regard to workload.

For variable 4, 66.7% of retail pharmacists are unhappy with their rate of pay as compared to 13.3% in public pharmacies.

For Variable 5, 86.7% of retail pharmacists feel that their task is difficult to perform, while 46.7% feel the same in public sector. Collectively 53.4% of retail pharmacists feel that they don't fully utilise all of their skills to serve their community while 60% of public pharmacists feel the same. From the data,

retail pharmacists are least satisfied concerning their responsibilities.

Note that question 3 encompasses a few of the variables namely variables 1,3,4 and 5 and overall 20% of public pharmacists agree that these variables influence their performance on a daily basis whereas 0.0% of retail pharmacists agree that these variables should affect their day to day performance.

Some limitations to the study are:

1. The ages of the pharmacists were not collected, which could have been done seeing that age plays a role in satisfaction as mentioned earlier

2. The gender of the pharmacists also plays a role in job satisfaction as shown in earlier research and should have also been included in the data analysis as well.

CONCLUSION

Retail pharmacists see themselves as the underdogs and although they perceive this, they agree that the factors which contribute to them being in that position, namely increased workload, low salary, unfulfilling responsibilities, lack of technology and decreased overall personal satisfaction should not affect their performance on a daily basis.

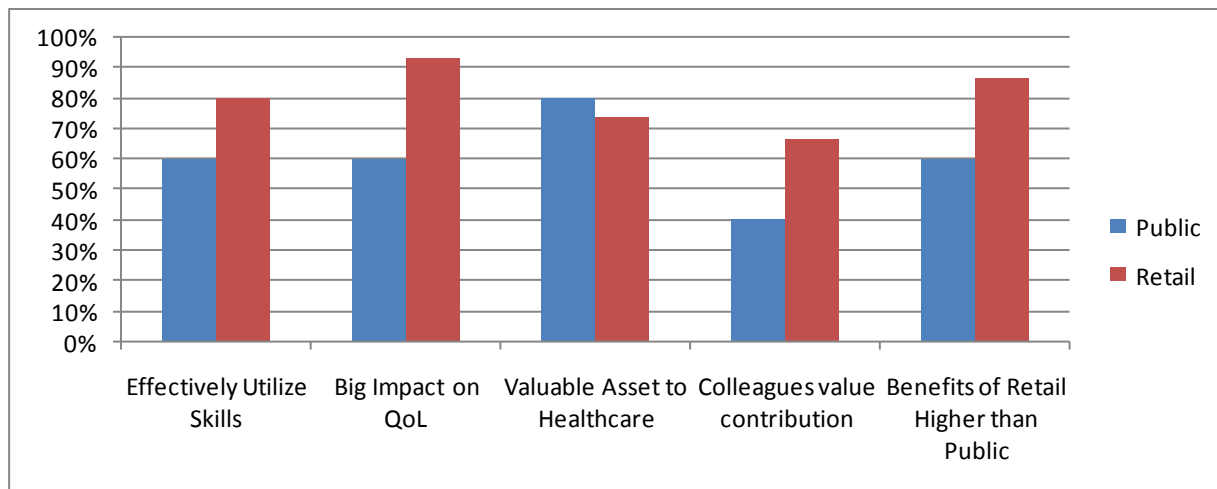


Chart 1: Showing percentage disagreement by Pharmacists concerning Self-Perception Variable

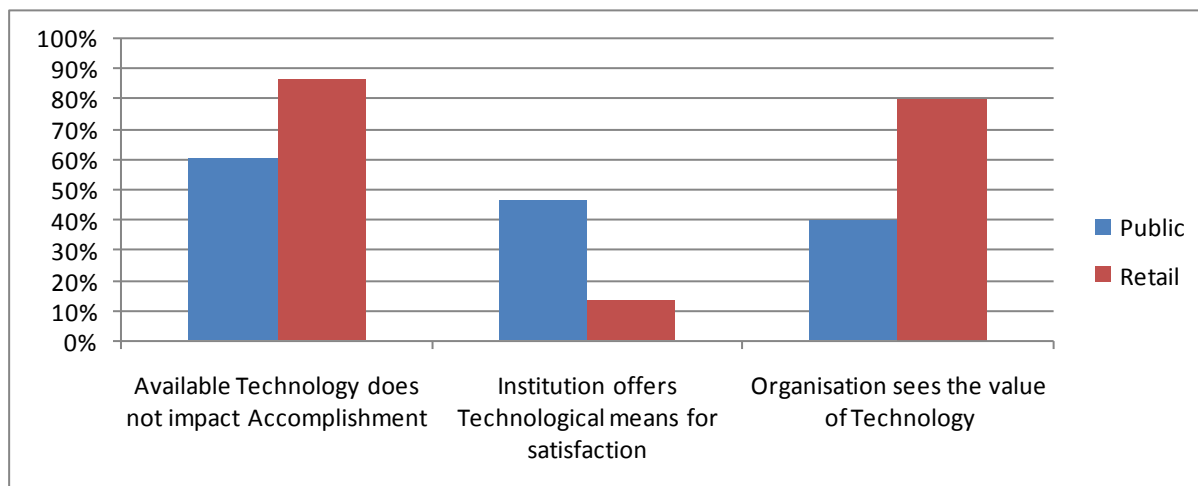


Chart 2: Showing Pharmacists perception about the use of Technology in their setting

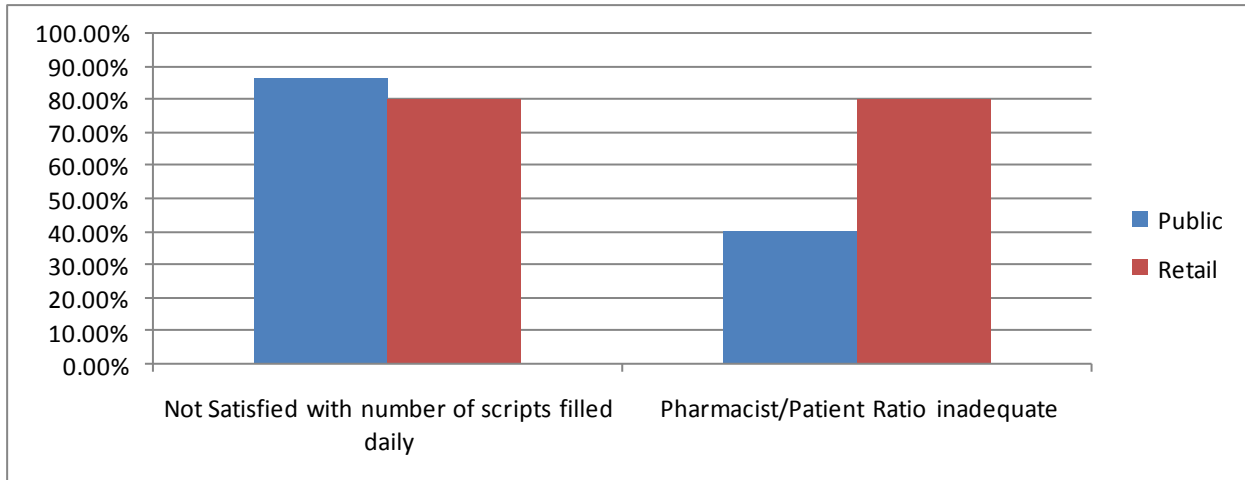


Chart 3 Showing Pharmacist Satisfaction concerning Workload

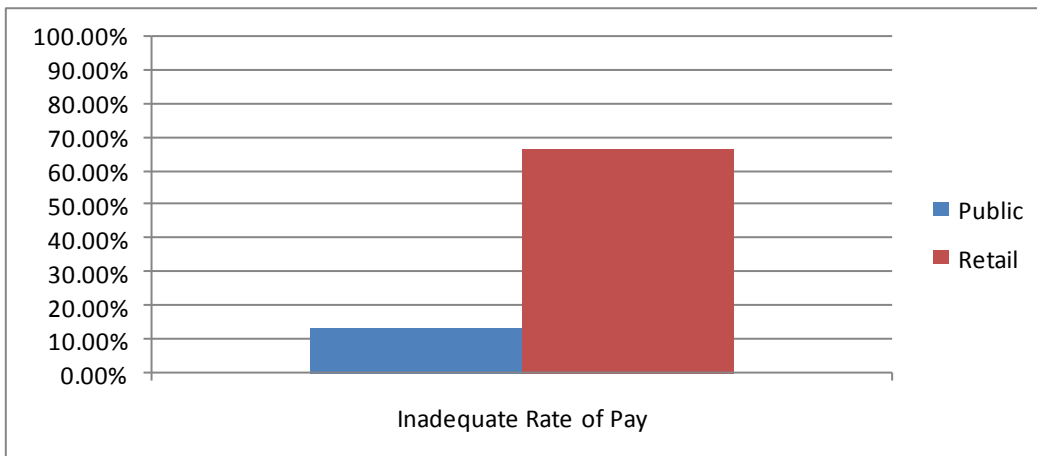


Chart 4 Showing perception of inadequate rate of pay for Pharmacists

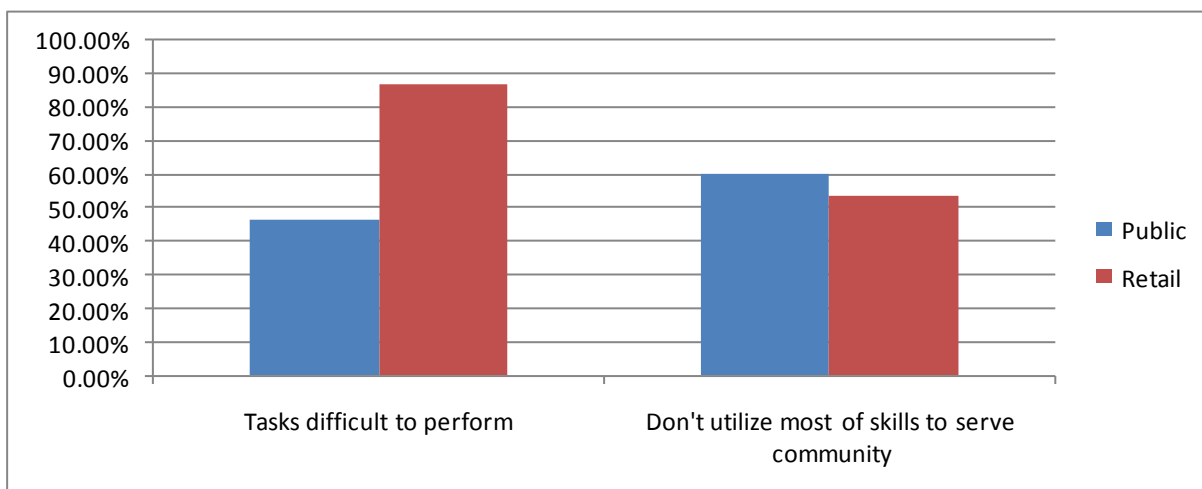


Chart 5 Showing the Satisfaction of pharmacists with respect to their Responsibilities

Appendix 1

			Strongly agree N (%)	Somewhat agree N (%)	Neutral N (%)	Somewhat disagree N (%)	Strongly disagree N (%)
1	Working in the pharmacy setting affords me the opportunity to effectively utilize my skills	Public	1 (6.7%)	1 (6.7%)	4 (26.7%)	8 (53.3%)	1 (6.7%)
		Retail	1 (6.7%)	0 (0.0%)	2 (13.3%)	7 (46.7%)	5 (33.3%)
2	My duties involve tasks that are easy to perform	Public	2 (13.3%)	4 (26.7%)	2 (13.3%)	6 (40.0%)	1 (6.7%)
		Retail	1 (6.7%)	0 (0.0%)	1 (6.7%)	7 (46.7%)	6 (40.0%)
3	Personal perception of my work, its environment and salary has influence my performance on a daily basis	Public	0 (0.0%)	3 (20.0%)	1 (6.7%)	9 (60.0%)	2 (13.3%)
		Retail	0 (0.0%)	0 (0.0%)	2 (13.3%)	4 (26.7%)	9 (60.0%)
4	As a pharmacist, I feel as if I make a big impact on the quality of patients'/customers' lives	Public	0 (0.0%)	2 (13.3%)	4 (26.7%)	2 (13.3%)	7 (46.7%)
		Retail	0 (0.0%)	0 (0.0%)	1 (6.7%)	10 (66.7%)	4 (26.7%)
5	My profession is of high repute and is valuable asset to healthcare	Public	3 (20.0%)	0 (0.0%)	0 (0.0%)	3 (20.0%)	9 (60.0%)
		Retail	0 (0.0%)	1 (6.7%)	3 (20.0%)	6 (40.0%)	5 (33.3%)
6	I feel my colleagues in the Healthcare profession, for example, doctors, value my contribution and see my role as very important	Public	1 (6.7%)	5 (33.3%)	3 (20.0%)	5 (33.3%)	1 (6.7%)
		Retail	0 (0.0%)	3 (20.0%)	2 (13.3%)	5 (33.3%)	5 (33.3%)
7	As a pharmacist I fully utilize most of my skills to serve the people of the community	Public	0 (0.0%)	2 (13.3%)	4 (26.7%)	5 (33.3%)	4 (26.7%)
		Retail	4 (26.7%)	0 (0.0%)	3 (20.0%)	4 (26.7%)	4 (26.7%)
8	I am satisfied with the amount of prescriptions I fill every day	Public	0 (0.0%)	2 (13.3%)	0 (0.0%)	10 (66.7%)	3 (20.0%)
		Retail	0 (0.0%)	1 (6.7%)	2 (13.3%)	6 (40.0%)	6 (40.0%)
9	The ratio of pharmacists to patients/clients to be attended to (prescriptions to be filled) is appropriate in my organization	Public	0 (0.0%)	7 (46.7%)	2 (13.3%)	6 (40.0%)	0 (0.0%)
		Retail	0 (0.0%)	1 (6.7%)	2 (13.3%)	8 (53.3%)	4 (26.7%)

			Strongly agree N (%)	Somewhat agree N (%)	Neutral N (%)	Somewhat disagree N (%)	Strongly disagree N (%)
10	My rate of pay is appropriate to the service I provide to patients/clients and the contribution I make to the organization	Public	3 (20.0%)	7 (46.7%)	3 (20.0%)	2 (13.3%)	0 (0.0%)
		Retail	0 (0.0%)	2 (13.3%)	3 (20.0%)	6 (40.0%)	4 (26.7%)
11	The benefits of retail pharmacists are higher compared to hospital pharmacists	Public	1 (6.7%)	1 (6.7%)	4 (26.7%)	5 (33.3%)	4 (26.7%)
		Retail	1 (6.7%)	0 (0.0%)	1 (6.7%)	5 (33.3%)	8 (53.3%)
12	The available technology in the work environment has a significant impact on pharmacists accomplishment	Public	3 (20.0%)	0 (0.0%)	3 (20.0%)	5 (33.3%)	4 (26.7%)
		Retail	1 (2.7%)	0 (0.0%)	1 (6.7%)	5 (33.3%)	8 (53.3%)
13	My institution offers the technological means to increase my level of productivity, quality of care to my patients and has made my job more satisfying	Public	2 (13.3%)	5 (33.3%)	2 (13.3%)	3 (20.0%)	3 (20.0%)
		Retail	0 (0.0%)	2 (13.3%)	2 (13.3%)	4 (26.7%)	7 (46.7%)
14	My organization sees the value of utilizing technology to assist the pharmacist in efficiently performing his/her duties	Public	2 (13.3%)	4 (26.7%)	3 (20.0%)	6 (40.0%)	0 (0.0%)
		Retail	1 (6.7%)	1 (6.7%)	1 (2.7%)	5 (33.3%)	7 (46.7%)

REFERENCES

1. Duan JJ, Li GC, Situ B, Tao JH, Deng X, Wu JY, Zhou T, Zheng ZH, Xu F. Afr J Pharm Pharmacol, 2011; 5(3):386-92.
2. Wei SY, Gao Y. China Pharm, 2002; 5(3): 159-62.
3. Zhang L, Hu J, Tang ZJ, Li L, Sun HJ, Xu HL, Shi LF, Wang DY. Clin J Hospital Administration, 2003; 19(11): 65-8.
4. Pharmacist workload and time management, <http://drugtopics.modernmedicine.com/drugtopics/Pharmacy/ArticleStandard/article/detail/118696>
5. McCann L, Hughes C, Adair C, Cardwell C. Pharm World Sci, 2009; 31:188-94.
6. Kreling DH, Doucette WR, Mott DA, Gaither CA, Pedersen CA, Schommer JC. J Am Pharm Association. 2006; 46(3):331-9.
7. Pharmacists' views on technology, <http://drugtopics.modernmedicine.com/drugtopics/article/articleDetail.jsp?id=119407>
8. Bryant, L, Coster, G., Gamble, G, McCormick R. Res Social Administrative Pharm, 2009; 5:299-301.
9. Central Intelligence Agency (2009). The World Fact Book. Trinidad and Tobago. <https://www.cia.gov/library/publications/the-world-factbook/geos/td.html>