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The Role of the Physicians' Assistant in Trinidad and Tobago's Healthcare System

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Abstract

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MA, Anglia Ruskin University, 2008

BA, Anglia Polytechnic University, 2005

Proposal Submitted in Fulfillment

of the Requirements for the Degree of

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Abstract

The profession of physicians' assistant was introduced in the 1960s to assist with physician shortages in the United States of America. Since then, some countries have introduced this profession to fill the gaps that exist in the physician shortages problem in their health care system. Yet, in many countries like Trinidad and Tobago, this role remains absent from the health care system. The objective of this study was to assess how professionalization supports the introduction of the physicians' assistant role in Trinidad and Tobago. Using the theory of profession as a theoretical framework, and through an evaluation of institutional, regulatory, and cultural norms and barriers associated with the health care system of Trinidad and Tobago, the role of jurisdiction, societal factors, professional competition, and legitimization was assessed using a qualitative, ethnographic design, with 22 participants. The data collection tools included a questionnaire and structured interview and content analysis of relevant documents to yield the data from which conclusions may be drawn. The results showed that jurisdiction, societal changes, interprofessional competition and legitimization can all influence the introduction of physicians' assistants. Evidence from this research may provide health care administrators with important information to assess the feasibility of the introduction of this vital role to improve patient care on the islands.

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Dedication

This dissertation was dedicated to my mother for her constant encouragement, love and support.

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Chapter 1: Introduction to the Study

Introduction

Since their introduction to the United States health care system in 1960, physicians' assistants have helped to improve the care of patients. They have assisted physicians in selective medical procedures and thus have helped to reduce patient wait times (Ashton, Aiken & Duffie, 2007). It is not surprising then that studies such as that conducted by Brook, Chomut, and Jeanmonod (2012) show that over 70 % of the emergency departments in the United States have incorporated the physicians' assistants role into their emergency departments. The studies performed by Hooker and Everet (2012), O'Connor and Hooker (2007), Stewart and Catanzaro (2005), and Rick and Ballwag (2017) concluded that physicians' assistants in many regions of the world have contributed to improving the workflow and productivity of healthcare systems. Countries like Australia, Canada, Germany, Ghana, Great Britain, the Netherlands, and South Africa had the physicians' assistant role introduced to address the shortage of physicians in their respective health care systems (Hooker & Everet, 2012). Physicians' assistants have aided in the comprehensive care of patients in both primary care and accident and emergency medicine (Hooker & Everet, 2012). As such, physicians' assistants in the healthcare system are a practical approach for providing primary health care for diverse populations.

In the public administration arena, administrators may evaluate their systems, their policies, and their organization to better serve the public. Conducting this research gave the administrators, the academic world and me an insight to an administrative

problem of physician shortages that has pervaded the health care systems in many countries, it also, for the first time in Trinidad and Tobago, it allowed me to evaluate the influence of professionalization via the introduction of a new professional role to address this organizational problem. To date, there was no research study in Trinidad and Tobago about the introduction of physicians' assistants in the health care system as a measure to address physician shortages and long wait times in the emergency department. As such, this research may be beneficial to filling that academic gap. Dunn (2004) noted that in policy analysis, it is important to evaluate and assess the existing policy or situation before changes can be implemented. I assessed how jurisdiction, societal factors, professional competition and legitimization affect the introduction of the physicians' assistant profession in Trinidad and Tobago.

The introduction of the physicians' assistant role can facilitate many positive changes in the delivery of healthcare. These include reduced wait time, more favorable patient outcome, increased patient satisfaction, improved access to healthcare, and more efficient division of labor to name a few (Dunn, 2004). I designed this study to facilitate data collection and assess how the professionalization can affect the introduction of physicians' assistants in Trinidad and Tobago, identify the barriers that affect this introduction, provide an insight on if such a change can improve the delivery of health care, and provide scholarly foundation for future research.

Chapter 1 includes the clinical medical environment of Trinidad and Tobago, the social problems that plagued the health care system of Trinidad and Tobago and the research questions in which the research project is based. Chapter 1 also includes, the

purpose and the nature of the study, the conceptual framework in which the research study was built upon and the assumptions, limitations, and delimitations of the study. Chapter 1 moreover includes the significance of the research and the operational definitions.

Chapter 2 includes a comprehensive literature review that joined two fundamental areas of study: emergency healthcare in Trinidad and Tobago and Abbott's theory of profession. Chapter 2 also includes previous research that highlighted the role physicians' assistants played in the health care system in many countries.

Chapter 3 includes the steps taken to conduct the research project by highlighting the research design, data collection and analysis presented. Chapter 4 includes the presentation of the results of the data collected. Chapter 5 includes the interpretation the results, the limitations of the study, recommendations and implications for social and administrative change.

Background of the Problem

The health care system is the organizations, institutions, resources and people that provide health care services to meet the health needs of citizens (Jonas, Goldsteen & Goldsteen, 2007). These needs included the prevention, treatment, and management of disease processes and the preservation of the physical and mental welfare of the citizens, through the services offered by the medical and allied health professionals (Jonas et al., 2007). The accident and emergency department is a subdivision of a healthcare facility that is staffed and equipped to provide rapid and varied emergency care, especially for

those who are stricken with sudden and acute illness or who are the victims of severe trauma. As such, patients should be treated within a short period.

According to Garcia, Bernstein, and Bush (2010), since 1996, the demand for emergency services has been rising. Consequently, emergency departments are experiencing higher patient volume and are overcrowded. Patients seeking medical care are experiencing longer than expected wait times for service.

One country that has experienced this deteriorating trend is Trinidad and Tobago. The literature over the last 10 years concluded that patient overcrowding and understaffing plague the emergency departments in Trinidad and Tobago (Sammy, 2015). At the same time, Sammy (2015) indicated that no significant improvements have occurred since this research; as overcrowding, a lack of facilities for trained staff, and waiting times were, problems that were present in the Trinidad emergency department then and are still plaguing these departments today. Mahabir and Sammy's (2012) also showed that staffing in most emergency departments in Trinidad and Tobago target physicians who are at the junior level and exhibits little interest in practicing emergency medicine.

Most of literature that exists on the physicians' assistant profession is focused in developed countries. There is limited research on developing nations and none in Trinidad and Tobago thus far. Furthermore, assessing the physicians' assistant role from the perspective of the influence of the theory of profession has not been covered. This highlights a need for research in this subject matter in Trinidad and Tobago, given the impact this profession has had globally.

My goal for this dissertation was to assess the health care environment in Trinidad and Tobago, by focusing on the role of physicians' assistants in the accident and emergency departments and finding plausible explanations for its inexistence using the theoretical framework of the theory of professions. As stated previously, this study was needed because I collected the necessary data to identify the barriers to the introduction of the profession within the local health care landscape, this data can also be used to initiate policy changes that will facilitate its introduction and lastly it can be used as a groundwork for future research.

Problem Statement

Many researchers have suggested physicians' assistants in many areas of the globe have contributed to the workflow and productivity of the health care system. For example, Hooker and Everet (2012) revealed how physicians' assistants have assisted in the comprehensive care of patients in both primary care and accident and emergency medicine in countries such as Australia, Canada, Germany, Ghana, Great Britain, the Netherlands, and South Africa. Jones (2011) stated that one of the most common factors that initiate the introduction of physicians' assistants into any healthcare system is physician shortage. Jones (2011) argued that there is a need for accredited educational programs and appropriate legislature to approve physicians' assistants as a health care profession (Jones, 2011). Likewise, Bowen (2012) pointed to the need for adequate financial resources and administrative planning as factors needed for the implementation of physicians' assistants into any health care system.

Taylor et al. (2013) suggested that areas of ambiguous roles and responsibilities of the physicians' assistants act as a barrier in utilizing their services in the hospital setting. Levels of autonomy, lack of clarity on the delegation of acts, lack of regulation, integration, the preliminary need for thorough supervision and on-the-job training were all listed as hindrances to hiring physicians' assistants (Taylor et al., 2013). Finally, Dunker, Krofah, and Isasi (2014) pointed to the importance of the law and regulation as a primary element that supports a role of physicians' assistants. Laws and regulation defined the scope of practice for physicians' assistants (Dunker at al., 2014). In the United States, legislation was used to outline the medical tasks and the method of supervision needed for the physicians' assistant role. Prescribing limits, the need for continuing medical education, licensure, and funding and economic incentives were all influenced by legislation (Dunker et al., 2014).

While these are all significant contributions, a study of the physicians' assistant role in the health care system of Trinidad and Tobago was lacking in the academic literature. Likewise, an examination of this complex issue from the theoretical perspective of Abbott's theory of profession was not conducted by other researchers. I assessed the specific problem of the lack of the physicians' assistant role in the Trinidad and Tobago health care system using Abbott's theory of profession to ascertain why this is so. I assessed institutional, regulatory, and cultural norms and barriers that may be impeding the introduction of this role. I examined professionalization as a key supporting mechanism in the introduction of a new profession.

Purpose of the Study

The purpose of this qualitative study was to find plausible explanations as to why physicians' assistants were not utilized in the health care system of Trinidad and Tobago, using Abbott's theory of profession as the theoretical lens. Beyond understanding potential barriers that may exist, my goal was to put forth strategies that may facilitate policy changes to promote greater acceptance and implementation of this valuable role. More importantly, I offered an opportunity to expand the literature's review on the role of physicians' assistants in developing countries including Trinidad and Tobago. In particular, I examined the importance of professionalization as a supporting mechanism in the introduction of a new profession. The results of this study offered an important insight for public administrators in Trinidad and Tobago an in as to the viability of the physicians' assistants as an alternative to alleviating the current problems plaguing the local emergency departments and the healthcare system of Trinidad and Tobago at large.

Furthermore, I highlighted key institutional, regulatory and cultural norms and barriers that may influence the decision not to introduce physicians' assistants into the Trinidad and Tobago health care system. One of the most common factors that initiated the introduction of physicians' assistants into to any health care system is physician shortage (Jones, 2011). Jones (2011), also stated that there is a need for educational programs, the accreditation of these educational programs and necessary legislature to approve physicians' assistants a health care profession (Jones, 2011). Additionally, Bowen (2012), stated the need for adequate financial resources and administrative planning as factors needed for the implementation of physicians' assistants into any

healthcare system. As such, the introduction of this position can be used to enhance the delivery of healthcare in Trinidad and Tobago as it does in the United States, Canada, Australia, Africa, the United Kingdom and other areas in the world. I assessed if the current organizational structure of the health care system of Trinidad and Tobago can support the introduction of the physicians' assistants profession and assessed what existing factors act as deterrents to the introduction of this profession.

Research Questions

The primary research question in this study was: How does professionalization support the introduction the physicians' assistant role in the health care system of Trinidad and Tobago? To answer this principal research question, I also asked this secondary question: How do jurisdiction, societal factors, professional competition, and legitimization, support the introduction of the physicians' assistants role in the health care system of Trinidad and Tobago?

Theoretical Framework

Abbott's theory of profession was the theoretical backdrop to demonstrate key barriers to introducing physicians' assistants into the health care system of Trinidad and Tobago. Abbott (1988) defined a profession a professional group that applies specialized knowledge and skills to accomplish work tasks that treat or solves a client's problem. According to Abbott (1988), professional duties are created, abolished or reshaped by external forces resulting in changes in the system of a profession. These changes resulted from changes in technologies or techniques, fight over jurisdiction, variations in the organization, negotiation in new jurisdictional settlements, or disturbances within the

system. These changes stemmed from the law, within the work place itself, and public opinion (Abbott, 1988). Each profession has a jurisdiction over its protected practice in which to resolve an issue.

Abbott (1988) also proposed that professions do not act or exist in isolation but rather make up an interdependent system whereby each profession performs with various professional claims and jurisdiction. Within the system, the profession may have full control or may be subordinate to another group (Abbott, 1988) all of which may come together for the efficient operation of an organization.

In this sense, Abbott's theory of profession was a unique lens to study this phenomenon particularly in the definitional context of "profession." Abbott (1988) also indicated that jurisdictional disputes amongst professions are perpetual thereby leading to organizational changes and development.

Nature of the Study

The purpose of the qualitative study was to explore why the profession of physicians' assistants have not been introduced in the health care system of Trinidad and Tobago. Creswell (2015) stated that qualitative research design investigates an assumption about a social problem via data collection and data analysis to establish patterns and themes that may facilitate a more in-depth perspective on the subject matter. Qualitative studies are used to understand the sociocultural interactions among groups and systems (Merriam, 2002). As such, I used this method of inquiry to explore the reasons why the physicians assistant role is yet to be introduced into the Trinidad and Tobago health care system. Ethnography is a holistic view point on the perceptions,

behavior, practice and culture of existing in a setting (Reeves & Hodges, 2008). As such I used ethnography to get a holistic perspective on the professionals in the local health care system in regards to the introduction of a new profession into their environment

The qualitative inquiry took place in the hospital where I administered an interview and questionnaire. The data collection method that I used in this study included an interview, questionnaire and a content analysis of similar related research. According to Creswell (2015), interviews allow the interviewee to answer the open ended questions in their own words thereby allowing the collection of data with greater depth and width; a wider perspective. Likert scales are close ended questions that a researcher may use to collect data relating to the opinions of respondents and their perception of different issues (Creswell, 2015). Therefore, I incorporated both open ended and closed ended questions in the interviews and questionaires to collect data.

For the qualitative approach, expert interviews and a questionnaire of at least twenty stakeholders were the primary methodological data collection devices. I taped the interview with an audio recorder and transcribed it for increased accuracy. The expert interview was a structured interview approach to allow me to collect the relevant data for this study. Therefore, using purposive sampling experts were chosen to ensure I collected the data needed to answer the research questions.

I analyzed the research data with the help of the Microsoft Excel to help find insights on the data collected and analyzed. I incorporated the triangulation of the data from the questionnaire, interviews, content analysis and the comparison of studies to validate the data that I collected.

Operational Definitions

Accredited educational programs: Educational program through an external quality assurance process ensures that curriculum meets best practice standards (U.S. Department of Education, 2017).

Administrative planning: The process of ensuring that the goals and objectives of a company is aligned to the mission and strategic direction of the company through a number of operational steps to support organizational improvements (Georgia College, 2017).

Allied health professional: A professional in the healthcare sector that is distinct from medicine and nursing that gives support to the providers of direct patient care (De Luca, 2017).

Content Analysis: A research method that interprets and codes documents to make replicable and valid inferences on a subject matter (Terry College of Business, 2012).

Emergency care: The service provided to a patient that presents to the emergency department with a high degree acuity level (Miriam-Webster's collegiate dictionary, 2017).

Ethnography: The study of social interactions, perception and culture of a group (Reeves & Hodges, 2008).

Legislation: Laws suggested by the government and made official by the parliament (Cambridge University, 2017).

Likert Scale: A data collection tool that ascribe quantitative value to qualitative data to allow for statistical analysis of attitudes, behavior and belief of the respondents (Kumar, 2005).

Patient wait time: The length of time it takes for a patient to get treatment measures from the time the patient was registered to the emergency department (Hing & Bhuiya, 2009).

Physicians' assistant: A certified licensed medical professional who practice medicine under the supervision of a physician (American Academy of Physicians' assistants, 2017). They conduct physical examinations, diagnose and treat illnesses, order and interpret tests counsel on preventative healthcare, assist in surgery, and write prescriptions for patients (American Academy of Physicians' Assistants, 2017).

Physician: A professional educated, clinically experienced and licensed to practice medicine (Miriam-Webster's collegiate dictionary, 2017).

Profession: A paid occupation, especially one that involves extensive training and a formal education (Oxford University Press, 2017).

Professionalization: The social process of a trade or occupation becoming a profession of high integrity and competence (Miriam-Webster's collegiate dictionary, 2017).

Professional jurisdiction: Experts in a certain area in which a number of privileges are involved such as control over training, recruiting and licensing (Krozen, Van Dijk, Groenewgen & Francke, 2013).

Qualitative study: the study of the assumptions and perception of research problems to explore the meaning groups attribute to that problem (Creswell, 2015).

Theory of profession: The power and reputation granted by society to a profession in terms of protecting public interest where professionals acquire a body of knowledge, which is connected to the major needs and values of society (Pollock & Amernic, 1981).

Triage: The sorting and allocation of treatment to patients based on the level of urgency (Miriam-Webster's collegiate dictionary, 2017).

Assumptions

The study was supported by the theoretical framework of Abbott's theory of profession. I assumed that the framework was adequate to support the answering the research question and to allow me to make recommendations to facilitate the introduction of the physicians' assistant profession in Trinidad and Tobago.

I used expert interviews and questionnaires as a source of data to ensure that the participants were knowledgeable about the research topic. The participants were all professionals with a stake hold in the health care system of Trinidad and Tobago. I assumed as stakeholders, they wanted to participate in the study because it gave a resultant perspective that can help improve the health care system.

In addition to participation, I assumed that the participants gave fair and objective answers. The questionnaire and interview details were confidential. The participants were anonymous and as such, I assumed that they were more confident in giving truthful answers.

The profession of physicians' assistants does not exist in Trinidad and Tobago. I assumed that a brief introduction on the term was needed if the informant was not familiar with the roles and responsibilities of the profession.

I also assumed that physicians' assistants will have a positive impact on the local health care system due to the physician shortages that exist. The introduction of physicians' assistants in the Trinidad and Tobago health care system can reduce the burden on the deficient numbers of physicians. Introducing physicians' assistants can improve the ratio of clinical professionals to patients in the emergency department. This increased workforce may allow a higher turnover of patients and consequently a decrease in the patient wait time in the emergency department. Reduced waiting time may also lead to improved patient outcome and increased patient satisfaction. I assumed that this positive social impact was an incentive for the expert professionals to participate in the study.

I assumed that there may be resistance to the introduction of the physicians' assistant role by the physicians. Consequently, physicians may want to protect their professional jurisdiction and safeguard their skills from physicians' assistants. As such, a range of professionals including clinicians and administrators were selected to reduce the possibility of any biases.

As a new profession, I assumed that physicians' assistants will have to gain the trust and confidence of their supervising physician and the public. It may therefore take some time to become comfortable and assured about their competence.

There may also be an expectation that malpractice may be high amongst the physicians' assistant population. Additionally, as a new profession in Trinidad and Tobago, I assumed that the necessary infrastructure will be lacking, policies or legislature to support the introduction of physicians' assistants into the health care system may also be absent.

Adequate staffing is necessary in the delivery of healthcare. Abbott (1988) looked at specialized knowledge in disciplines and the dynamics of their formation and professionalization. Expert knowledge is needed in healthcare, as changes in techniques and procedures are ever changing to improve patient management and outcome.

The introduction of new professions was one way to keep up with technological changes, thereby causing changes in professional jurisdiction (Abbott, 1988). I stated a number of assumptions that highlighted a number of situations that are outside my control and without which can make the study irrelevant.

Scope and Delimitations

Even though, the health care system of Trinidad and Tobago has both a public and private sector. The scope of the study focused on the public aspect of healthcare. The research also focused on collecting data from the physicians, administrators and the decision makers because these were the individuals that have the most influence in introducing physicians' assistants role into the local health care system.

There were no limits to the studies used as references, especially in regards to the theorteical frame work. The major author of the theory of profession, Andrew Abbott wrote most of his work on the subject matter in the early 1980's.

The study was limited to the introduction of physicians' assistants in the emergency department. Due to patient's acuity, the role of physicians' assistants can best enhance the delivery of service in such an important department.

Trinidad and Tobago is a small island with five health regions. As such, data collection was limited to these regions and the select experts that worked within it. This study can be generalized and transferable to other health care clinics within Trinidad and Tobago and to health care systems in small countries similar to Trinidad and Tobago.

Limitations

Weaknesses of this study were low response rates. Firstly, I invited the Ministry of Health, the relevant Regional Health Authorities (RHAs) and two tertiary level instutions that have medical and health education programmes to particpate in the research. Two of the five Authorities did not approve participation in this study in a timely manner. Similary two of the main teriary level institutions did not respond to the invitation for participation. The Ministry of Health indicated interest and as such, I sought approval for the research proposal at the office of the Medical Chief of Staff in the Ministry of Health, whose office is responsible for academic studies in the RHAs. It is through this approval , I demonstrated to the Ministry of Health the importance of researching this topic in view of the shortcomings in health care staffing currently faced by the country.

A second limitation of the research was a small sample size. Trinidad and Tobago are small islands, with only five Health Authorities. As such, a focused, expert interview was one of the methodologies that was used to ensure that necessary data was

collected. Additionally, a lack of prior research on this topic in Trinidad and Tobago was also a limitation since this may limit the literature review of the research. Nevertheless, this was cited as a possible gap in the literature and can be used as a foundation to build on current knowledge.

Qualitative studies incorporates interpretation of data. This may cause a limitation because researcher bias may influnce its analysis (Creswell, 2005). The data collection process was time cosuming and expensive. I had to take time off from employment to carry out the interviews and to administer the questionnaires. Similarly, I covered all the expenses of the research.

Significance

The specific problem of the nonexistence of the physicians' assistant role in the Trinidad and Tobago health care system was assessed using Abbott's theory of profession to ascertain why this is so. Beyond understanding the potential barriers that exist, this study aimed to examine professionalization and how it explains the physicians' assistant role in Trinidad and Tobago.

Significance to Theory

This study provided a foundation towards the progression of knowledge in this discipline, from two perspectives. Firstly, it looked at the role of professionalization through Abbott's theory of profession in the introduction a new profession in a developing country. I assessed how changes in technology, conflicts over professional jurisdiction and the division of expert labor, the enactment of legislation and public

opinion can make drastic shifts in the professional landscape of an organization so much so to allow a new profession to emerge.

Moreover, I offered an opportunity to expand the literature's review on the role of physicians' assistants in developing countries including Trinidad and Tobago. The results of this study provided valuable insights for public administrators in Trinidad and Tobago in regards to the viability of the physicians' assistants as an alternative to alleviating the current problems plaguing the local emergency departments and the health care system of Trinidad and Tobago at large.

From these observations, one can begin to draw out the significance of a study of physicians' assistants in emergency rooms for instance. Preliminary research revealed that there was no prior research on physicians' assistants in Trinidad and Tobago. In fact, there appeared to be limited evidence of existing research on Trinidad and Tobago's health care system in general. Searches in PubMed demonstrated 272 studies related to emergency health care in Trinidad and Tobago. However, less than a handful of studies provided some degree of relevance to need for change in the health care system in Trinidad and Tobago. Data from this research highlighted that there was limited attention on the subject matter in literature; and consequently, conducting this research helped to fill this gap. Future researchers can use this study as a foundation to add to academic knowledge on the subject matter.

Significance to Practice

For practitioners, this study was significant because it provided new evidence, which public administrators and other stakeholders in healthcare can use to improve their

activities related to the provision of healthcare. Evidence-based research has over the years influenced practice in many organizations (Sackett, 2006). As a result, data collected from this research study can help support and effect change in local healthcare policy-making. Regarding social change, the results from this research may improve our understanding of some of the most pressing challenges that healthcare systems in developing nations such as Trinidad and Tobago face and perhaps offer alternative approaches to improving the delivery of healthcare.

This study had relevance to the Public Administration discipline in that it provided an opportunity to explore a general problem from a unique perspective of Trinidad and Tobago and the Caribbean. The introduction of the physicians' assistant profession in Trinidad and Tobago can have many positive social impacts. Many studies have shown improved patient care with the introduction of physicians' assistants into the health care system. For instance, Doan (2013) systematic review documented that the length of stay in the emergency department decreased from 127 minutes to 53 minutes after physicians' assistants were introduced into the department. Likewise, ninety one percent of emergency department physicians had confidence in the physicians' assistants that they worked alongside.

According to Bohm et al. (2010) study, the physicians' assistant roles and tasks saved 204 hours per year of their supervising physician's time, which can then be used for other clinical, administrative, or research purposes. Additionally, Ducharme et al. (2009) found that with physicians' assistants on duty, the patients that left without being seen in the emergency department were significantly decreased. Additionally, an

investigation of the early economic impact of physicians' assistants on rural or solo practices found physicians' assistant to be an asset (Hooker, 2006).

Introducing physicians' assistants into the healthcare system can, therefore, improve physician's shortage in emergency care and improve patient wait time in the emergency room (Sacks, 2002). Consequently, reduced wait time can lead to increased patient satisfaction and improved patient outcome (Sacks, 2002).

The introduction of the physicians' assistant role will also usher in many public policy changes in Trinidad and Tobago. Government policies will have to include those that cover licensure, regulation of roles and responsibilities, consistency in professional standards, accountability and interprofessional collaborations and restrictions. Since this profession currently does not exist in Trinidad and Tobago, policy implementation will require engagement of the policy implementation cycle.

Significance to Social Change

The study of the role of professionalization in the introduction of physicians' assistants in the healthcare system can initiate several social changes. Once such change is a greater understanding of how the theory of profession can influence the everyday operations of the workplace. For instance, it can affect trade union relations within the organization in regards to the resolution of jurisdictional disputes. An understanding of the concepts of professionalization may improve conflict resolution amongst established and emerging professions (Abbott, 1988). Similarly, an understanding that improvements in technology and medical procedures require investments in the continuous training and retraining of professional staff to ensure that the public is given

healthcare that is aligned to best practice ideals. Additionally, acknowledging the role of public opinion in professionalization can allow the healthcare system to consider the public as an active stakeholder in the delivery of healthcare by ensuring that their needs and concerns are addressed.

The above determinants of professionalization work towards improving the delivery and the access of health care. These improvements ultimately work towards better patient outcome and prognosis and the health and well-being of people around the world depend critically on the efficiency of the health care systems that serve them (World Health Organization, 2000). The World Health Organization (2000) further stated it is not just about financing or geographical access but there needs to be a balance in the inputs that counts, there must be the right number of professionals to support the physicians in an efficient health care system. A health care system with professionals who properly executes their duties can promote a healthy population.

Summary and Transition

The paragraphs above highlighted the need to improve patient wait time by addressing physician shortages in Trinidad and Tobago. The physicians' assistant role is an option to meet this need. As such, the aim of this study was to assess whether the health care system of Trinidad and Tobago can support the physicians' assistants role. This chapter gave an introduction and background of the problem identified. Also, the purpose of the research was detailed. A description of the qualitative methods used in the investigation was given. The assumption, limitations, and delimitations of the study were also presented. The operational definition of the key words in the research was presented,

and the significance of the study was also reviewed. A review of the literature on the health care system in Trinidad and Tobago, the physicians' assistant's role and Abbott's theory of profession, are discussed in the following chapter.

Chapter 2: Literature Review

Introduction

The introduction of new professional roles such as physicians' assistants in the health care system was done to alleviate physician shortages in many medical institutions. Although introduced into the healthcare workforce in the 1960s, this profession does not exist in Trinidad and Tobago. The purpose of the study was to understand the health care system of Trinidad and Tobago and in particular, provide plausible explanations for the inexistence of the physicians' assistant role in the island's health care system. After explaining the literature review methodology, I will present a brief historical summary of healthcare in Trinidad and Tobago. This section precedes a general introduction to the literature on emergency health care, and how prior research has examined the physicians' assistant profession. I gave particular emphasis to studies from the Caribbean region and developing countries. Studies that identified barriers to the introduction of the role of physicians' assistants was discussed. The literature review concludes with an examination of Abbott's theory of profession. After which, I will discuss in detail the key foundational concepts and driving mechanisms of this theory.

Literature Review Strategy

The search strategy to ascertain scholarly resources on Abbott's theory of profession, professionalization and the role of physicians' assistants involved electronic searches on academic databases such as Cumulative Index to Nursing and Allied Health Literature [CINHAL], Latin America Caribbean Center in Health Sciences Literature

Database, Medline/ Pub Med, National Research Register and Health Services Research Projects in Progress, Pro Quest Central, Sage Premier, and Science Direct.

I conducted additional searches in Walden University library resources to further identify literature that was relevant to the study. These included access to books, dissertations, and research studies. The primary search engines used were google scholar, google and chrome. The key words that I used in the search strategy were *physicians' assistants, physicians' assistant role, physicians' assistant profession, physicians' assistant barriers, physicians' assistants in developing countries, physicians' assistants in the Caribbean, emergency care in the Caribbean, and theory of professions.*

There were no language restrictions or time restrictions applied to the literature research. I included articles more than five years old to get a historical perspective on the subject matter. Additionally, I did not list any major exclusion criteria for assessing studies related to physicians' assistants.

I searched for unpublished studies on the following electronic databases: National Research Register and Health Services Research Projects in Progress were also undertaken. I reviewed relevant abstracts and some full-text articles to determine eligibility for inclusion in the literature review according to the defined criteria.

I found that searches on studies that used the theory of profession in health as their theoretical foundation were limited. As such, I performed a more generalized search on the theory of profession. I will address Andrew Abbott's theory of profession as well as a present studies that incorporated this theory in their study.

Theoretical Foundations of the Theory of profession

I assessed the theory of profession using a sociocultural perspective to determine the barriers of introducing the profession of physicians' assistants in Trinidad and Tobago. I attempted to understand why an organization is the way it is by assessing the rules, policies, and regulations of the organization and the social and cultural factors that influence them.

Professions offer expert services that address the clients' problems (Abbott, 1988). According to Abbott (1988), the characteristics of a profession are acquired through higher education, national professional association, ethical codes, protected titles and academic journals. The physicians' assistant profession includes all of the characteristics listed above. Abbott (1988) stated that professions have a control of knowledge that defines their tasks and classifies ideal professions as the clergy, medicine, and law. Globalization and industrialization have challenged these ideal professions, as ancillary roles have challenged the original jurisdictions to allow recognition and acceptance.

There are many dynamics that allow change to occur. These dynamics include jurisdiction, societal factors, competition and legitimization (Abbott, 1988). One such condition is the opening or closing of professional jurisdiction (Abbott, 1988). Since physicians have always controlled the jurisdiction since the inception, of the field of medicine, the introduction of the para-medical role of physicians' assistants has caused disturbances in the established system. Stabilization of the system can take place when

jurisdictional settlements occur (Abbott, 1988). One such need for jurisdictional settlements occur due to the division of labor.

Societal factors that may affect professionalization are changes in technology and the commodification of knowledge (Abbott, 1988). Technological changes have given rise to new professions and the revision of tasks. For instance, advances in technology within the medical field has allowed specialties profession to be developed as these specialist focus on a particular task through the division of labor. This action has in turn left spaces available in the bureaucratic organizational chart to allow emerging professions such as the physicians' assistants to perform the lesser status task that was previously performed by the physician.

According to Abbott (1988), professional knowledge has encouraged interprofessional competition. The addition of new knowledge and the replacement of old has allowed for changes to occur in the profession and to a larger degree the organizational structure. Addition of knowledge creates more focused specialties and as such, the introduction of new professions. More so, the division of labor has introduced a contest for jurisdiction amongst the multidisciplinary bureaucracies that were developed. Similarly, replacement of knowledge has made other professions redundant or obsolete.

Legitimization of the profession is needed to assert cultural authority (Abbott, 1988). Legitimization justifies what a profession does and how it is done (Abbott, 1988). As such, its results are culturally accepted. Technical and scientific expertise are often used to legitimize paramedical specialties thereby, validating the need for legal parameters and licensure to legitimize professions (Abbott, 1988).

Universities are paramount in concreting professionalism, such that educational institutions are considered as the seat of knowledge in modern society (Abbott, 1988). Obtaining a university degree is the first step in professional practice, and as such, each profession should have a well-grounded academic program to provide its students with the knowledge and the tools needed to perform efficiently in their profession (Abbott, 1988). Higher education is an important element of professionalization (Abbott, 1998). Additionally, there also needed to be fiscal measures in place to allow for the incorporation of a new profession in the hospital system. Available finances are needed to build infrastructure, purchase tools and pay salaries for those recruited in the new professional role.

The provision of healthcare is defined by changing sociocultural ideologies, the introduction of a range of technologies, and the formal recognition of particular groups through the introduction of education and regulation (Nancarrow & Borthwick, 2005). As such, this allowed for a changing workforce via the introduction of new professions (Nancarrow & Borthwick, 2005). Within recent years the healthcare profession has evolved into a more patient centered occupation. As such, problems plaguing the delivery of healthcare such as staff shortages, is a catalyst for changes within professions. Through the expanding of the boundaries and roles of a profession, this expansion allow the health care professionals to provide more inclusive health care (Nancarrow and Borthwick, 2005). Similarly, the emergence of a new profession may so the same. Physicians' assistants were therefore introduced by Dr. Eugene Stead Jr. to assist in the shortages that existed in the doctors' population in the United States (American

Academies of PAs, 2019). Many external factors such as staff shortages have allowed for de-professionalization, post professionalization, diversifications, and professional unions and divisions (Nancarrow & Borthwick, 2005). These concepts have allowed ever-changing boundaries within professions that initiate an emergence of new professions, new roles and or new responsibilities.

Sanglard-Oliveira et al. (2012) indicated that oral health technicians in Brazil had a long journey before being legally recognized as an occupation. Even though dental technicians existed since the early 20th century, the legislation to recognize them as a profession was only enacted in 2008 (Sanglard-Oliveira et al., 2012). The introduction of oral hygiene technicians in the health care system allowed for greater patient coverage (Sanglard-Oliveira et al., 2012). The historical need for the professionalization of oral hygiene technicians involved the liberation of specialized profession from a simpler function of dental work and to expand dental services at a lower cost (Sanglard-Oliveira et al., 2012). Because, the oral health technicians were supervised by dentists, their lack of power and autonomy limited their recognition as a profession (Sanglard-Oliveira et al., 2012). Through Abbott's theory of profession, the oral hygiene technicians were able to use professional jurisdiction and their work range to claim mastery over their jurisdiction (Sanglard-Oliveira et al., 2012). Abbott (1988) indicated that this claim can only be made through the legal system where they were given formal control over their professional work, public opinion where they can influence, pressure the legal system in their favor and the ability to adjust the work setting due to cultural and social determinants. As such, there must be reconciliation between a public position and its

perception in the work place (Sanglard-Oliveira et al., 2012). If the public opinion is not in support of a profession, it will be difficult for that profession to have mastery over its jurisdiction in the work place, due to a lack of public confidence (Sanglard-Oliveira et al., 2012). Abbott stated that this permanent dispute amongst professions is aimed at maintaining a monopoly in the field (Sanglard-Oliveira et al., 2012).

Cummins (2002) examined whether bioethics consultation could be classified as a profession. Cummins (2002) acknowledged that social changes allow alteration in the boundaries of all professions. Theoretical concepts in trait theory, Wilensky's five-stage process of professionalization, Abbott's interdependent system of professions, and Haug's de-professionalization thesis indicated that bioethics consultation have not met the required criteria to be classified as a profession (Cummins, 2002).

Disruption in the family physician- specialist collaboration can compromise quality of care to the patients (Beaulieu et al., 2009). Using Abbott's professional theory, Beaulieu et al. (2009) aimed to get a deeper understanding of collaboration between specialties learned within medical schools. The framework covers concepts of professional identity, professionalism and professional interactions and collaboration (Beaulieu et al., 2009). According to Abbott (1988) the concept of specialization and expertise is fundamental to professionalization. Every profession must defend its legitimacy and jurisdiction to preserve its social status amongst other professions in the workplace, training field and academic knowledge (Beaulieu et al., 2009). It is in the workplace that professional boundaries are negotiated every day (Beaulieu et al., 2009). The training field allows the professional identity to be shaped and commitment to the

profession is inculcated (Beaulieu et al., 2009). Similarly, the academic knowledge legitimized professional work and allows for the development of new expertise (Beaulieu et al., 2009). Abbott (1988) acknowledged that it was important for professions to differentiate themselves from each other because it supports professional autonomy. As a result of this, professional conflict may arise, and it is suggested that professional collaboration should be nurtured in the training of professionals (Beaulieu et al., 2009). For instance, radiologists are trained to act as consultants to family physicians in regard to the imaging techniques in the primary care setting (Beaulieu et al., 2009). Examination of the curriculum of the training programs revealed that there is no uniformity in collaboration skills, interchanging role terminology such as medical experts, skilled profession, scholar, other health care professionals, and interprofessional teams (Beaulieu et al., 2009). The survey amongst the professionals revealed that interprofessional collaboration was not formalized during clinical rotations but was instead learned on the job (Beaulieu et al., 2009).

Kroezen, Van Dijk, Groenewgen, and Francke (2011) performed a systematic review of nurses prescribing medication using Abbott's division of professional labor as a theoretical foundation. The legal, organizational and educational conditions in which nurses prescribe medication vary from country to country (Kroezen et al., 2011). Physicians in the past had the monopoly in prescribing medication to patients (Kroezen et al., 2011). According to Abbott, a profession can have jurisdiction over a particular task (Kroezen et al., 2011). However, in an interdependent environment, competing jurisdictional claims may occur in the legal arena, workplace and public opinion

(Kroezen et al., 2011). As such, due to physician shortages and a need for more efficient health care system, nurses through the division of labor and client differentiation facilitated a jurisdictional settlement which allowed nurses to prescribe medications to patients (Kroezen et al., 2011).

Von Knorring, de Rijk, and Alexanderson (2010) studied the manager's perception in a manager's role in relation to physicians in Sweden. The medical profession is one of the oldest and as such is a strong profession due to its training, organization and jurisdiction (Von Knorring et al., 2010). Physicians are responsible for legitimate medical tasks that are rarely disputed by other professionals (Von Knorring et al., 2010). The role of a manger is a fairly new and as such the manager's jurisdiction over their tasks may not be apparent (Von Knorring et al., 2010). Previously, health care administration had physicians acting as managers roles, however with the separation of the two roles one will have to consider how two independent and autonomous roles will relate to each other (Von Knorring et al., 2010). Von Knorring et al. (2010) showed that there was a need for jurisdiction negotiation as most chief executive officers found it difficult to manage physicians because the physicians had the highest status and expertise in the medical field, they lacked knowledge on the overall administration of the system and they do what they want within the organization (Von Knorring et al., 2010). Additionally, the researchers indicated that physicians that also acted as managers saw this position as an extension of their leadership role as a doctor and not as a manager (Von Knorring et al., 2010). Similarly, managers in an attempt to gain control over physicians in their daily work were unsuccessful in the strategies they employed such as

organization separation of physicians in the system, arguing and nagging, increased compensation and relying on the physician's role found that they decreased their manager role legitimacy (Von Knorring et al., 2010). Von Knorring at al. (2010) showed there is a greater need to clarify the manager's role, authority and responsibility to allow them to better manage the medical profession (Von Knorring et al., 2010).

Strand (2008) in her study enabling legislation for physicians' assistants in Puerto Rico revealed it was the only state in which the profession was not enabled as it is in mainland United States. The study looked at numerous professions' theory such as Abbott's perspective on interprofessional competition, Durkheim's and Marx's division of labor, and Goode's list of professional traits. High emigration of physicians, almost 39 % has left an area of need in the healthcare system of Puerto Rico (Strand, 2008). Notwithstanding legislation to enable the profession has been denied (Strand, 2008). The structured interview revealed that factors that lead to this failure included the perception that there was no problem in the health care system in regard to physician shortages, patient acceptance of physicians' assistants and the need for controlled organized medicine and thirdly the need to minimize scandal within medical regulation and the governor's office (Strand, 2008).

Bradley (1996), researched the changes in the health information system and how these changes affected health sciences librarians. Global networking and changes in health care delivery were two external environmental forces that ushered changes in the view of health care information and how it is perceived (Bradley, 1996). According to Bradley (1996) Abbott's system theory of profession, suggested that changes in the

system may result in changes in the professional structure of healthcare librarians (Bradley, 1996). For instance, some specialties may struggle to remain relevant and others will emerge for official sanction and jurisdiction for new expert specialties (Bradley, 1996). Likewise, there may also be a rise in competitive struggle which may produce a new balance of information roles and responsibilities (Bradley, 1996).

Literature Review

Through the literature search I looked at physicians' assistants in the following capacities. These include roles and responsibilities, needs assessments, response to doctor's shortage, legislature regulating the profession, cost consideration when hiring physicians' assistants, barriers to the physicians' assistant profession, the autonomy of physicians' assistants, physicians' assistants training, physicians' assistants in primary care, and physicians' assistants in emergency care. The following paragraphs highlight what literature has covered on the subject matter. Thereafter, I reviewed a brief history on the health care system of Trinidad and Tobago, studies in emergency care in the Caribbean, physicians' assistants in developing countries, barriers to the physicians' assistant profession.

Collwill, Cultuce and Kruse (2014) study titled "will generalist physician supply meet demands of an increasing and aging population" highlighted that population growth and aging will increase doctor's workload by 29 % between 2005 and 2025. However, Collwill et al. (2014) predicted that there will only be a seven percent increase in physicians at the corresponding time. Thereby creating a shortfall in the need and supply demand for the patients who need the care of a doctor. Collwill et al. (2014)

recommended that a viable response to that shortfall could be a greater use of physicians' assistants.

Geographic mal-distribution of physician offices, increased specialization, reduced working hours, human resource shortages to name a few have been listed as factors that affect patients access to doctors in Canada (Doan et al., 2012). As such, calls have been made to find new approaches to help alleviate this drawback that exist in the provision of health care in the Vancouver region. (Doan et al., 2012). One initiative introduced, to assist with the shortfall in service is the introduction of Physicians' assistant role in the areas of minor injury (Doan et al., 2012). Physicians' assistants were initially utilized by the Canadian Forces in 1990 and have become fully recognized by the Canadian Medical Association by 2004 through the process of licensing and registration of physicians' assistant (Doan et al, 2012).

Two hundred and twenty-nine mothers were selected through random selection and who had no prior knowledge of the physicians' assistant role in the BA Children's Hospital. They were thereafter given a brief description of physicians' assistant training and scope of practice as well as that of physicians. They were then presented with one of three injury scenarios: sprained ankle, forearm laceration or forehead laceration. They were then asked to choose care between the physicians' assistants and the physician based on wait time tradeoff (Doan et al, 2012). Ninety nine percent of the participants were willing to accept physicians' assistant care for themselves and 96% of them accepted care for their children in exchange of reducing their wait times in as little as two hours. As opposed to waiting for a longer period for physician care (Doan et al., 2012).

Doan et al. (2016) revealed in 66 studies of physicians' assistants in Australia an average of 64 to 65 % need for use of the physicians' assistant role. O Connor and Hooker (2007) indicated that this model of profession might be beneficial to Australia in addressing medical workforce shortage.

Hooker and Muchow (2015) showed that States where physicians' assistant have restrictive license have under-utilized their services. Changing legislation to allow practice as per their training can over a 10-year period save the State as much as seven hundred and twenty-nine million dollars (Hooker & Muchow, 2015). The introduction of physicians'assistant role in the healthcare system has also allowed physicians to focus on the most important responsibilities by delegating some of their functions to the physicians' assistants. O' Connor and Hooker, (2007) concluded that hospitals found that they could substitute about 50 to 75 % of a doctor's work with one physician' assistant, with their broad-based training enabling them to quickly function in a number of different clinical environments.

The educational training of physicians' assistants has evolved over the years, now offering masters and doctorate degree in this paramedical specialty. Students spend on average 28 months in the classroom (Bruner, 2016). Courses also include medical students using the physician model of medicine using the medical school curricula (Bruner, 2016). Basic science, behavioral science and clinical medicine are all included in the program's curriculum (Bruner, 2016). After the didactic, students completed two thousand hours of clinical rotations in the field of obstetrics and gynecology, pediatrics,

general medicine, surgery, psychiatry, internal and emergency medicine to name a few (Bruner, 2016).

Structural barriers in the physicians' assistant role include increased administration, federal regulation, patient and physician resistance and third-party payment limitations (Halter et al., 2013). Nevertheless, since 2012 physicians' assistants were legally authorized to prescribe medication autonomously and to indicate and perform specific medical procedures in countries in which the profession is recognized (Timmermans et al., 2016).

Brief History of Trinidad and Tobago Healthcare System

Trinidad and Tobago have a two-tiered health care system, whereby private and public government hospitals provide health services to the population. The Ministry of Health, through the RHAs, is responsible for providing public health care to the nation. The government of Trinidad and Tobago provides universal health care to the citizens. As such, the 1.3 million citizens of Trinidad and Tobago have access to an array of health care services at no cost to them (Ministry of Health, 2016). The drawback of this universal health care system in the public domain has resulted in insufficient staffing and goods to provide a timely service to those who need it. This situation has allowed for a flourishing private healthcare system whereby the citizens utilize this alternative requiring financial payments for services rendered. However, for those who cannot afford private health care, the service offered by the government is their only option. The five RHAs have primary and secondary healthcare facilities that provide services that include but are not limited to the following: accident and emergency centers, laboratory

services, surgical services of most type pharmacy services, medical imaging services dental services for children and adults, specialists clinics for chronic and or lifestyle diseases, ante-natal and post-natal clinics, family planning clinics, child health clinics, and health promotion fitness programs (Ministry of Health, 2017).

Emergency Care in the Caribbean

Emergency health care is the rapid management of patients that present to the emergency department with a high degree acuity level (Morris, 2016). There are occasions in which the demand for acute care exceeds the ability of physicians and nurses to provide timely quality care, leading to emergency department overcrowding (Morris, 2016). Qureshi et al. (2011) found that prompt consultation in the emergency department reduced patient wait time, improved patient outcome and overall emergency department overcrowding. Collwill et al. (2014) highlighted that population growth and aging would increase doctor's workload by 29 % between 2005 and 2025. However, Collwill et al. (2014) also predicted that there would only be a seven percent increase in physicians at the corresponding time. Thereby creating a shortfall in the need and supply demand for the patients who need the care of a doctor. The researchers also recommended that a viable response to that shortage could be a greater use of physicians' assistants (Collwill et al., 2014). My research of literature demonstrated that even with the establishment of the physicians' assistants profession in the United States in 1970, there was still a predictable shortage in the delivery of healthcare given by doctors. The researcher's conclusion included highlighting the need for physicians' assistants especially in countries such as in Trinidad and Tobago that have not yet considered the introduction

physicians' assistants profession. This profession can be an alternative to fill the current and future gap that may exist due to inadequate numbers of doctors to supply the needs of the population they serve.

Patient satisfaction in many studies is used as an indicator of the quality of health care given to patients, as there is a positive correlation between both variables. For instance, Buchanan, Dawkins and Lindo (2015) found that in a Jamaican emergency department patient satisfaction survey, 59.9 % of the patients were satisfied with the level of patient care they received. However, the researchers also concluded that there was also a positive correlation between patient satisfaction and the education level of the patients (Buchanan et al., 2015).

Geographic restrictions were also cited as an inhibitor to adequate emergency healthcare. Nelson et al. (2015) found that in the restricted Mayaguana, Inagua, Crooked Island, Acklins, and Long Cay [MICAL] constituency emergency care was limited due to a lack of diagnostic equipment, lack of residential staff and a lack of facilities (Nelson et al., 2015). Conditions such as chest pains, abdominal pains, trauma and dysfunctional uterine bleeding required the patients to access emergency care in the Nassau County (Nelson et al., 2015).

Du Wolf, Aluisio, Muhlfelder, and Bloem (2015) of north east Haiti's emergency department found that all of three hospitals had 24 hours emergency department that was serviced by a medical doctor. All hospital had X ray and ultrasound services (Du Wolf et al., 2015). No computer tomography technology, oximetry equipment and emergency protocols existed (Du Wolf et al., 2015). There were limited airway equipment,

defibrillation equipment, emergency pharmaceuticals, sphygmomanometers, stethoscope and ambulance access (Du Wolf et al., 2015). There were many deficiencies in the emergency departments wherein interventions were necessary to provide quality health care.

Dewberry et al. (2014) study of Central Haiti hospitals concluded that there were no dedicated emergency registries in the seven hospitals assessed (Dewberry et al., 2014). Seventy one percent of the hospital had no formal trauma policies (Dewberry et al., 2014). There were limited medical imaging facilities with only 66 % of the hospital having x rays and 57 % with ultrasound (Dewberry et al., 2014). The most common reason for referral to the major hospitals were a lack of equipment at primary care levels and limited trained personnel at higher level facilities (Dewberry et al., 2014).

Marsh, Rouhani, Pierre, and Farmer, (2015) concluded a lack of attention given to emergency care in Haiti due to the limited public resources available for its adequate functioning. Additionally, there was no training programmes to prepare physicians for the practice of emergency care (Marsh et al., 2015). Review of an emergency department which opened in 2013, the researchers revealed an improvement in the care given to citizens and a conclusion that saw thoughtful investments in the emergency care and training system can meet the acute surgical and the traumatic disease needs of the population (Marsh et al., 2015).

Baird, Sammy, Nunes, and Paul (2014) evaluated ethical issues physicians faced in the emergency department when resuscitating patients. Thirty eight percent of the physicians had some training in emergency health care (Baird et al., 2014). The

physicians agreed that the survival rate for physicians were poor (Baird et al., 2014). Additionally, Baird et al. (2014) revealed that 41.2 % performed more than ten cardio pulmonary resuscitation over the past three years. The need for policies in advance directives and other legal concerns should be formalized with the introduction of educational programmes to allow them to better address their concerns in regard to cardiac pulmonary resuscitations (Baird et al.,2014).

Rivera and Torres (2015) assessed the need for palliative care in the emergency department in Puerto Rico. The researchers cited palliative care training as a response to overcoming barriers in managing patients that presented with the need for this type of care in the emergency department (Rivera & Torres, 2015). Rivera and Torres, (2015) stated that 35 % of the physicians felt uncomfortable providing such care to patients (Rivera & Torres, 2015). Forty percent of the physicians agreed that the lack of training in palliative care negatively affected their care of patients in such clinical state (Rivera & Torres, 2015).

There is an increasing incidence of asthma among children in the Caribbean (Cadelis, Tourres & Molinie, 2014). This has been attributed to ecological factors such as an increase in the Saharan dust in the atmosphere (Cadelis et al., 2014). The conclusion of the study included a positive correlation between increased visits to the emergency department for asthma related emergencies and days with increased Saharan dust particles in the air (Cadelis et al., 2014).

Edwards et al. (2013) carried out and observational study from 2007-2008 assessing patients who presented with severe sepsis in the emergency department of the

University of West Indies hospital. The results found that the most common causes of sepsis were pneumonia were 67 % and urinary tract infections were 46 percent (Edwards et al., 2013). Antibiotics administration was given within three hours post admission to the emergency department for 67.9 % of the patients (Edwards et al., 2013). Ninety five percent of the patients were admitted to the hospital wards with an average in hospital stay time of 9.5 days (Edwards et al., 2013). There was an in-hospital mortality rate of 25 % (Edwards et al, 2013). Regardless, of this the treatment protocol incorporated best practice standards and the mortality rate were lower than international comparators (Edwards et al., 2013).

Gingrich, Saul and Lewiss (2013) demonstrated the usefulness of point of care ultrasound in the emergency department in Haiti to diagnose intussusception. Traditionally, ultrasounds are performed in the radiology department, however in the emergency setting the lack of 24 hour ultrasound staff has compromised the need to diagnose patients in a timely manner (Gingrich et al., 2013). Consequently, physicians were trained to perform ultrasound tasks in a limited capacity with the ability to identify pathology in emergency situations (Gingrich et al., 2013).

Triaging is one of the administrative responses introduced to assist in physician shortages and increased wait time. Acosta, Duro and Lima (2012), found that they can organize the workflow of patients in levels of priority in regard to urgency in the triaging system. The 22 articles used in the review concluded that nurses were an excellent option for detailing triage and risk classification system to treat patients in the emergency department (Acosta et al., 2012).

Wait time in the emergency department has always been an area of concern in many hospitals. French et al. (2014) looked at the difference in wait time when nurses are compared to specialist doctors in the triaging section of an emergency department in Jamaica. French et al. (2014) concluded no significant time difference with the time in the emergency department when triaging is performed by nurses versus a specialist physician. Increased wait time were determined by wait time for radiological and laboratory services (French et al., 2014).

Valles et al. (2016) found that traumatic injury was a social problem that required investigation and intervention to preserve human life in Haiti's emergency departments. The emergency department treated patients based on the World Health Organization trauma quality recommendations and the advanced trauma life support system (Valles et al., 2016). As such, major trauma patients were attended immediately seen in the resuscitation room and time spent between admission and the operating room was minimized (Valles et al., 2016). These changes caused an improvement in the emergency department performance and a low percentage of mortality (Valles et al., 2016).

Jamaica has a high incidence of trauma and accounts for 40 % of the work load in the emergency department (Mc Donald, 2002). Mc Donald (2002) concluded that an organized system of care to ensure the necessary patients get immediate access to healthcare and staff trained in advanced trauma life support can reduce preventable deaths.

According to the World Health Organization, 1 out of 10 deaths is attributed to trauma or injury (Tansley, Schuumann, Amram, & Yanchar, 2015). Throughout the

years research has led to improvements in emergency care, reduction on morbidity and mortality in trauma (Tansley et al., 2015). Many of the progress was initiated in developed countries thereby creating a disparity in those who have access to emergency care and quality (Tansley et al., 2015). Consequently, the World Health Assembly urged World Health Organization States to make improvements in 10 areas deemed essential to improving services such as to assess pre-hospital and emergency care and to identify unmet needs (Tansley et al., 2015). The assessment carried out from these criteria revealed that eighty one percent of the facilities were not adequate to be operational and only one percent had the capacity to provide tertiary health care (Tansley et al., 2015).

Gonzalez and Soltero (2009) assessed a five-tier triage system in an emergency department. After implementation of the emergency algorithm index the patient wait time was correlated with their acuity. Gonzalez and Soltero, (2009) concluded that there were in appropriate stratification with some patients resulting in longer than average wait time for those patients that were under stratified.

Mohammed et al. (2006) studied 300 children who accessed emergency care services for asthma in Trinidad. Mohammed et al. (2006) revealed that over 50% of the patients were repeat visits. Predictors of these repeat visits included mothers with a history of asthma, exposure to perfume, use of corticosteroids, the rainy season, and a young age group between the ages of one to five. Mohammed et al. (2006), also revealed that there was poor post emergency room management, unconfirmed education about the disease process which lead to repeat visits putting a strain on the emergency services.

A study of the treatment of dengue patients in the emergency department was performed in Martinique. Thomas et al. (2010) revealed that in dengue endemic zones there was a need to introduce case management protocols and public health intervention to manage this disease. Five hundred and sixty patients presented to the emergency department at the Fort-de-France University Hospital with dengue related complications (Thomas, et al., 2010). These included 95 patients developed plasma leakage, including 39 patients diagnosed with dengue hemorrhagic fever, and 10 diagnosed with dengue shock syndrome (Thomas et al., 2010). Among the other patients without plasma leakage, 84 had isolated thrombocytopenia, 14 had internal bleeding, and 90 had unusual manifestations (Thomas et al., 2010). Seven patients died from one of the following complications: fulminant hepatitis, myocarditis, encephalitis, acute respiratory failure, gangrenous cholecystitis, and post-traumatic intracranial hemorrhage (Thomas et al., 2010).

The Physicians' Assistant Role in Developing Countries

Since its introduction to the United States, the profession has spread across to continents such as Canada, Europe, Africa and Asia, bringing relief to health care systems that were bursting at the seams. Hooker, Hogan, and Leeker (2007) indicated that physicians' assistants were considered with staff shortages, increased health care costs, healthcare access problems, and increased physician specialization.

In the developing world, the doctor-to- population ratios range from 1:5000 to 1:30 000 in sub-Saharan Africa, and 1:1400 in other parts, while in some parts of the developed world, the ratio is 1:300 (O' Connor & Hooker, 2007). The World Health

Organization estimated the health workforce shortage is 4.5 million and growing, consequently the physician shortage still exists (O' Connor & Hooker, 2007). The physicians' assistant profession helped bridge the gap for those who did not have adequate access to health care that existed due to these shortages. Green and Savin (2013) estimated there is one physician to 2500 in the United States. These workforce shortages can also compromise timely service or access to health care and unfortunately patient outcome.

Many studies such as Green and Savin (2013), O'Connor and Hooker (2007), Hogan, Hooker and Leeker (2007), concluded that physicians' assistants in many parts of the world have contributed to the workflow and productivity of the health care system. Countries like Australia, Canada, Great Britain, the Netherlands, Germany, Ghana and South Africa have all introduced the physicians' assistants role in addressing the shortages of physicians in these regions (Hooker & Everett, 2012). According to Hooker and Everett (2012), physicians' assistants have assisted in the comprehensive care of patients in both primary care and accident and emergency medicine. As such, physicians' assistants seem as a reasonable strategy for providing primary care for diverse populations as they through, the collaboration and guidance of doctors can contribute in many of clinical tasks and patient management. The following studies highlight the roles physicians' assistants play across the globe, particularly in developing nations.

Van der Biezen, Derckx, Wensing, and Laurant (2017) indicated that the increasing demand for primary care had highlighted the need to introduce other care

providers such as physicians' assistants to perform specific medical tasks. In their qualitative study, seven primary care managers and 32 general practitioners were interviewed on the factors that influence the training and employment of physicians' assistants in their primary care clinic. Van de Biezen et al. (2017) found that physicians' assistants who attend to patients with minor ailments reduced the doctor's caseload. The resultant substitution of care allowed general practitioners to agree that there could be the introduction of additional services and improvement in quality care (Van der Biezen et al., 2017). The primary factors that influenced the hiring of physicians' assistants include organizational factors such as the financial impact of employing the physicians' assistants, factors concerning professional relations, general physicians work load and job satisfaction, the general physicians experience with physicians' assistants as it emerged that those who previously collaborated with physicians assistants were more willing to employ them, vision of the physicians' assistant profession, and insecurities regarding the physicians' assistant profession (Van der Biezen et al., 2017).

Aaron and Andrews (2016), concluded the need to have physicians' assistants in Israel's healthcare system due to physician shortages and reduced access to health care. Even though this may be apparent, legislation was not ratified to allow the introduction of this profession into Israel. Aaron and Andrews (2016) looked at international barriers that affected the implementation of this profession. These include territorialism by other health professionals, educational isolation, licensing restrictions, no independent functions and a lack of an internationally recognized professional title (Aaron & Andrews, 2016). Recommendations made by Aaron and Andrews (2016), suggested that

the physicians' assistant role can be beneficial in Israel once it mirrors international models.

Eyal, Cancedda, Kyamanywa, and Hurts (2015) assessed at the role non-physician clinicians play in Sub Saharan Africa. Eyal et al. (2015) concluded that due to physician shortages and the disease burden of the sub-Saharan States, non-physician clinicians were introduced and have since become a cornerstone of healthcare in Africa (Eyal et al., 2015). Eyal et al. (2015) found that physicians' assistants equaled or exceeded the numbers of physicians in nine sub-Saharan countries. According to Eyal et al. (2015) 84% of caesarian sections were performed by non-physician clinicians in 2009. Similarly, 92% of laparoscopies for ectopic pregnancies were also performed by non-physician clinicians in the region (Eyal et al., 2015). In 2010, non-physician clinicians were found in 47 out of 54 African countries (Eyal et al., 2015). In 2014, every Ethiopian health care facility, the role of non-physician clinicians was utilized (Eyal et al., 2015). Challenges to maximizing the use of non-physicians' assistants in the healthcare system included limited decision-making policies and documented prescription drugs distribution regimes, insufficient professional status and recognition with limited room for growth, opposition from mainstream health professional societies, and limited training facilities (Eyal et al., 2015).

Wilson et al. (2011) in a systematic review on the outcomes of caesarian sections in the developing world concluded that there was no significant difference between clinical officers and physicians for maternal deaths and perinatal death. There was, however, a higher incidence of wound infection and wound dehiscence in the clinical

officers (Wilson et al., 2011). Wilson et al. (2011) indicated that this might point to a need for particular or focused training.

Atiyeh, Guun and Hayek (2010) recognized that surgical care is inadequate in remote and rural areas in low to middle-income countries due to a shortage of surgeons and anesthesiologists. Atiyeh et al. (2010) indicated that task shifting might be required via the training of non-physician clinicians to perform necessary surgery in rural and remote areas.

Similarly, Kruk et al. (2007) performed an economic evaluation on the use of surgically trained medical officers in performing obstetric surgery in Mozambique. Comparisons were made with the costing of specialist physicians performing obstetric procedures. Kruk et al. (2007) stated that a major obstetric surgery cost 38.9 USD with the assistant medical officer and 144.1 USD with the specialist surgeon. The study concluded that mid-level health care workers such as surgically trained assistant medical officers could be a response to providing health care in developing countries with a low availability of obstetric care and severe physician shortages (Kruk et al., 2007).

Bhalachandra (2006) acknowledged that there are limited health care resources to the Pacific island Micronesia. Patterning the "bare foot doctor" and the red medical worker concept in China where there was the mobilization of part time employees in the rural areas to provide affordable health care and improve the overall health of the community, training of indigenous people as health assistants to serve their community was introduced in Micronesia (Bhalachandra, 2006). A full-time physician was employed in the training of 16 candidates in English and new medical terms,

mathematics, health science and basic anatomy and physiology, bedside clinical training and communication skills for health promotion to name a few during an eighteen-month program (Bhalachandra, 2006). Fourteen candidates completed the program. They thereafter, provided healthcare to their communities under the supervision of medical physicians who were a radio call away on the main islands (Bhalachandra, 2006).

Mullan and Freywot (2007) concluded in their research on non-physician clinicians in 47 sub- Saharan African countries that in nine of those countries the role of non- physicians' assistant also called physicians' assistants were equal to or greater in numbers than the doctors. In fact, due to the disproportionate doctor: patient ratio in Africa, to assist in delivering healthcare to the population physicians' assistants were perceived as a benefit to the provision of healthcare. Non-physician clinicians were mainly recruited from rural and poor areas to allow the delivery of service to those in geographically restricted areas (Mullan & Freywot, 2007). All non-physician clinicians were trained in the diagnosis and medical treatment of patients (Mullan & Freywot, 2007). Many of the physicians' assistants had advanced training, specializing in procedures such as caesarian section, ophthalmology, and anesthesia to name a few (Mullan & Freywot, 2007). The use of non-physician clinicians as a viable option as a response to physician shortages because of its low - cost training and its ability to provides health care in rural areas.

The physicians' assistant role was also explored in Taiwan to meet the physician supply shortage that came with the introduction of the universal health insurance system (Chou & Hu, 2015). However, resistance from the medical board, nursing organizations

and failed legislation did not allow the introduction of the profession in Taiwan's healthcare system (Chou & Hu, 2015). The consequence of this public administrative policy resulted in the physicians' assistant role being absorbed into nursing practitioners. Nevertheless, staff shortages still plagued Taiwan's healthcare system, and efforts are currently on the way to revisit the need for the profession of physicians' assistants within the medical niche.

To date, there are no studies in regard to the use of physicians' assistants in South America, Central America and in the southern Caribbean islands. Due to this gap in the literature, this topic was of interest to investigate within the Trinidad and Tobago healthcare system.

Barriers to the Physicians' Assistant Role

Research has shown many obstacles hindering the introduction and or advancement of the physicians' assistant profession. The following studies highlight areas of training, legislative licensure, medical malpractice insurance specifications, required finances, knowledge of the profession, territorial professional jurisdictions protection as possible factors that can inhibit the introduction of the profession.

Government approval and assistance is crucial in overcoming barriers to the introduction of the physicians' assistant role into any health care system. The finances required to introduce any professions requires considerable financial planning and allocation. The government of Canada, through their Ministry of Health and Long-Term Health Fund, has supported the introduction and use of the physicians' assistants in the Canadian healthcare system (Health Force Ontario, 2017). The initiatives give financial

support of up to $46,000 to help approved employers provide employment opportunities to physicians' assistants graduates (Health Force Ontario, 2017). The program aims to encourage sustainability of the physicians' assistant profession (Health Force Ontario, 2017). Even though the government funds this program, the participating physicians are fearful of government's withdrawal of this fund and how it will impact their practice (Taylor et al., 2013).

Taylor et al. (2013) found that a lack of familiarity with the role and scope of practice inhibited physicians from integrating physicians' assistants in their practice. Physicians were mostly confused if they had to hand over the patient to the physicians' assistants after their clinical examination (Taylor et al., 2013). Additionally, there were reasonable concerns about the lack of clear guidelines from the Ontario Medical Association and the Ministry of Health Long-Term Care Fund (Taylor et al., 2013). Zwijnenberg and Bours (2011) also found many other barriers related to the physicians' assistant role. These included an improper legal framework to give the Physicians' assistants the authority to request x rays, lab works, and other investigative studies. Moreover, there were significant concerns about who was liable for the physicians' assistants in cases of malpractice and negligence (Taylor et al., 2013).

Farmer et al. (2015) in the two-year pilot study, had a mix up with the patient's notes and a change in a patient's drug regimen without consulting the supervising physician. Nevertheless, Brock, Nicholson, and Hooker (2015) showed data from the National Practitioner data bank that there was 1.4 – 2.4 per 1000 records of malpractice payment for physicians' assistants, as opposed to 11.2 to 19 per 1000 physicians.

Regardless of this, Bernard (2015) indicated that a medical doctor can be held responsible for the physicians' assistant malpractice due to improper supervision or for demonstrating negligence when hiring the physicians' assistant.

Bruner (2016) highlighted that an average post graduate physicians' assistant program duration is 28 months and includes a didactic and clinical component. Programs firstly must be accredited, and the accreditation status must be maintained (Bruner, 2016). Additionally, to practice, upon successful completion of the physicians' assistants' programme, students must be tested and certified by the National Commission on Certification of Physicians' assistants to receive a license to practice by the State (Bruner, 2016). In order to maintain licensure, physicians' assistants must complete recertification examination every 10 years and maintain one hundred hours of continuing medical education every two years (Bruner, 2016).

Another barrier to the physicians' assistant role integration into the current health care system. Resistance from other medical professionals, lack of hospital privileges and restrictions to the physicians' assistant role were all listed as barriers to integration (Taylor et al., 2013). Additional structural barriers in the physicians' assistant role included increased administration, federal regulation, patient and physician resistance and third-party payment limitations (Halter et al., 2013).

Summary and Conclusion

Throughout the years, there has been growth and expansion of the physicians' assistant profession in the countries in which this model has been introduced. As stated previously, despite the many reported advantages of having the physicians' assistant role

in the health care system internationally, this role continues to be excluded as an option in Trinidad and Tobago. Jolly (2008) recognized as an option to address workforce shortages was the introduction of a new health care professional. Jolly (2008) found in a patient satisfaction survey that more than forty thousand patients were equally satisfied with the care delivered by doctors, physicians' assistants and nurse practitioners. They found that the role of physicians' assistants was beneficial in rural locations and areas with an overall shortage of health care professionals. Jolly (2008) also highlighted that physicians' assistants delivered a cost-effective service as they attended to ten percent more patients than doctors per shift. There was also no increased liability in using physicians' assistants in any healthcare setting. Lastly, Jolly (2008) also showed that physicians' assistants also alleviated the workload of doctors.

Despite this, Trinidad and Tobago have not tapped into this resource. What then are the main contributing factors to this? Literature has exposed many internal factors such as monetary allocations for the training of staff, salaries and the addition or improvements of infrastructure that inhibit the introduction of the physicians' assistant role. Likewise, the local physician's attitude to the physicians' assistant role may also be an impediment to the introduction of the role. This study assessed the role of professionalization in the introduction of physicians' assistant profession in Trinidad and Tobago using Abbott's theory of professions thereby filling an academic gap.

Chapter 2 presented key literature highlighted the role and barriers of physicians' assistants in numerous settings. Chapter 3 will now discuss the methodology used

answer the research question, the data analysis plans and issues in regard to trust worthiness and ethics.

Chapter 3: Research Method

Introduction

The purpose of this study was to assess why the physicians' assistant role is not utilized in the health care system of Trinidad and Tobago and using Abbott's theory of profession as the theoretical lens. My goal was to generate new evidence, aimed at identifying how professionalization presents potential barriers that may be inhibiting this process. Chapter three includes the research methodologies that was used to answer the central research question of this study: How does professionalization support the introduction of the physicians' assistant role in the healthcare system of Trinidad and Tobago? Chapter 3 also includes the research setting, research rationale design, role of the researcher, the methodology, threats to validity, and issues of trustworthiness.

Research Setting

The health care system of Trinidad and Tobago was the setting in the evaluation of professionalization in the introduction of the physicians' assistant role as a profession. It is hoped by administrators that this profession can alleviate the congestion that may result from limited numbers of physicians to address the needs of the population. Trinidad and Tobago's universal healthcare system facilitates free healthcare for all those that wish to access it (Ministry of Health, 2019). Observation of the setting revealed that the public healthcare system in most cases was the first choice of care because the cost for the use of the system is subsidized by the government. Consequently, this has led to overcrowding, increased wait time, and the need to implement programs that aid in overcoming the limitations present when it is essential to have medical, surgical or

psychiatric care. Initiatives employed by the government to alleviate some of these problems included firstly medical triaging in the emergency departments. This included the evaluation and categorization of the patients when there are insufficient resources for the medical care of everyone at their arrival (Myer, 2001). Secondly, filter clinics were introduced within the emergency department that specifically attends to the patient with a low acuity score to facilitate a faster transition through the system. Thirdly, there was the introduction of extended hours of primary care facilities whereby hours of operation adjusted from 8 hours a day to 14 hours a day. Lastly, the employment of foreign physicians from Cuba, India and Nigeria to help alleviate physician shortages in Trinidad and Tobago (Ministry of Health, 2019).

There are five RHAs that provide universal healthcare to the citizens of Trinidad and Tobago. These RHAs support 98 health facilities, nine health centers, and seven major hospitals that operate as tertiary, secondary, and primary centers respectively (Ministry of Health, 2017). The key members or stakeholders of the organization were the government of Trinidad and Tobago, the minister of health, the board members of the RHAs that the hospital is a part of, the medical chief of staff, physicians, and the citizens of Trinidad and Tobago. Each member of this team was essential to the impact of the study as their cooperation were essential to the success of the research.

Research Design and Rationale

In this study I sought to answer the following: How does professionalization support the introduction of the physicians' assistant role in the healthcare system of Trinidad and Tobago? I sought to answer this principal research question, by asking the

following secondary question: How do jurisdiction, societal factors, professional competition, and legitimization support the introduction of the physicians' assistant role in the healthcare system of Trinidad and Tobago?

I utilized Abbott's theory of profession as the central concept to assess the barriers to the introduction of the physicians' assistant role in health care system of Trinidad and Tobago. Abbott's theory of profession defined profession as an exclusively professional group that applies specialized knowledge and skills to accomplish work tasks that treat or solves a client's problem (Abbott, 1988). According to Abbott (1988) professional duties were created, abolished, or reshaped by external forces resulting in changes in the system of a profession. These changes resulted from changes in technologies or techniques, fight over jurisdiction, variations in the organization, negotiation in new jurisdictional settlements, or disturbances within the system. These changes stemmed from the law, within the work place itself, and public opinion (Abbott, 1988). I used the framework of this theory, with the hope that by highlighting the clinical and administrative obstacles this new profession may to be introduced in Trinidad and Tobago to alleviate the problems that exist.

Qualitative Approach

I used a qualitative design for this study because the main purpose of the study was to explore and obtain a greater understanding on how professionalization supports the introduction of the physicians' assistant role in the Trinidad and Tobago healthcare system. Qualitative studies are used to obtain a greater understanding a social problem (Merriam & Tisdell, 2016). Qualitative studies also provides an explanation for complex

situations that can result in the evolution or creation of concepts, theories and hypothesis to explain the research problem (Denzin & Lincoln, 2011).

I intened to explore the reasons for the lack of incorporation of this valued profession in Trinidad and Tobago. Thus, the qualitative approach best suited this inquiry. Through this research I sought to understand how professionalization affected the implimentation of a new professional role. Qualitative research are used to explore and get more in depth information on a social problem, with methods used to encourage openess in the responses in the data collection process (Creswell, 2009).

The qualitative method encouraged openess in responses because the particpants were allowed explain their perspectives on the subject matter by allowing the expression of feelings and emotions (Denzin & Lincoln, 2011). This gives a more holistic insight on the focus of the research when analysing the data collected (Denzin & Lincoln, 2011). This openess provided data that has depth and detail which can facilitate the emergence of new data that can give an even greater understanding to the subject matter or initate enquiries into another social phenomenon (Sofaer, 2002). Merriam and Tisdell (2016) stated that the data collected from qualitative research can give researchers a more in-depth perspective on the social and cultural context in which the participants exist. Yin (2014) stated that interviews can be used to get an understanding of the phenomenon being studied by gathering descriptions of the participant's experiences. As such, I used interviews and questionnaires to gather the qualitative data needed by giving the particpants the opprtuinity give their opinion or view on the subject matter.

Qualitative research is considered effective because from the data collected, the researcher can make recommendations on the changes needed to improve the efficiency of an organization (Sofaer, 2002). I hope that the data collected from this research can highlight the possibility of using physicians' assistants as a remedy to physician shortages and emergency department over crowding or suggest through the theory of professions the steps needed to facilitate this.

Irwin (2013) listed a number concerns about the qualitative approach. One such concern is the inability to generalize the findings to the wider population due to its small sample size (Irwin, 2013). Creswell (2009) stated that a high degree of research skill is need to conduct a qualitative study. For instance, I had to interpret the data and the narrative collected to allow me to develop conclusions on the subject being studied. Another drawback of the qualitative research is the extensive time needed to conduct the research (Creswell, 2009).

Quantitative research included the gathering and evaluation of numerical data, to test a hypothesis or to infer results based on statistics (Mellinger & Hanson, 2016). Since I was not conducting any of the above, a quantitative study was not the best approach to assess how does professionalization act as a barrier to the introduction of physicians' assistants in Trinidad and Tobago.

Likewise, a mixed method was not appropriate because this research design is complex and time consuming to plan and execute. Creswell (2009) stated that in mixed method studies, it may be difficult for the researcher to explain discrepancies that may arise in the interpretation of the data collected.

Ethnographic Design

Ethnography is a qualitative research design that describes and inteprets shared perspectives, behaviour, values and culture (Creswell, 2009). Hollohan & Barry (2014) stated that the ethnograpic design is used to get a greater understanding of the culture of a group with the aim of getting a greater in sight on the research problem. The two main approaches to ethnographic designs: critical ethnography and realist ethnography. I used critical ethnography for the research design because it not only allows me to state the facts but allow me to present findings that support changes in the status quo. Thomas (1992) stated when it comes to issues of power and control critical ethnography is a good tool. It is through critical ethnography issues of empowerment, dominance, control, inequlity, and repression are studied (Thomas, 1992).

Spradley in Cook (2005), stated that ethnography can be utilized in qualitative studies to elicit a group's point of view or to understand their world. Ethnography was an appropriate method for this research because I used it to describe how professionalization can support the introduction of the physicians' assistant profession by studying the culture of the physicians and relevant stake holders through eliciting their point of view on physicians' assistants. Although Cook (2005) and Hardcastle, Usher and Holmes (2006) highlighted the need to have observation and or Carspecken's Five Stage Critical Qualitative Research Method as the foundational data collection method in critical ethnography it was not incorporated in this research. The main goal of the research was to assess the role of physicians' asssitant in the Trinidad and Tobago health care system; a role that currently does not exist. Observation as the primary methodological source to

try and understand their world would not have yielded the necessary information to answer the research questions because they are currently non existent in the local healthcare setting. As such, interviews and questionaires were used to assess their impending role through eliciting the perspectives of the stakeholders that do exist.

Additionally, because literature on physicians' assistants was deficient in Trinidad and Tobago, it was worthwhile to carry out this research to bring to the forefront the role of physicians' assistant and how they can contribute to the local health care system. The physicians' assistant role is not currently a profession in Trinidad and Tobago and many may not be familiar with the role of this group in the health care sector. This research filled this gap.

The Trinidad and Tobago health care system has operated for some time with vital professions suchs as doctors, nurses and administrators and it can be understood by healthcare stakeholders that these professions may have a cultural understanding on the status quo of the organization. As such, access through key informants via expert interviews allowed me to gather important information on the research problem.

I used the cultural themes in professionalization such as jurisdiction, societal factors, professional competition and legitimization obtain a greater understanding of the shared culture in the healthcare system of Trinidad and Tobago. This too, provided holistic data on the shared perspective on introducing this new profession in the local health care system. Themes and patterns arose to help answer the reseach question.

Data Source Triangulation

I collected data for this study from two primary data sources and two secondary data sources. Expert interviews and a questionnaire, comprise the primary data sources, while data from other studies and documents of policies and legislation on professionalization made up the secondary data.

The target population for the pool of interviewees was composed of individuals with a unique or specialized knowledge the health care system in Trinidad and Tobago; particularly those who were in a position to assess the barriers that exist to prevent the introduction of the physicians' assistants role. Through the expert interview in this research, I collected qualitative data relating to the opinions of respondents and their perception of different issues related to objectives of the study (See Appendix C).

Advantages of the expert interview method of collecting data included that it was a more efficient and concentrated manner of collecting data. Additionally, it shortened the data collection process since I collected the data from the experts that were considered surrogates for the wider population. It allowed me access to a specialized social field and it was more economical to interview a few experts rather than many lay persons. It was an easy access point to the institution behind the expert, as the experts normally hold key positions within the organization. Additionally, the experts may also suggest additional interviewees with expertise in a particular field. I have a shared health care background with the participants as such this may have increased motivation for the expert to participate in the interview process.

Questionnaires are used to collect standardized data to allow for objective data collection (Kumar, 2005). As such, I incorporated a questionnaire as a data collection tool. I quantified the data easily and analyzed it scientifically. This enabled me to collect data on basic demographics, such as the gender, occupation, age, and education. Additionally, the second part of the questionnaire focused on simple questions in regard to their knowledge and opinion on the professional role of physicians' assistants being introduced in the public health care system of Trinidad and Tobago. Kumar (2005) indicated that Likert scales can be used for ordinal psychometric measurement of the expert's attitudes, beliefs and opinions. As such, I utilized Likert scales in the questionnaire, which allowed me to perform the psychometric measurements on the topic of introducing physicians' assistants in Trinidad and Tobago (See Appendix B).

Statistical data from studies conducted by other researchers served to act as a comparative measure of the correlation of the individual variables and barriers being assessed. I used the convergent parallel design to integrate data during analysis. I analyzed the research result using Microsoft Excel as the tool to determine the relationship between the variable factors and the objectives of the research.

The Role of the Researcher

The role of the researcher is influenced by the chosen methodology (Jones, Rodge, Zivanni & Boyd, 2012). In qualitative methods, the creditability of the research is dependent on the skill and competency of the researcher (Maxwell, 2013). Additionally, it requires the application of high ethical and professional standards (Miles

et al., 2014). As the researcher in this academic dissertation, my role encompassed the following: I created the primary data collection tools; the interview and questionnaire. I obtained permission from the Medical Chief of Staff to administer the questionnaire and interview the relevant staff that can give the necessary information to answer the research questions. I identified potential participants and they were given an invitation to participate in the study. Once the participants agreed, a consent form was provided for them to review and to sign to indicate voluntary participation in the research project. Appointments were made as per convenient to the participants to administer the expert interview and the questionnaire. After approval was granted, I proceeded to gather the necessary primary data via the open and closed ended interview. As a result of the small sample, I hand delivered and administered the questionnaires. Additionally, the expert interview allowed me, through interviewing to clarify any issues the participants had.

As soon as the data collection process was completed, my responsibilities changed to that of a research analyzer. I coded, evaluated and interpreted the data collected to understand the obstacles that present itself in the introduction of a new profession in an already established system. Additionally, I transcribed the audio recording from the interviews and a copy returned to the participants if they wanted such.

There were no personal or professional relationships between me and the participants. Since there was no supervisory or instructor relationship between us, there was no need for the management of power relationships.

As a researcher, it was important for me to ensure that during the research there were no breaches to international ethical guidelines. A lack of conformity to these

guidelines were minimized in this research as a result of the fact that patients and patient's information were not required to conduct this investigation. However, under the Belmont report ethical principles, respect for the participant's autonomy were observed by providing enough information so that informed, voluntary decisions were made in regard to their participation in the data collection process. As such, the participants were required to give informed consent to make their contribution in the data collecting process.

Methodology

Participant Selection Logic

The population of the study were the stakeholders that were involved in the provision of health care in the public health care system in Trinidad and Tobago. These include the Medical Chief of Staff, Medical Directors, Hospital Administrators, Human Resource Managers and Clinical Head of Hospital / Departments to name a few. I used selective expert sampling because the data needed was heavily reliant on expert opinion and knowledge on the operation of the clinical aspect of the hospital. Additionally, expert opinion was needed on how the introduction of a new profession will affect the health care system of Trinidad and Tobago. Even though a non-probability method, the purposive sampling method, was used because the population selected gave the data needed to answer the research questions. The individuals selected were experts who fulfil the identified criteria for the study.

The criterion of the participants chosen for the research were: Actively involved in their area of expertise in the healthcare system of Trinidad and Tobago. Greater than

three years' experience in the public healthcare system of Trinidad and Tobago and or involved in the educational formation of the professions needed in the healthcare system of Trinidad and Tobago.

The sample size of the study was a representative portion of the population, in which data can be gathered. The sample must be adequate in size for the data generated to be considered trustworthy (Tashakkori & Teddlie, 2009). Saturation is the gold standard for purposive sampling whereby the collection of any more data will not provide any new information that can be integrated into the thematic of the study (Tashakkori & Teddlie, 2009). The sample size was expected to be small because the population to be sampled from was small. As per the attainment of data saturation, the sample size was determined when no additional data is collected from the primary data sources. Never the less for ethnographic studies it is recommended to have a sample size between 20 – 30 participants (Natasi, 2007).

I identified the participants by assessing the organizational structure of the relevant departments in the government agencies and the medical and para medical educational facilities in Trinidad and Tobago. There were on average 29 professionals who could provide the information needed for the research study. The Medical Chief of Staff in Trinidad and Tobago granted permission for the administration of the questionnaire and interview. I contacted him via email and telephone with scripts for the research project. This included a briefing on the purpose of the study, recruitment scripts, informed consent scripts and scripts of the line of questioning that was used in the

data collection process. Additionally, the proposal of the research was submitted for his perusal.

Instrumentation

The primary data collecting tools that I used were the research questionnaire and unstructured expert interviews. Both data collection instruments were produced by me. The instruments were developed because there are no known research studies of this nature performed in Trinidad and Tobago. Additionally, in producing the instruments I ensured that it addressed the needs of this research.

The questionnaire is a series of questions that are used to collect data from all the participants of a study (Kumar, 2005). Advantages of using this data collection tool included the fact that it was simple method to collect data. It was not as time-consuming to administer when compared to other methods. It was cost effective, it can be administered by me or other personnel without affecting validity and reliability, analysis of data collected is performed scientifically, and data analysis software packages can be used. Additionally, according to Kumar (2005) a large amount of data can be collected from a large number of participants over a short period of time.

Nevertheless, even though a number of advantages of questionnaires are highlighted, there are many disadvantages that need to be considered. These include a low response rate if emailed or posted, lacks the ability to collect in depth data, and does not allow for clarifications (Merriam & Tisdell, 2015).

The second data collection method was the expert interview. Interviews may be able to provide more in-depth data that can be used to get a greater understanding of the

system get opinions on how the service can be improved. The reliability of the interview protocol can be assessed by intra rater reliability of the test re test method (Kumar, 2005). The intra rater reliability can evaluate the ratings of the interview when one interviewer is used. Similarly, the test retest reliability can also be performed to assess the repeatability of the same interview protocol by the same interviewer. The validity of the instruments is also essential to ensure that they measure what they intend to. Many different types of validity need to be considered. These include predictive, content, construct and face validity (Kumar, 2005).

The sufficiency of the instrument to answer the question was determined through content adequacy. This can be performed during the pilot study as a means of testing an instrument. I used the questions in the data collecting instruments to answer the research questions. As such, it was important that I properly constructed the items to be measured. There were no double barrel questions in the questionnaire. The questions were short and simple to allow for greater clarity on the intention of the question by the respondent. There were no specific criteria for determining the number of questions placed in the data collecting instruments, as long as the topics of interest were included for measurement. I used verbal reasoning to assess the data sufficiency in each question asked. According to Hinkin, Tracey and Enz (1997) a question can be deemed sufficient if the data alone from that question can answer the research question.

Data collecting tools are administered in a pilot study to test its validity (Merriam & Tisdell, 2015). As such, I examined the validity of the tools to collect the relevant

information by conducting a pilot study. This allowed me to assess if additional questions or rewording the questions were needed to improve the data collecting process.

The secondary data that I collected consisted of policies and or legislation that give directives on the process of introducing a new profession into the organization. As well as statistical data from similar studies were used to allow for transcultural comparisons.

Procedures for the Pilot Study

Kumar (2005) stated that the pilot study is used assess the feasibility of the main study. As such, I conducted a pilot study to establish the validity of the data collecting instruments. I recruited participants for the pilot and the main study from the expert panel selected by purposive sampling. I then contacted the selected participants were via email and or telephone though the RHAs. As a part of the request for participation requirement, I forwarded the information sheet, confidentiality agreement, informed consent form, questionnaire, and interview script to the relevant RHA's for perusal. The participants were allowed to suggest and scheduled the date and time to administer the instruments to encourage greater participation in the data collection process. After the interview, I asked the participants if they wanted a copy of the transcripts. Additionally a thank you card was sent to the respective RHAs.

Van Teijlingen and Hundley (2001) stated that the purpose of the pilot study was to develop and test the adequacy of data collection instruments of the main study. The pilot study is also used to assess the feasibility of the study, help design the research protocol and to assess if the research protocol is working (Merriam & Tisdell, 2015).

Merriam & Tisdell (2015) further states that pilot studies determines if the sampling frame and technique are effective. Van Teijlingen and Hundley (2001) indicated that including a pilot study in the research process accomplishes the following: it allows the researcher to test the recruitment technique and help the researcher to identify any problems in the administration of the data collecting tool. Van Teijlingen and Hundley (2001) further states that pilot studies are used by researchers to collect preliminary data and to estimate the variability in the outcomes. According to Van Teijlingen and Hundley (2001) pilot studies are used by researchers to help determine the sample size and to ascertain what resources are needed to perform the study. Additionally pilot studies are used by researchers to assess the proposed data analysis to ensure there are no problems with the methods chosen (Van Teijlingen & Hundley, 2001).

Procedures for Recruitment, Participation and Data Collection

I recruited participants from leaders in the medical field with expert knowledge on the day-to-day operations of the public health care system in Trinidad and Tobago. Expert purposive sampling was done to ensure that I collected the information needed to answer the research question. Institutional Review Board approval were required by Walden University, the Ministry of Health in Trinidad and Tobago and the respective RHAs before conducting the research study. As such, the necessary requirements for ethical approval was followed for both the pilot and main study if necessary. I selected the first, ten percent of the participants for the pilot study to test the validity of the research instruments. I administered the data collection instruments - the questionnaire and interview to the following expert professionals: the Medical Chief of Staff/ Medical

Director, the Chief Executive Officer/ Chairman for each of the Region, the Human Resource Manager for each of the Regions, the Chief Financial Manager for each of the region, the hospital administrators for each of the hospitals/ health care facilities with an emergency department, Consultant or lead physician in the emergency department, and the manager of the emergency department.

The Medical Chief of Staff from the Ministry of Health in Trinidad and Tobago as well as the RHAs gave approval to access the relevant hospital personnel to collect the essential data needed for the research project. The Medical Chief of Staff and RHAs were contacted via email and telephone with the intention to secure a meeting him to further discuss the research regarding why the study is being conducted, the advantages and possible risks of taking part of the study to name a few. I sent a letter of request to collect data from their expert staff to each of the RHAs offices as well as a copy of the research proposal as per requested.

I collected data based on an appointment date and time that was convenient to the respondents within a four-month period. The data collecting process was intended as a single- phase process. As such, both questionnaire and interview were administered once at the same time to make the process time efficient for both the participant and me.

Once the CEO of the RHAs approved the study an appointment date and time was set to collect data, the participants were given a short, open and closed ended questionnaire and asked to participate in an interview that should last approximately thirty minutes. Informed consent is a necessity in every ethical research. As such, informed consent was mandatory for every participant. A written informed consent was

given, detailing the aim of the study and what was required of them. Additionally, informed consent was also verbally explained to the participant. For instance, if the participants had any queries, questions or concerns it was addressed with the informed consent process. There was no coercion for participation in any way. Once agreed upon, the informed consent form to participate in the study was signed by the participant.

The first data collecting tool administered was the questionnaire. This was given to each participant in an unsealed, unmarked envelope. The participants were given instructions to seal the envelope and return to researcher once completed. I left the participant's presence to allow them to complete the questionnaire privately. Once the participants completed the form, I returned to the room to collect the completed form and to administer the expert unstructured interview.

I taped the interview with an audio recorder and I wrote notes from the interview on a data sheet. I ensured that multiple data sheets, stationery and batteries were available to collect the data. Additionally, I supplied stationery of the same kind to the participants to ensure reproducibility.

After completing the interview, I debriefed the participants by thanking them for their participation verbally, informing them that a transcribed copy of their audio recording will be hand delivered to them within two weeks if they wanted it and allowing any final questions by the participants. After the debriefing process, I transcribed the audio recording privately, thereafter I started the data analysis. No follow up procedures were required for this research.

The RHA's did not give me access to their official policies for the content analysis. Instead, the participants verbalized relevant information that applied to the questions asked. I downloaded the Professions Related to Medicine Act of Trinidad and Tobago from google to analyze.

Data Analysis Plan

The collection and data analysis of the study was centered on each research question. The primary research question was: How does professionalization support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

The data analysis process included reducing the collected data into themes via coding, reducing the codes, counting the frequency of the codes and the displaying the data in tables and a discussion. According to Walcott (1994) the basic three data analysis approach of description, data analysis and interpretation is recommended in ethnographic research. Wolcott (1994) further states that description is the foundation of qualitative research and involves a straight forward presentation of the facts.

I used the data collected from the questionnaire and expert unstructured interview to answer the primary question (see appendix B and appendix C). Creswell (2009) stated that descriptive analysis describes and summarize the findings of the study in such a way that it can allow one to visualize the data collected. As such, analysis of the primary question was descriptive.

The following secondary questions were also assessed from the data collected in both the questionnaire and interview: How does jurisdiction play in supporting the

introduction of the physicians' assistant role in the health care system of Trinidad and Tobago? Data to answer this question was taken from question 13 in the interview. How do societal factors play in supporting the introduction of the physicians' assistant's role in the healthcare system of Trinidad and Tobago? Data to answer this question was taken from question eleven in the questionnaire. How does professional competition support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago? Data to answer this question was taken from questions 10 and 12 of the questionnaire and question eight from the interview. How does legitimization play in supporting the introduction of the role of physicians' assistants in the health care system of Trinidad and Tobago? Data to answer this question was taken from questions eight and 15 from the interview.

Content analysis of legislation - Profession Related to Medicine Act 90:04 and information that guide the introduction of a new profession was performed. Hsieh & Shannon, (2005) stated that conventional and summative analysis are performed to identify codes and patterns in the documents and allow the identification of relationships between barrier elements. As such, both conventional and summative analysis were performed. Additionally, I made inferences from the data collected in the documents to provide a more holistic picture of the professionalization process in Trinidad and Tobago.

As part of the ethnographic approach, I did a comparison with the data collected from this study to that of studies with a similar nature to allow for a comparison of cultures in different groups.

Inferential Data Analysis

Inferential data analysis was used to infer from the data collected. Question one of the interview required me to use inferential data analysis to answer the question. I then coded the data to allow easier analysis of the data collected. For instance, I used ordinal coding was for the numerical data collected. All qualitative data was assigned numbers to allow for easier data analysis. I kept a code book to document what each of the codes means as this allowed for a simplified method of data analysis.

I used Microsoft Excel software in the analysis of data. The computer software allowed me to organize a file storing system that facilitated a quick and easy method to access all the material that will be stored in one location. Creswell (2009) noted that computer software provides an array of advantages which range from line by line analysis of the data by the researcher, concept mapping to allow the visualization of the relationships among the generated codes via a visual model and easy access to retrieve stored data.

A data cleaning process was performed as recommended by Kumar (2005). Kumar (2005) stated that the data cleaning process involved ensuring the computer used in the data analysis was free from all computer viruses and have a functioning antivirus system. Kumar (2005) also stated that the computer needed to have enough free hard-drive space to analyze the data. Additionally Kumar (2005) stated that the computer should be defragmented and a file should be created that should only be used for data analysis. Kumar (2005) also stated that there must be a back-up processes for the data

collected, inputting sample data into the software, computed frequencies, and saved the resultant file.

Threats of Validity

Internal Validity

The internal validity looks at the inferences of cause and effect or causal relationships of what is being studied (Trochim, 2006). Since this study was not assessing the effects of one factor on the other, threats to internal validty was not applicable.

External Validity

External validity is the degree to which the result of a research can be generalized across a population, setting and time (Michael, 2000). The following were possible threats to the external validity of the research.

There are many measures to control threats to internal and external validity. They include general control procedures, control over participant, researcher effect, control through participant selection, and control through specific experimental design (Kumar, 2005). The setting was in its natural state to increase the external validity of the research (Kumar, 2005). Additionally, I promoted replication so that the findings were consistent and generalized to other developing countries interested in introducing the physicians' assistant role. Likewise, using random sample selection also improved the validity of the research study.

Issues of Trustworthiness

Credibility

I used triangulation techniques to enhance the credibility of the study. Triangulation allowed me the use of multiple data collecting methods to gather information. I triangulated the data and consequent results from the questionnaire and interview of the expert participants.

Transferability, Dependability and Confirmability

Transferability of the results and methodology was important because it indicates that the data can be used in a wider setting. Transferbility increased with having heterogeneity in the participant selection. As for dependibility, the findings of the research may become applicable to countries with a similar setting. To increase the confirmability the research process was checked to ensure that the results are documented accurately.

Ethical Procedures

I did not anticipate ethical issues. However, measures were taken to ensure that unethical boundaries were not crossed. For instance, I requested permission to conduct the research and collect data from expert personnel from the Ministry of Health and all other relevant administrative authorities prior to collecting data. [See appendix 1]. Likewise, confidentiality was placed high on the ethical procedures agenda to ensure that the responses could not be linked to the respondents. As such, demographics such I did not collect the name and specific work location were of the patients. Additionally, once required I asked for permission to collect data in writing to Walden's University, the

Ministry of Health and the RHAs Institutional Review Board to ensure that the highest academic integrity was maintained for both the main research and the pilot study. The data collection sheets were stored in a safe at my office and shredded when completed.

The required participant's ability to refuse or withdraw from participating in the research was of concern because their participation was pivotal to the success of this research. There was no known conflict of interest in regard to familiarity with respondents or power differentials.

Summary

To assess the barriers to the introduction of the physicians' assistant profession into the healthcare of Trinidad and Tobago, questionnaires and expert interviews were conducted. The methodology for the pilot study and the main research study was discussed in detail in this chapter. Twenty two key stakeholders with expert knowledge were chosen via purposive sampling to participate in the study. Legislative and procedural policy documents were selected to perform a content analysis to further supplement the data collection process. The triangulation method was used to improve the credibility of the study. Data analysis was organized with a data analysis plan and supported using relevant software packages. Issues of trustworthiness and ethical procedures was also highlighted in the chapter. The research findings of the questionnaire, structured interview and content analysis will be addressed in the following chapter.

Chapter 4: Research Results

Introduction

The purpose of this qualitative study was to find plausible explanations as to why physicians' assistants are not utilized in the health care system of Trinidad and Tobago, using Abbott's theory of profession as the theoretical lens. Beyond understanding potential barriers that existed, my goal for this study to put forth strategies that may facilitate policy changes which may in turn promote greater acceptance and implementation of this valuable role.

I used a qualitative design for this study because the main purpose of the study was to explore and obtain a greater understanding on how professionalization supports the introduction of the physicians' assistant role in the Trinidad and Tobago health care system. Thomas (1992) indicated that the critical ethnography design looks at not only stating the facts but also changing the status quo by addressing the social problem especially when it comes to power and control. As such, I used this design.

The foundational data that I used in this research were collected from a questionnaire and a semi structured interview instrument. This chapter includes a description of the pilot study, research setting, demographics, data collection, data analysis, evidence of trustworthiness, and study results. In addition, an overview of the key results of the barriers perceived to influence the introduction of the health care system in Trinidad and Tobago will be included.

Pilot Study

I undertook a pilot study to give me the opportunity to make changes to the study design and data collecting instruments prior to starting the main study. The pilot study commenced in October 2018. The proposal indicated that the participants of one of the five RHAs will be used as the pilot. However, the Authorities' and Ministry of Health dichotomy managerial system, lengthened the data collection approval stage due to the need to get approvals from the Ministry of Health as well as the individuals RHA's. This method did not prove feasible. As such, 10 % of the total participants was used as the pilot sample. Simon (2012) indicated that 10 to 20 % of the sample can be used as the pilot study. A 10 % sample therefore resulted in two participants. I used purposive sampling and used one healthcare administrator and one physician as the pilot participants. The first healthcare administrator and the first physician that were interviewed were used as the pilot participants. I administered the research questionnaire and interview in Appendix B and C.

I gave a briefing on the research using the informed consent form as a guide. Once the prospective participants agreed to partake in the research, I administered the questionnaire. After, I recorded the interview with and audio recorder and took notes on a data sheet. Following debriefing, I compiled the data, and made the necessary changes. The pilot study highlighted that administrator had a less concise of the role and responsibilities of the physicians' assistant profession when compared to the physicians. As such, I prepared a listing to take to the interview in the event a participant did not know what the specifications of the physicians' assistant profession.

Research Setting

The major influencing factor that allowed participants to take part in the study was the approval of the study by the Ministry of Health and the RHAs. I scheduled the interview dates and times as per the availability of the participants. I conducted the data collection in the respective offices of the participants. There were no organizational or research-based factors that influenced the interpretation of the results.

Demographic

Twenty-two health care professionals working in the public health care system agreed to participate in this study (see Table 1). There were 13 male and nine female professionals. Ten participants were between the ages of 30–39 years, seven participants were between the ages of 40–49, four participants were between the ages of 50–59 years and one was above 60 years. The professional titles of the participants included four facility managers, two medical chief of staff, three clinical head of the accident and emergency department, nine registrar physicians, one consultant physician, one clinical head of primary health care, one human resource manager and one chief financial officer. The professionals performed their current professional roles responsibilities for the following period of time: eleven professionals performed their duties between 1–5 years, seven professionals performed their duties between 6–10 years, two professionals performed their duties between 11–15 years, and one professional performed their duties for over 30 years. The participants work experience in the public health care system ranged from 6 years to over 30 years.

Table 1

Demographic Profile of the Participant's Profession

Position	Number
Department /Facility Manager	4
Clinical Head of A&E	3
Registrar Doctors	7
Medical Chief of Staff	2
Chief Financial Officer	1
Human Resource Manager	1
Clinical Head of Primary healthcare	1
Consultant Emergency Physician	2
Consultant Radiologist	1

Table 1

The following is the list of the participants, detailing their profession and years of service in that capacity.

- Participant 1: The current Facility Manager of a District Health Facility of the RHA with 6–10 years of experience in healthcare administration.
- Participant 2: The current Clinical Head of the Accident and Emergency Department of a District Health Facility of the RHA with more than 60 years of experience in medicine.

- Participant 3: The current Registrar Physician of Accident and Emergency Department of a District Health Facility of the RHA with 6–10 years of experience in medicine.
- Participant 4: The current Consultant emergency physician at a District Health Facility of the RHA with 11–15 years of experience in medicine;
- Participant 5: The current Clinical Head of the Accident and Emergency Department of a Major Hospital of the RHA with 11–15 years of experience in medicine.
- Participant 6: The Chief Financial Officer of the RHA with 21–25 years of experience in health care.
- Participant 7: The Medical Chief of Staff of the RHA with 21–25 years of experience in medicine.
- Participant 8: The current Facility / Business Manager of the Accident and Emergency Department of a Hospital of the RHA with 16–20 years of experience in health care.
- Participant 9: A current Registrar Physician of Accident and Emergency Department of a District Health Facility of the RHA with 6–10 years of experience in medicine.
- Participant 10: The current Clinical Head Physician of Accident and Emergency Department of a District Health Facility of the RHA with 11–15 years of experience in medicine.

- Participant 11: A current Registrar Physician of Accident and Emergency Department of a District Health Facility of the RHA with 6–10 years of experience in medicine.
- Participant 12: The current Facility Manager of a District Health Facility of the RHA with 26–30 years of experience in health care.
- Participant 13: A current Primary Care Physician at the RHA with 11–15 years of experience in medicine.
- Participant 14: The current Human Resource Manager at the RHA with 1–5 years of experience in health care administration.
- Participant 15: The current Facility Manager of a District Health Facility with 6–10 years of experience in health care administration.
- Participant 16: A current Registrar Physician of Accident and Emergency Department of a District Health Facility of the RHA with 1–5 years of experience in medicine.
- Participant 17: A current Registrar Physician of Accident and Emergency Department of a District Health Facility of the RHA with 6–10 years of experience in medicine.
- Participant 18: The current Medical Director of a Major Hospital of the RHA with 1–5 years of experience in medicine.
- Participant 19: A current Registrar of a Major Hospital of the RHA with 6–10 years of experience in medicine.

- Participant 20: A current Clinical Head of the Accident and Emergency Department of a Major Hospital of the RHA with 11–15 years of experience in medicine.
- Participant 21: A current Registrar Physician of Accident and Emergency Department of a Major Hospital of the RHA with 11–15 years of experience in medicine.
- Participant 22: A current Registrar Physician of Accident and Emergency Department of a Major Hospital of the RHA with 11–15 years of experience in medicine.

Data Collection

The sampling method I used in this research was purposive sampling. I submitted the applications to conduct the research in the public healthcare system to the Ministry of Health and all five of the RHAs of Trinidad and Tobago. I was granted approvals firstly by the Ministry of Health and then by three out of the five RHAs. The RHA scheduled appointments for me to meet with the participants based on the availability of the participants. Data collection occurred at the offices/work space of the participants. Most of the data collection took place in one meeting lasting on average 30 minutes to 40 minutes. Completion of the questionnaire took about 5 minutes. The interviews lasted about 30 minutes. One interview was stopped and rescheduled due to an emergency involving one of the participants.

I administered the questionnaire and interview that were approved by the IRB at Walden University via face to face in person interaction in an enclosed office space. The

informed consent was signed both by me and the participant, after which I administered the questionnaire. I allowed the respondent to complete the questionnaire without any input from the researcher. The questionnaire had 16 questions, the last three using Likert scales. The completed questionnaires were handed to me and placed in an envelope. The interview began immediately after the questionnaire. Throughout the interview, I took notes of key words on the interview protocol. Additionally, an audio tape of the interview was taken to supplement the notes.

I gave the participants the opportunity to ask questions after the interview. All of the participants declined a copy of the transcript. I had contact with all but one of the participants for a single data collection session. I had to meet one of the participants twice due an urgent meeting for which the participant's attendance was requested during our data collection process. The participant rescheduled within 1 week.

After the completion of the interview process I prepared the transcripts using Microsoft Word. I reviewed the transcripts with the audio recorder to ensure accuracy of documentation. To date, I was not given documents by the RHAs to perform the content. However, one human resource manager during the interview did verbally detail to me the procedure on introducing a new profession into the hospital setting. Thereby causing a slight variation to the data plan presented in Chapter 3. I downloaded the Professions Related to Medicine Act 90: 04 of Trinidad and Tobago for content analysis.

Data Analysis

The purpose of the study was to find plausible reasons for the absence of the physicians' assistant profession in the Trinidad and Tobago health care system. I used a

methodological triangulation approach to obtain in depth information on the subject matter. This allowed a greater understanding on how factors in professionalization can influence the introduction of a new profession within an established health care system. Walsh (2013), indicated that collecting data from different sources on the same subject matter created depth and increased the validity of a researcher's findings. The data sources included interviews, questionnaires, content analysis on policies and legislation, and a comparison of data from similar research. The data analysis process included the preparation of the transcripts from the interview and cross-checking the data with that written from the interview notes. I hand coded the data by the individual interview questions. I identified and chose themes as it related to the main and secondary research questions. I used a descriptive analysis approach was used because according to Walcott in Creswell (2007), ethnography describes the culture of a group or situation as in the case of this research. Additionally, description, being the foundation of qualitative research served to inform me on the status quo of a situation.

Firstly, I designed the interview and questionnaire questions to provide evidence that would be used to answer the primary and or secondary research questions, Secondly, I stated and sorted the answers of the interview questions based on (a) the interview question (b) descending numerical order with the most common answers being listed first. I took a similar approach for the questionnaire.

I coded the data for the questionnaire and the interview in their respective code documents to reduce the data collected into themes. There was a direct correlation between the research questions and those asked in the questionnaire and the interview. As

such, I categorized the codes into demographics, internal influencing factors, external influencing factors and physicians' assistants miscellaneous. The arrangement and the position of the questions in the questionnaire and interview were considered with the four listed codes in mind. Consequently, I assigned pre-codes were through the data collection tools to facilitate organized data collection. I did this to allow easy identification of themes via the questions asked. I used the theoretical framework and research questions to guide the determination of the data collecting questions. I input the codes into tables using Microsoft Word to make it easier to identify categories, themes and to generate corresponding graphs.

The themes that were generated for the demographic code were *clinical, administrative, gender,* and *professional experience*. The themes that were generated for internal influencing factors include *policy*, *financing* and *culture*. The themes that were generated external influencing factors were *public* and *institutions*. The theme that was generated for physicians' assistant miscellaneous was *awareness/ knowledge*. Walcott (1994) recommended a three step basic data analysis approach for ethnographic designs. This incorporates the use of description, data analysis and interpretation in ethnographic studies (Wolcott, 1994). As such, I used Wolcott's model as the template in the data analysis process.

The content analysis aspect of the research was influenced by the lack of willingness for some categories of administrative personnel to participate in the study as such the relevant documents were not available for review. One participant did however verbally detail the process and requirements for the introduction of a new profession in

the health care system in Trinidad and Tobago. A second source for the content analysis was the Professions Related to Medicine Act 90: 04 of Trinidad and Tobago was used to assess the requirements for the legitimization of the physicians' assistant profession. Similar to the process taken with the questionnaires and interviews, I coded the data and extract themes. I categorized the data collected using in the internal influencing factor code with policy emerging as the main theme. I made inferences from the data collected and the results are presented in the following chapter.

Data from studies such as Cummins (2002), Strand, (2008), Beaulieu et al. (2009), Von Knorring et al. (2010), Sanglard-Oliveira et al. (2012) that address that secondary questions were included in the comparisons from other study data analysis. These studies addressed how and if (a) Jurisdiction, (b) Societal factors, (c) Professional competition, and (d) Legitimization, support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago. I made comparisons to assess similarities and differences in the factors that may influence the introduction of the physicians' assistant profession within a health care system.

Evidence of Trustworthiness

Credibility

The collection of data from the questionnaire and interview enhanced the credibility of the study. Triangulation allows for correlation of data form two or more data collection tools (Kumar, 2005). As an indication of ethical credibility every participant was required to sign an informed consent for. Additionally, the interview protocol was used to standardized administration of the interview amongst participants.

Transferability

Even though purposive sampling was used to select the sample, to ensure transferability of the study to the wider region, each RHA was approached to participate in the study to increase the heterogeneity of the sample. Thus far, three of the five RHAs have positively responded to this request. With increased heterogeneity, the study results could be applied to healthcare settings that are similar to Trinidad and Tobago.

Dependability

Miles et al. (2013) indicated that for a study to be considered dependable it must be conducted in a through and rigorous manner. Similarly, Patton (2014) stated that a study can be considered reliable if the research question, theoretical framework is aligned to the purpose of the study. The purpose of this study was to assess the barriers to the introduction of the physicians' assistant profession in Trinidad and Tobago. As such, a qualitative study was employed to assess such. Miles et al. (2013) recommended that researchers collect data in a meticulous manner to reduce the probability of bias. The data collection process was structured as such. For instance, I engaged in no communication with the participant during the filling out of the questionnaire. Likewise, during the interview process, I adhered to the protocol; to ensure that researcher bias did not infiltrate the research process. I also used the interview protocol for every participant. I recorded the participant, the interviewer, the date and the setting of the interview. I arranged the interview questions to allow me obtain data that I can use to answer the research questions. As such, data collected from the questionnaire and interview provided information to address the research questions.

Confirmability

Patton (2014) stated that the confirmability of a study is apparent when there is a direct connection between the research findings and interpretation with that of the data collected. As such, the data collected forms the foundation of the data analyzed and conclusions drawn. The questions of the questionnaire and the interview were based on the research question. As such, questions 11–17 of the interview directly answered the secondary research question - How do jurisdiction, societal factors, professional competition, and legitimization, support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago? Likewise, questions 10–16 of the questionnaire also directly answer the research questions. I stored the data collected for the purpose of potential future review as per requested by Walden's IRB. I recorded the interview via note taking and audio recording. This allowed me to compare one method of data collecting with the other. Similarly, I re-read the transcripts and compared it to the corresponding audio recordings.

Results

Research Question

This study was aimed at answering the principal research question: How does professionalization support the introduction the physicians' assistant role in the health care system of Trinidad and Tobago? The secondary research question - How does jurisdiction, societal factors, professional competition, and legitimization, support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago? was put forward. I designed this question to assess how the main determinants

of professionalization may or may not be a barrier to the implementation of the physicians' assistant profession in Trinidad and Tobago.

The results of the data analysis from the interview, questionnaire, content analysis, and study comparison revealed that professionalization does support the introduction of a profession into a system by the following:

- Jurisdiction – defines the roles, tasks and responsibilities of a profession.
- Societal Factors – must be a need for the role and have the requirements to support the introduction and maintenance of its function
- Interprofessional Competition – provides the environment for division of labor
- Legitimization – builds confidence in the role

The factor of *jurisdiction* defines the roles of professions to allow for division of labor. This ensures that there will not be a duplication of responsibilities which will in turn highlight the need for the profession. The need for the tasks a profession performs determines if the profession will be accepted and implemented into a professional system.

Societal factors can influence if a profession is introduced, by determining if there is a need for the profession or not. For instance, changes in technology can create a need for a new profession or make another obsolete. Similarly issues such as growing trends in lifestyles diseases or increased violent crimes, increased population, increased road traffic accidents to name a few creates a need for health care access. These may contribute to overcrowding and imbalances in the need and supply of services. Thus, this creates a requirement for more staffing to accommodate the needs of the population.

Through this need, professionalization can influence how the need is addressed whether through the implementation of a new profession such as the physicians' assistant profession or the hiring of more doctors. Economic and political situations are also societal factors that influence how professionalization influences the introduction of a new profession. Societies with a low gross national product or a contracting economy may not be willing to allocate additional finances to support the introduction of a new profession. Lastly stakeholders such as the public and administrators' support can determine the possibility of introduction by either demanding it through citizen activism through citizen activism the public can highlight the need for better health care or through administrators in the formation or policies to allow for better health care.

Interprofessional competition can influence the introduction of a new profession by creating an environment favorable in which a new profession can emerge. Once the dominant profession is willing to accept the differences of the roles and responsibilities of the new profession without the fear of professional encroachment this can reduce competition between the professions. Thereby allowing each of the role to fulfil the duties that they were created to perform.

Legitimization can influence the introduction of a profession by increasing the public's confidence in their role through educational accreditation, legislation, licensure and governance by a disciplinary committee. When there are assurances of the legitimacy of a role, the knowledge it takes to perform the role and a course of redress if necessary, with that role, the more comfortable the public will be about being managed

by physicians' assistants. Additionally, physicians may be more comfortable will be with working along-side physicians' assistants once the role is legitimized.

The results were presented by the research question, with evidence via the data collection tools in answering the secondary and consequently the primary research questions.

The following paragraphs will detail the results for each segment of the secondary question.

The Results of Secondary Research Question A

How does *jurisdiction* support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

Jurisdiction is the control of knowledge, professional roles and tasks (Abbott, 1988). Jurisdiction may support the introduction of the physicians' assistant profession by defining the role and responsibilities of the physicians' assistants. Abbott (1988) indicated that no two professions can occupy the same jurisdiction at once, as such having well defined duties encourages well defined roles and well defined roles shows the physicians assistants and physicians as two separate professions. Question 10 of the interviews allowed the respondents to state the roles in which they can envision the physicians' assistant performing to allow them to be beneficial to the public health care system of Trinidad and Tobago. Similarly question 13 of the interview reveled how jurisdiction can influence the physicians' assistant introduction into the health system.

Interview Question 10.

What roles/tasks can you see the physicians' assistants performing?

The roles most identified by the participants in order of popularity were managing low acuity patients at the accident and emergency department (see figure 1). The second most popular tasks and roles identified were phlebotomy and taking history. The third most popular tasks they can perform as identified by the participants were working in rural health centers, triaging at the accident and emergency department, reviewing patients and giving directives, assisting in the primary health care clinics, documentation of notes and filling out of medical requisition forms.

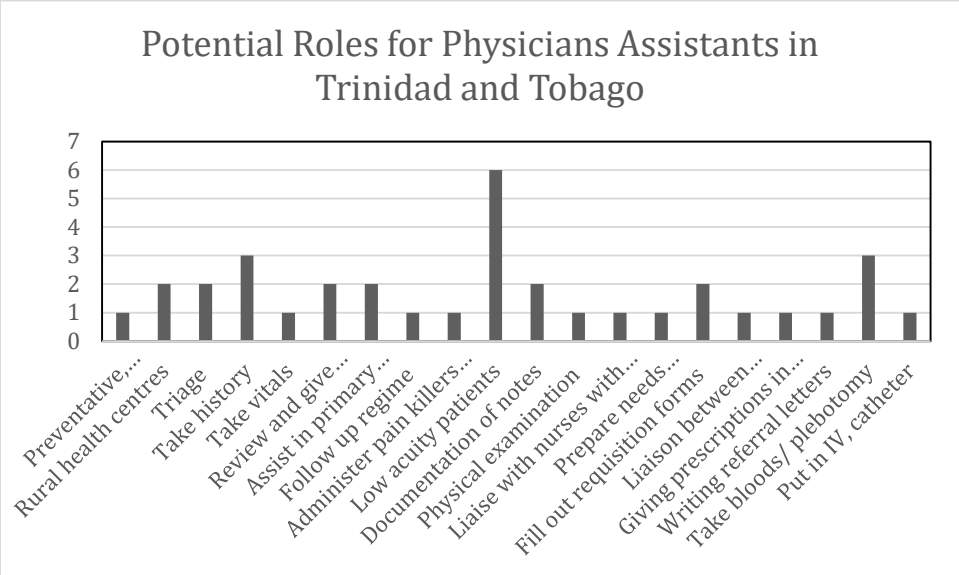

Figure1. Potential roles for physicians' assistants in Trinidad and Tobago

Interview Questions 13 and 14.

Do you think professional jurisdiction can influence the introduction of the physicians' assistant role in Trinidad and Tobago? In what ways?

Fourteen of the 22 participants indicated that they believe jurisdiction can influence the introduction of the physicians' assistant profession. As many highlighted

that professional encroachment and interprofessional competition may cause some level of resistance. However, six of the 22 participants did not believe this can happen citing that if a professional body regulates the profession and if legislature is put in place to prevent physicians' assistant working outside their scope or opening private practice, jurisdiction will not be an issue. Two of the 22 participants did not know if professional jurisdiction can influence the introduction of physicians' assistants in Trinidad and Tobago.

Abbott (1988), also indicated that vacancies in a jurisdiction can create a favorable environment for the introduction of a new profession. Physician shortages are cited as an indication to introduce physicians' assistants into the healthcare system. As such, interview question 18 was incorporated into the protocol

Interview Question 18.

Do you think there are enough physicians employed in the public healthcare system in Trinidad and Tobago?

Eight of the 22 of the participants said there was enough physicians in the country and as such there was no need to introduce. Ten of the 22 participants indicated that there was a physician shortage in Trinidad and Tobago. Two of the 22 participants said yes and no because there were enough general practitioners but there was not enough specialists in the country. One of the 22 participant indicated that it was not about number of doctors but rather the patient doctor ratio that will determine if the public is being well serviced as this ratio may shift from facility to facility, department to

department and times with a 24–hour period. Two of the 22 participants did not feel they were well equipped with information to answer the question.

Abbott (1998) also indicated that external forces opening, and closing can cause changes in the jurisdiction. The content analysis indicated that the introduction of a new profession is determined by two factors. The CEO has the authority to introduce a professional position for a temporary period of one year. Additionally, a profession must get the approval from the Cabinet of Trinidad and Tobago Parliament for it to be introduced into system.

The Results of Secondary Research Question B.

How does *societal factors* support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

Societal factors that can support the implementation of the physicians' assistant profession include (a) the creation of new tasks or the revision of tasks, (b) improvements in technologies (Abbott, 1988). Changes in either of the above listed factors can leave vacancies in which a new profession can undertake (Abbott, 1988). Interview question eight indicates a number of external or societal factors that can act as barriers to the implementation of the physicians' assistant profession in the local health care system.

Interview Question 8.

What in your opinion are barriers to introducing physicians' assistants to practice in Trinidad and Tobago?

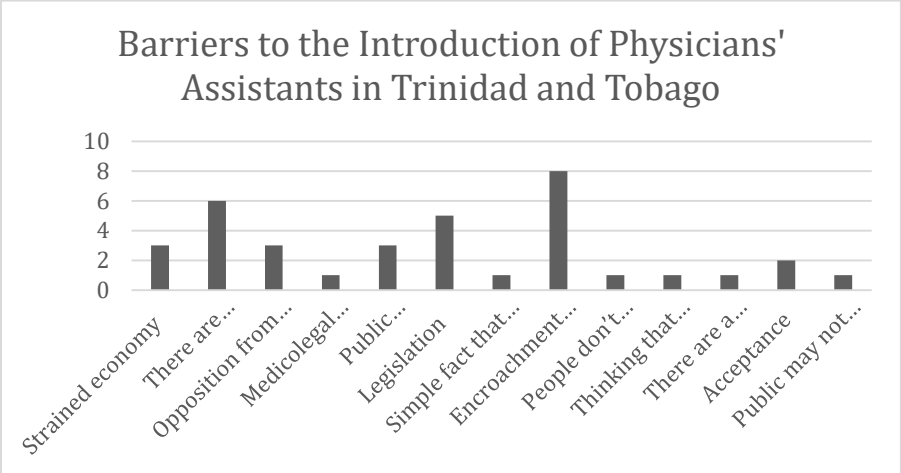

Figure 2. Barriers to the introduction of physicians' assistants in Trinidad and Tobago

The number one barrier to the introduction of the physicians' assistant profession as identified by the interview is the perception of encroachment of one profession into the next and issues of jurisdiction (see figure 2). The second most common barrier identified is the quantity of unemployed physicians in Trinidad and Tobago. Most cited that it was not feasible to introduce a new profession to assist physicians when there were hundreds of unemployed physicians in the country. The third most prevalent barrier given was the need for legislation to support the introduction of the physicians' assistant profession in Trinidad and Tobago.

Interview Question 11.

Do you think changes in technologies can support the introduction of physicians 'assistants in Trinidad and Tobago?

Sixteen of the 22 participants stated that they believed changes in technology can support the introduction of the physicians' assistant profession. Most of the respondents thought the introduction of an electronic information system may most likely facilitate

this introduction as it can make the management of the patient more efficient via networking departments and freeing the physicians from the tasks of documentation. Nevertheless, five of the 22 did not believe that technology changes can influence the introduction of the profession. One of the 22 respondents chose not to answer this question.

Interview Question 15.

How can changes in the organization affect the introduction of the physicians' assistant role in Trinidad and Tobago?

Four of the 22 respondents found that given that the position is not currently on the organizational chart that this chart needs to be updated to include them [see figure three]. Content analysis showed that this a process that requires the approval of the Parliament of Trinidad and Tobago before this can be introduced. Three of the 22 of the respondents found that there needs to be changes in the policies and protocols that define the physicians' assistant profession. Content analysis indicated that a professional Board has to be established to oversee the overall rules and regulations that define the profession. Two of the 22 participants identified finance and cost constraints as a factor that can negatively influence the introduction of the physicians' assistant profession. Two of the 22 participants stated that inadequate staffing and changes in the staffing such as emigration can support the introduction of the physicians' assistant in Trinidad and Tobago. Two of the 22 participants were of the opinion that the organization will not influence the introduction of the role. One of the participants highlighted with the construction of three new hospitals: Arima District Hospital, Couva Children's Hospital

and the Point Fortin Hospital, can provide the ideal situation to introduce the role as a test run to assess its impact on the health care system without disrupting the status quo of the hospitals with its ingrained culture.

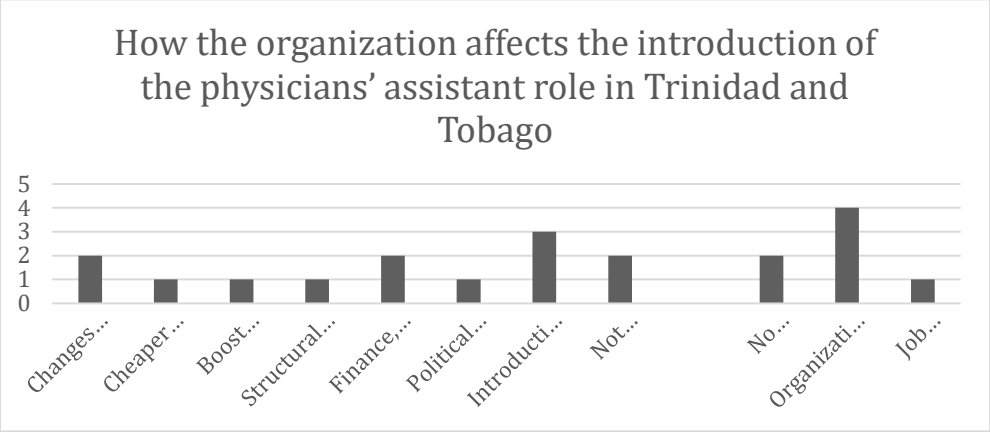

Figure 3. How the organization affects the introduction of physicians' assistants in Trinidad and Tobago

Questionnaire Question 11.

Do you think there will be opposition to the introduction of the role of physicians' assistants by members of the public?

Three of the 21 participants stated that they think the public will oppose the introduction of the physicians' assistant profession by the public. Both of which believed that the public perception is that they will receive more accurate care from physicians. Seventeen of the 21 participants indicated that they do not think the public will oppose because of the advantages they will bring such as decreased wait time outweighs being managed by a physician. One of the 21 participants did not respond to this question.

The Results of Secondary Research Question C

How does *professional competition* support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

Professional competition developed through the emergence of new knowledge and technology (Abbott, 1988). Specialization, the division of labor and professional bureaucracy has encouraged professions to compete, to maintain or obtain dominance in their field (Abbott, 1988). The following questions in the interview or questionnaire answered how professional competition supports the introduction of physicians' assistants' profession in Trinidad and Tobago.

Questionnaire Question 10.

Do you think there will be any opposition to the introduction of the role of physicians' assistants to the health care system by current staff?

Fourteen of the 21 respondents stated yes, they do believe that there will be opposition to the introduction of physicians' assistants by current staff. Conversely, six of the 21 respondents stated that they do not think there will be opposition by current staff. One of the 21 respondents indicated maybe.

Questionnaire Question 12.

Do you think there will be interprofessional competition between physicians and physicians' assistants?

Ten of the 21 participants indicated that they think there will be interprofessional competition between physicians' assistants and physicians. Ten of the 21 participants did not think there will be interprofessional competition between physicians and physicians' assistants. One of the 21 respondents did not respond.

Interview Question 13.

Do you think professional jurisdiction can influence the introduction of the physicians' assistant role in Trinidad and Tobago?

Fourteen of the 22 participants indicated that they believed that professional jurisdiction can influence the introduction of the physicians' assistant profession. They however indicated that if the role and responsibilities of each profession are clearly defined, they do not think it will be an issue. Some saw that professional jurisdiction may introduce competition between the professions which may in this case may encourage the existing profession to work more dutifully. However, six of the 22 respondents did not believe that professional jurisdiction can influence if the profession is introduced and two of the 22 participants did not know if professional jurisdiction can influence it or not.

The Results of Secondary Research Question D.

How does *legitimization,* support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

Legitimization justifies what a profession does and how it is done (Abbott, 1988). Legitimacy protects the jurisdiction of a profession (Abbott, 1988). Legitimization is validated through public confidence in a profession, technique, technology, professional skills and professional association responsible for the accreditation, licensure and discipline (Abbott, 1988). Legitimization identifies the public as a driving force for acceptance because the public as a major stakeholder in the health care system needs to have confidence in the professionals that are attending to them. As such, interview

question 17 assess the role the public may have in the implementation of physicians' assistants in Trinidad and Tobago.

Interview Question 17.

What role do you think the public may have in introducing the physicians' assistant profession in Trinidad and Tobago?

Six of the respondents found that physicians' assistant will be beneficial to the public and as such see the public as a driving force to their introduction. However, five respondents indicated that the public in Trinidad and Tobago prefers physicians to manage them while they are ill due to fears of compromised care if attended by another category of staff. Three of the respondents did not see the public as a driver for change in our clinical setting. See figure four for the list of perceived role the public may have in the implementation of the profession.

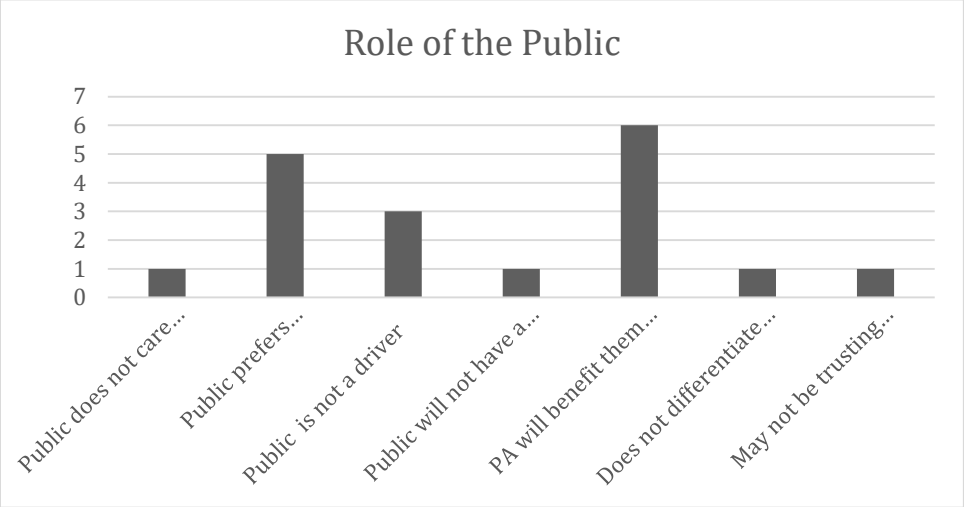

Figure 4. The role of the public in introducing the profession of physicians' assistants in Trinidad and Tobago.

Interview Question 11

Do you think changes in technologies can support the introduction of physicians ’assistants in Trinidad and Tobago?

Sixteen of the 22 respondents did indicate that technology can support the introduction of physicians’ assistants into the local health care system. Interview question 12 indicated how technology can do this**.**

Interview Question 12

If yes, how?

Six respondents identified that networking departments through technology, the physicians’ assistant can keep physicians abreast with the patients, thereby allowing patients to move through the department faster. This thereby improves the efficiency of the department. Two of the respondents found that the incorporation of technology such as an electronic health information system can allow physicians assistants to act as a scribe. One respondent stated that improvements in medical technologies and or techniques can allow for specialization or sub-specializations in medicine. This can then allow physicians’ assistants to take on tasks basic medical tasks or administrative tasks. Another respondent stated that improvements or addition of technology can ease the transition of a physicians’ assistant into the departments if the local hospital systems wants to mimic the physicians’ assistant model at international hospital. Six of the respondents agreed that technology can help support the introduction but could not indicate how it will do so.

Questionnaire Question 7.

Do you think that physicians' assistants can have a positive impact in the health care system of Trinidad and Tobago?

Eighteen of the 21 respondents thought that physicians' assistants will have a positive impact in the health care system of Trinidad and Tobago. One of the 21 respondents did not believe that the introduction of physicians' assistants will have a positive impact in the health care system of Trinidad and Tobago. One of the 21 respondent was not sure if the physicians' assistant will have a positive impact and one of the 21 respondent did not respond. Questionnaire question seven supports legitimization as it indicates confidence in the profession.

Questionnaire Question 8.

Do you think the physicians' assistant role can be integrated into the culture of the health care system in Trinidad and Tobago?

Sixteen of the 21 participants indicated that they believe that the physicians' assistant profession can be integrated in the healthcare system. Two of the 21 did not believe that they can be integrated. One of the 21 participants did not respond and two of the 21 of the participant was uncertain about the possibility. Once again, this question supports legitimization by showing confidence in the implementation of the physicians' assistant profession.

Questionnaire Question 13.

Do you think the physicians' assistant profession will be easier to introduce in Trinidad and Tobago if the role legitimized?

Seventeen of the 21 respondents thought that the profession will be easier introduced if it is legitimized. Whereas, four of the 21 respondents did not believe that legitimization will make the introductory process easier.

Questionnaire Question 16

On a scale of 1–10 indicate if you believe the role of the physicians' assistants will be accepted in the local health care system, with 10 being most accepted

Eighteen of the 21 participants circled numbers greater than five indicating that they believe that the physicians' assistant profession will be accepted in Trinidad and Tobago. The questions in the questionnaire that included the topic of legitimization, highlighted confidence in the profession.

Content Analysis

The content analysis identified that the Parliament has the final say in the permanent introduction of a profession into the health care system of Trinidad and Tobago. The Professions Related to Medicine Act 90: 04 indicates that all allied health professions must be regulated by a Board, there must be registration of every practicing member and must have a disciplinary committee. Comparison with other studies for all of the research questions will be addressed in Chapter 5.

Summary

The research question "How does professionalization support the introduction the physicians' assistant role in the health care system of Trinidad and Tobago?" yielded multiple themes from the secondary questions investigated. Codes were used to identify

salient features of the data as it related to the research question, while analyzing the transcripts to create the interview and questionnaire code book. The codes were then grouped into thematic categories that were similar in nature. The themes generated for the demographic code were clinical, administrative, gender, professional experience. The themes generated for internal influencing factors include policy, financing, culture. The themes generated external influencing factors were public, institutions. The theme generated for physicians' assistant miscellaneous was awareness/ knowledge.

Jurisdiction supports the introduction of physicians' assistants into the health care system of Trinidad and Tobago by creating clear jurisdictions in regard to the roles and responsibilities of the physicians' assistants. All of the respondents identified tasks that the physicians' assistant can perform that will be beneficial to the physicians that supervise them (see Figure 3). These tasks included (a) managing low acuity patient in the accident and emergency department, (b) requesting diagnostic investigations for the patients, (c) phlebotomy, (d) taking patient history, (e) triaging accident and emergency patients, (f) documentation of notes and (g) management of primary care patients to name a few. Shortages in a jurisdiction such as physician shortages also supports the introduction of the physicians' assistant profession. The most common answer given for possible roles and responsibility of the physicians' assistant is managing less urgent patients in the accident and emergency department. A respondent indicated that on average two hundred patients are seen by 9 doctors in an accident and emergency department. This gives a doctor: patient ratio of 1:22. Physicians' assistants can reduce this ratio by managing the patients that are deemed less urgent as suggested by the

respondents. Even though physicians' assistants are not utilized in Trinidad and Tobago, the role is known by seventy two percent of the respondents. Many of the respondents understood that the role of the physician is to assist the physician in a medical capacity, emphasizing of the fact that whatever they did must be done under the supervision of a physician. Jurisdiction was not seen as a barrier because once roles and responsibilities of the physicians' assistant were understood by both the physician and the physicians' assistant, they can perform their respective tasks in tandem.

Societal factors may support the introduction of physicians' assistants into the health care system of Trinidad and Tobago in a number of ways. The societal factors considered in the research included barriers to the introduction of the profession, technology, organizational changes, and public perception. The major barriers listed to the introduction of physicians' assistants in Trinidad and Tobago is encroachment of physicians' assistants into physicians' sphere. Eight out of 22 of the respondents indicated that encroachment was a serious issue that can inhibit the acceptance of physicians' assistants into the local health care system. Nevertheless, they all indicated that education of current staff, legislation to regulate practice and ensuring practice is guided by policy as measures that can be used to mitigate the fear of encroachment. Additional barriers listed by the respondents include the fact that there are currently 300 unemployed medical graduates in Trinidad and Tobago. Many understood the division of labor between the professions one out of 22 indicated that if the RHA's hired the unemployed medical graduates there will be no need to introduce physicians' assistant into our system. The third most shared barrier listed by the respondents were a lack of

legislation to regulate practice. Content analysis of the Professions Related to Medicine Act of Trinidad and Tobago that every allied health profession by law has to be regulated by a professional Board, professionals must be registered and there must be a disciplinary committee to regulate practice. Technology is a societal factor that can support the introduction of physicians' assistants into Trinidad and Tobago health care system. Seventy two percent of the respondents indicated that technology can assist in ushering the physicians' assistant into the local health care system. The introduction of an electronic health information system with the physicians' assistant performing administrative duties such as networking tests/ departments, scribing physician notes was listed as the most likely technological change that can support the physicians' assistants' introduction. Seventy seven percent of the respondents did not think that the public will oppose to the introduction of this role.

Interprofessional competition supports the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago by creating a climate for division of labor and professional bureaucracy (Abbott, 1988). 47.6 % of respondents indicated that there will be interprofessional competition between physicians and physicians' assistants. The respondents who did not think that there will be interprofessional between the professions indicated that once the roles are well defined there will be no issue in this regard. However, 66.6 % of the respondents found that there will be opposition to the introduction of the physicians' assistant profession not only by doctors but by nursing personnel as well.

Legitimization support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago by justifying what a profession does and how it is done, and protects the jurisdiction of the profession (Abbott, 1988). Legitimization is the act of being accepted within the professional niche (Abbott, 1988). Legitimization is validated by public confidence, technology, professional skills and licensure (Abbott, 1988). Six of the 22 participants indicated that the public can be a driver for introducing physicians' assistants in Trinidad and Tobago because their presence will most benefit the patients. However, five of the 22 participants indicated that the public may prefer a physician treating them as opposed to a physicians' assistant. One of the participants indicated that this can be resolved by educating the public about the role of physicians' assistants. Technology can support the introduction of the profession not only in societal factors as demonstrated previously but also through legitimization. Seventy two percent of the participants indicated that technology can assist in supporting the physicians' assistant profession into the local health care system. Similarly, content analysis again revealed that licensure, accreditation and disciplinary committees as a law for allied health professional will provide a foundation for the process of implementation to be built upon.

In summary, Chapter 4 of the research highlighted the key results of the data collected in regard to the role of professionalization in the introduction of the physicians' assistant role in Trinidad and Tobago. Particular emphasis was placed on the role jurisdiction, societal changes, interprofessional competition and legitimization in influencing the introduction of this role. Chapter 5 interprets the findings, address

limitations of the study, list possible recommendations and implementation for social change.

Chapter 5: Discussions, Conclusions and Recommendations

Introduction

The main purpose of the study was to assess the role of professionalization in introducing the role of the physicians' assistant profession in Trinidad and Tobago using qualitative research methods. The usefulness of this profession was well documented over the years, across the globe (Capstack, 2016, Hooker, 1991, Roblin et al., 2004). The role of professionalization using Abbott's Theory of profession is examined to assess the non-existence of this profession in Trinidad and Tobago.

I used a critical ethnographic, qualitative approach to get a greater understanding of the culture of the participants to get a greater understanding as to why the physicians' assistant profession has not been considered as a supporting profession in the health care system in Trinidad and Tobago. The findings support the theory showing that professionalization attributes such as jurisdiction, societal factors, interprofessional competition and legitimization does support if a profession is accepted.

Key findings in regard to the introduction of the physicians' assistant profession revealed that the majority of the stakeholders were not opposed the introduction of the physicians' assistant profession in Trinidad and Tobago. While most acknowledged that implementation may be difficult due to organizational limitations and the cultural mind set of stakeholders such as physicians and the public. Many were optimistic that with a strategic approach and structurally planned implementation, the role can greatly assist the physician and improve the efficiency the current system.

The principal findings to the secondary question in regard to the role of jurisdiction in the implementations of the physicians' assistant profession indicated that most health care professional do believe that it can support its implementation. Many of the participants were aware of the physicians' assistant role; however, most the respondents indicated professional encroachment may cause opposition to the implementation and lack of acceptance of the profession.

Societal factors listed as supporting factors to back the introduction of the physicians' assistant profession were introduction of technology or advancement of technique. The public was seen as a supporting factor, to the introduction of physicians' assistants, once they understood the benefits, they may receive from the physicians' assistant role in the health care system. The respondents gave possible solutions for all of the barriers listed. For instance, professional encroachment was listed as the main barrier. The respondents indicated that solutions such as licensure and professional body regulation legalize the boundaries, roles and responsibilities to ensure encroachment does not occur.

Professions are legitimized when their roles are accepted and affirmed by the public (Abbott, 1988). The data collecting tools revealed that the introduction of the role will be beneficial to the public and as such will be accepted by them. Many of the respondents were of the opinion that the profession can be integrated in our current health care culture. Additionally the respondents indicated the introduction of the role, will have a positive impact on the health care system, will be easier to introduce once legitimized and most believed they will be accepted in Trinidad and Tobago. The

findings of this study may add to the knowledge related to physicians' assistants in developing countries.

Interpretation of the Findings

The study addressed the problem of the lack of utilization of the physicians' assistant profession in Trinidad and Tobago with the attempt to assess the barriers that may impede its' introduction. Hooker (1997) stated that the physicians' assistant profession is beneficial to the health care setting throughout the world. As such I deemed the research topic worthy to study. The study was centered on one main research question that was divided into subcategories for investigation, using Abbott's theory of profession as the theoretical backdrop.

I used the following research questions to guide this study:

Research Question: How does professionalization support the introduction the physicians' assistant role in the health care system of Trinidad and Tobago?

Secondary Question: How does jurisdiction, societal factors, interprofessional competition and legitimization support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago?

According to Abbott (1988) the introduction of the paramedical role of physicians' assistants has caused disturbances in the established system. Stabilization of the system can take place when jurisdictional settlements occur (Abbott, 1988). One such need for jurisdictional settlements occurs due to the division of labor. As such, once the roles and the responsibilities of the physicians' assistant role are identified, any misunderstandings about theirs tasks should be resolved. The majority of the respondents

in this study thought that professional jurisdiction can influence the introduction of the role in Trinidad and Tobago when their roles and responsibility are not clear or if they carry out the same tasks junior doctors do. This can create interprofessional competition between doctors and physicians' assistants which may lead to jurisdiction disputes and opposition. This research confirms Abbott's theory of profession.

Hooker and Everett (2012) indicated that physicians' assistants have assisted in the comprehensive care of patients in both primary care and accident and emergency medicine. As such, physicians' assistants are a reasonable strategy for providing primary care for diverse populations. Van de Biezen et al. (2017) found that physicians' assistants who attend to patients with minor ailments reduced the doctor's caseload. The research respondents in this study, listed an array of both primary health care and emergency care responsibilities as possible tasks the physicians' assistants can undertake if introduced in Trinidad and Tobago. These include the following:

- Primary Health Care: preventative care, working in rural health centers, assist in primary care clinics, follow up regime;
- Emergency care: triage, administer oral and injectable pain medication, attend to low acuity patients, insert IV access and catheters, phlebotomy;
- Intersecting roles: taking vitals, taking history, review patients and give directives, documentation of notes, write referral letters and prescriptions, liaison between doctor and patient, physical examinations, prepare examinations, procedures for physicians.

Once the roles and responsibilities are clarified, according to Abbott (1988), jurisdictional disputes should be settled. The findings of this study confirm that professional jurisdiction can influence the introduction of the physicians' assistant profession.

Abbott in Sanglard-Oliveiram et al. (2012) indicated that professional jurisdiction can only be made through the legal system where professions are given formal control over their professional work and public outlook where they can influence and pressure the legal system in their favor. Additionally, they have the ability to adjust the work setting due to cultural and social determinants (Sanglard-Oliveiram et al., 2012). As such there must be reconciliation between public position and its perception in the work place (Sanglard-Oliveiram et al., 2012). If public opinion is not swayed it will be challenging to have mastery over its jurisdiction in the work place (Sanglard-Oliveiram et al., 2012). This highlights the importance of public opinion in the establishment of a new profession. Even though only six of the twenty respondents thought that the public has an important role in introducing the physicians' assistant profession, Sanglard-Oliveiram (2012) study suggests otherwise. Taylor et al. (2013) found that a lack of familiarity with the role and responsibilities of physicians' assistant profession inhibited physicians from integrating physicians' assistants in their practice.

Societal factors that may affect professionalization are changes in technology and the commodification of knowledge (Abbott, 1988). The majority of the participants thought that technology can influence the introduction of the profession by providing the tools needed for the physicians' assistant to assist the physicians. For instance, the

introduction of the electronic health information system can allow networking of departments. This may allow for more efficient carrying out of the tasks ordered by the physicians such as the documentation of the patient's notes or findings in the electronic system, the review and follow up of ordered diagnostic examinations. Additionally, one respondent highlighted that technology allows for specializations and in medicine physicians always need assistance to make the completion of an examination more efficient. The commodification of knowledge can only occur if the role is introduced in Trinidad and Tobago. The skill set of the physicians' assistant profession can only be appreciated when put into practice.

The primary factors that influenced the hiring of physicians' assistants include organizational factors such as the financial impact of employing the physicians' assistants, factors concerning professional relations, general physicians work load and job satisfaction, the general physicians experience with physicians' assistants as it emerged that those who previously collaborated with physicians' assistants were more willing to employ them, vision of the physicians' assistants profession, and insecurities regarding the physicians' assistants profession (Van der Biezen et al., 2017). Trinidad and Tobago is currently experiencing an economic stagnation after 10 years of a recession (Chan Tack, 2019).

Two of the respondents highlighted that the current financial constraints of the government will not allow for the necessary budgetary allocations for the introduction and implementation of this new profession. Likewise, professional relations between the physician and the physicians' assistant should be directed and controlled by licensing and

regulatory boards as indicated by five of the respondents. Many saw the introduction of the physicians' assistant as a lessening of physicians' workload as the physicians' assistants can overtake the routine, less urgent cases. Other societal factors listed as factors that could influence the introduction of the physicians' assistant profession include educating current staff about the physicians' assistant profession, implement proper legislation to regulate practice, introduce proper and policies to support the implementation process.

Human resource shortages were listed as one of the factors that affect patient access to doctors in Canada (Doan et al., 2012). As such, calls have been made to find new approaches to help alleviate this drawback that exist in the provision of health care in the Vancouver region. (Doan et al., 2012). Even though many respondents cited that there were many unemployed doctors in Trinidad and Tobago, they acknowledged the need for help as the current staff was overworked and that their time would be more efficiently spent if they could concentrate on managing their patients as opposed to doing ancillary staff responsibilities that are needed to make their responsibilities executed more smoothly. They also listed responsibilities that are outside the jurisdiction of nurses and within the job specifications of the physicians' assistant will be beneficial to the practice such as doing intra venous (IV) access, administering medications in the form of injection, and managing less acute cases in accident and emergency as time savers.

The primary factors that influenced the hiring of physicians' assistants include organizational factors such as the financial impact of employing the physicians' assistants, factors concerning professional relations, general physicians work load and job

satisfaction, the general physicians experience with physician 's assistants as it emerged that those who previously collaborated with physicians assistants were more willing to employ them, vision of the physicians' assistant profession, and insecurities regarding the physicians' assistant profession (van der Biezen et al., 2017). Van der Biezen et al (2017), study had similar findings as this research.

According to Abbott (1988) professional knowledge has encouraged interprofessional competition. More so, the division of labor has introduced a contest for jurisdiction amongst the multidisciplinary bureaucracies that were developed (Abbott, 1988). Interprofessional competition as a result of jurisdictional encroachment is listed in both the interview and questionnaire as a barrier to the introduction of the physicians' assistant profession in Trinidad and Tobago.

Legitimization justifies what a profession does and how it is done (Abbott, 1988). Legitimization is needed to assert cultural authority (Abbott, 1988). Solutions to some of the barriers listed in answers to the interview include defining the role of the physicians' assistant to augment the health care system with ensuring they do not replace another category of staff. Additionally, implementing proper legislation to regulate practice can also be seen as measures to legitimize the role in Trinidad and Tobago. The provision of healthcare is defined by changing sociocultural ideologies, the introduction of a range of technologies and, the formal recognition of particular groups through the introduction of education and regulation (Nancarrow & Borthwick, 2005). As such, this allowed for a changing workforce via the introduction of new professions (Nancarrow & Borthwick, 2005). Most of the respondents stated that technologies can make the introduction of

physicians' assistants easier, regulation of practice and that education of both staff and public may counteract the barriers that currently exist to prevent the introduction of the profession. The findings confirm Abbott's theory of profession.

Limitations of the Study

One of the major limitations of this study was the fact that observation was not used as a data collecting source. Observation is a central data collecting tool in critical ethnography and is usually supported by interviews and questionnaires (Cook, 2005). However, since the physicians' assistant role currently does not exist in Trinidad and Tobago, the researcher had to rely on the understanding of the role through the stakeholders that currently operate in the system. Other limitations included a small sample of 22 participants and all of the RHAs in Trinidad and Tobago at the time of this documentation did not agree to participate in the study. As such, the sample size were not representative of all the RHAs in Trinidad and Tobago. The questionnaire gave self-reported data in which, the respondents answered the questions without the interference of the researcher. Jupp (2006) stated that limitations of this include selective memory, exaggerated answers and participant bias. One of the respondents misplaced the questionnaire and did not agree to its re-administering. The study had time constraints in that some of the respondents did not dedicate the 30 minutes to the data collection process. There were occasions during the interview or questionnaire the respondent due to professional responsibilities had to reschedule the interview or gave brief answers to speed up the process. Both tertiary level education institutions did not respond to the request for participation in this research. As such, the perspective of the education's role

on the introduction of a new profession into the health care system of Trinidad and Tobago were not included.

Recommendations

Review of the findings of this study indicated that 83.6 % of the respondents found that adding the physicians' assistants to the Trinidad and Tobago health care system will be beneficial to the country. As such, it may be worthwhile for the Ministry of Health and the RHAs to further investigate the feasibility of its introduction. Additionally, this can include a trial of having physicians' assistants incorporated into the health care system to better observe the role and impact this profession will have on health care in Trinidad and Tobago. The study also indicated that there were numerous perceived barriers to the introduction of the physicians' assistant profession in Trinidad and Tobago. More importantly, possible solutions to those barriers were given to overcome any impendence to this profession introduction locally. The Ministry of Health and the RHAs can use this as a foundation in the consideration of the usefulness in Trinidad and Tobago.

Given the possibility for improved social change from the profession into the health care landscape, it may also be useful to allow for the necessary time period needed to allow all the RHAs to participate in the research. This will allow for a more representative distribution of data collected, thus improving the generalizations that can be made from the study. More so, further investigations should include observation as part of the critical ethnographical assessment.

There are a number of academic recommendations that should be considered. One such is the inclusion of the two RHAs that did not participate in the study to improve the generalizability of the study. Likewise, a greater sample of key stakeholders as participants may also assist in this respect. There are limited studies that look at the role of professionalization in the introduction of anew profession in the Caribbean. As such, this study can be expanded to the wider Caribbean community to fill this gap in literature.

Implications

There are many possibilities for positive social change to both the organization and the individual. The introduction of the physicians' assistants can reduce staff shortages, improve the efficiency of the department by increasing patient throughput and decreasing patient wait time (Doan, 2013). As a result of this, the patient may receive better management, outcome and increased satisfaction (Doan, 2013). The introduction of the physicians' assistant profession will facilitate changed policy for their accommodation, structured policy formation and implantation for their regulation. For the organization, the theory of profession can influence how professions may coexist in the same setting.

This research also allows for the opportunity to disseminate the findings to the Ministry of Health and the RHAs to act on if so desired. Academically, it will add the gap in knowledge that exist with regards the role of physicians' assistants in Trinidad and Tobago.

Conclusion

The goal of this qualitative research was to find plausible reasons as to why the profession of physicians' assistant do not exist in the Caribbean islands of Trinidad and Tobago. The results of the study found that while there are a number of barriers that can inhibit the introduction of the physicians' assistant profession in Trinidad and Tobago. Professionalization supports the introduction of the physicians' assistant by defining the roles, tasks and responsibilities, creating a need for the profession, providing requirements to support the profession, promoting an environment for division of labor, and builds confidence in the profession. The respondents of this study revealed that with the relevant support once introduced, the role will indeed be beneficial to the health care system in Trinidad and Tobago as it has been all over the world.

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Appendix A: Research Cover Letter

Walden University

15th September 2017

Medical Chief of Staff

Ministry of Health Trinidad and Tobago

Dear Doctor,

My name is Martha Pamponette and I am a doctoral student at Walden University, in the school of Public Policy and Administration, specializing in Health Sciences. For my dissertation, I am administering questionnaire and interviews with experts in healthcare, health care administration and health care education in Trinidad and Tobago. I am thereby requesting your participation in the research project by filling out a simple questionnaire and participating in an unstructured interview process that should take less than thirty minutes of your time. The scheduling of the administration of these is at your convenience during the period of February to March 2018.

The Research Project is titled "Professionalization and the Role of the Physicians' assistant in Trinidad and Tobago's Healthcare System". The objective of the research is to assess how professionalization can support the introduction of the physicians' assistant role in the health care system of Trinidad and Tobago. Beyond understanding potential barriers that may exist. The relevance of this research is that it can highlight the possibility of using physicians' assistant role to assist in making the public healthcare of Trinidad and Tobago more efficient.

Participation in the research is voluntary. There are no risks involved in the participation of this research study. All your responses will be kept confidential. Your participation in this study will add to the body literature available for the overall strategies used to improve health care in developing countries. There is no cost attached to participating in this study, thirty minutes of your time will be requested.

Thanking you in advance for your co operation

Sincerely

Martha Pamponette

Doctoral Candidate

Walden University

Appendix B: Research Questionnaire

Research Topic: Professionalization and the Role of the Physicians' assistant in Trinidad and Tobago's Healthcare System

ALL INFORMATION COLLECTED WILL BE CONFIDENTIAL

Please tick the box below to indicate that you consent in participating in this research

☐

For the questions below please circle which best applies to you

1. What is your gender?

Male Female

2.What is your age range?

20 -29 years 30 - 39 years 40 -49 years 50 – 59 years

+ 60 years

3.What is your professional title? _____

4.How many years have you acted in this position?

1-5 years 6-10years 11-15 years 16-20 years 21-25 years 26-30 years

+ 30 years

5.How many years have you been employed in the healthcare sector?

1-5 years 6-10years 11-15 years 16-20 years 21-25 years 26-30 years

+ 30 years

6.Do you know about the profession physicians' assistants?

Yes No

7.Do you think that physicians' assistants can have a positive impact in the health care system of Trinidad and Tobago?

Yes No

8.Do you think the physicians' assistant role can be integrated into the culture of the health care system in Trinidad and Tobago?

Yes No

9.Do you think the health care system can support the introduction of physicians' assistants?

Yes No

10.Do you think there will be any opposition to the introduction of the role of physicians' assistants to the health care system by current staff?

Yes No

11.Do you think there will be opposition to the introduction of the role of physicians' assistants by members of the public?

Yes No

12.Do you think there will be interprofessional competition between physicians and physicians' assistants?

Yes No

13.Do you think the physicians' assistant profession will be easier to introduce in Trinidad and Tobago if the role legitimized?

Yes No

14.On a scale of 1-10 how difficult do you think it will be to implement physicians' assistants into our local health care system with 10 being the most difficult?

1 2 3 4 5 6 7 8 9 10

15. On a scale of 1-10 indicate if you believe that the physicians, assistant profession can be beneficial in the local health care system, with 10 being most beneficial

1 2 3 4 5 6 7 8 9 10

16. On a scale of 1-10 indicate if you believe the role of the physicians' assistants will be accepted in the local health care system, with 10 being most accepted

1 2 3 4 5 6 7 8 9 10

Appendix C: Interview Protocol

Date:

Location:

Name of Interviewer:

Name of Interviewee:

Interview Number:

	INTERVIEW QUESTIONS
1	What is your current professional position?
2	Do you know what the profession of physicians' assistant is ?
3	If yes, What do you know about physicians' assistants?
4	If no what comes to mind when you hear the term physicians' assistants?
5	Given your perception of physicians' assistants do you think adding this role to the current healthcare system will be beneficial to the system?
6	If yes, why?
7	If no, why?

8	What in your opinion are barriers to introducing physicians' assistants to practice in Trinidad and Tobago
9	In what ways do you think the government agencies can overcome these barriers?
10	In what roles/ tasks can you see physicians' assistants performing?
11	Do you think changes in technologies can support the introduction of physicians 'assistants in Trinidad and Tobago?
12	If yes, how?
13	Do you think professional jurisdiction can influence the introduction of the physicians' assistant role in Trinidad and Tobago?
14	In what ways can it influence the introduction of the role?
15	How can changes in the organization affect the introduction of the physicians' assistant role in Trinidad and Tobago?
16	Do you think trade unions can affect the introduction of physicians' assistants in Trinidad and Tobago?
17	What role do you think the public may have in introducing the physicians' assistant profession in Trinidad and Tobago?
18	Do you think there are enough physicians employed in the public healthcare system in Trinidad and Tobago?

19	Do you think physicians' assistants can bridge that gap?