

The problem and review of related literature and studies

Literature



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Introduction

The practice of Pharmacy has gradually improved over the last few years, from the traditional practice, patient counseling to dispensing automation, the practice continue to develop more means to deliver efficient pharmaceutical care and facilitate the reduction of medication errors in all aspects of healthcare. Interestingly, one of the means that was implemented is the program called Telepharmacy. This program is currently practiced in North Dakota, Washington and Australia.

Telepharmacy is defined as “ the use of state-of-the-art telecommunication technology by the pharmacists to be able to provide pharmaceutical care to patients at a distance. ” (Khatri, 2006). Factors associated with the hindering of quality pharmaceutical service in remote communities are geographical barriers, lack of available pharmacists working on remote towns, distance of the pharmacies, financial issues and unavailability of the medicines, which will be sufficiently addressed by implementing the telepharmacy.

Several studies have also concluded that limited pharmacist hours adversely affect the contributions that pharmacists can make to medication safety in rural hospitals. (M. Casey et al. , 2008). With the implementation of Telepharmacy, delivery of 24-hours pharmaceutical service will be addressed. As telecommunication being an indispensable part of effective exchange of information, its application to the practice of dispensing medical information poses a valuable contribution to the field of Pharmacy, paving

another means to effective delivery of pharmaceutical care to patients at a distance.

With the modernization and growing complexity of medicines being capable of curing, mitigating and treating disease, the need for the Pharmacists becomes more evident to ensure the safe and cost-effective use of it. Since the Telepharmacy program is capable of developing better access to a more efficient health care wherever the patients are, adequate attention must be employed to the program and the readiness of community pharmacists for the program must be established. With Telepharmacists being the ones performing complete drug utilization reviews

on the patient medication profile and performing the mandatory patient education counselling to patients over the phone, the readiness of the community pharmacist on the task is crucial to the effective implementation of the Telepharmacy (C. Peterson, H. Anderson et al. 2004). Even though pharmacists are not physically present in their area, patients can access consultation with a registered pharmacist and get their prescription verified through video conferencing (Riley, 2010).

Enabling dispensing of medication via telepharmacy will increase access to more pharmacy services by more patients. By telepharmacy, the problems and restrictions pertaining to medication counseling by Pharmacists will be addressed even in the most urgent time and situations. The readiness of the Registered Pharmacists for the program will lead to the accomplishment of the Telepharmacy in the country since it will eventually mean that the goals that were set up for were attained, the intended purposes were met and generally produced a strong impression or response from the clients.

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Licensed pharmacists provide traditional pharmacy services, including drug utilization review, prescription verification, and patient counseling to a remote site via telepharmacy technology. Retaining the active role of the pharmacist helps assure the delivery of safe, high quality pharmacy services that can be at risk when the pharmacist is left out as in the case of internet and mail-order pharmacies.

(Peterson, 2004) The researchers believe that in pursuing this study, the awareness of the public and professional-alike on the tremendous contribution of Telepharmacy which is fully practiced in other countries in facilitation of quality pharmaceutical care will be raised considerably. And along with the idea that Telepharmacy reduces any possible medication errors, with Pharmacists giving counsel on the phone, the practice of Pharmacy in the country will be improved which will result to its full implementation in the Philippine setting therefore marking the pharmacist's role as more crucial to the health care of the Filipinos.

The evaluation of the readiness of the Pharmacist will be stepping stone to prove that the Telepharmacy program can be carried out successfully in the country. With this study, the possibility of the practice of Telepharmacy in Philippine setting will be determined and assessed, which will render it as a proof for the service to be utilized more in the country for more effective drug information dissemination. Review of Related Literature

Telepharmacy has the potential to improve the quality of pharmaceutical care and decrease medication errors and adverse drug events in small rural hospitals. However, because telepharmacy is relatively new, there is little literature in peer-reviewed journals. (M. Casey, et al, 2008). In other <https://assignbuster.com/the-problem-and-review-of-related-literature-and-studies/>

countries, the implementation of Telepharmacy in dispensing drug information to patients at a distance is being greatly utilized due to its considerable usefulness on improving the practice of Pharmacy and they were even able to develop various models of the service.

In the US, there are two models of telepharmacy: North Dakota Telepharmacy and Washington State Model, employing pharmacists giving instructions to the technicians via a video-conferencing link and pharmacists activating automatic dispensing system from the base site to be dispensed by an authorized personnel at the remote site, respectively. Australia also developed a Rural Clinic Model of Telepharmacy that permits non-pharmacist professionals to render the pharmaceutical services. In all the models of telepharmacy aforementioned, the dispensing stage are all divided into 5 steps: 1.

) Prescription 2.) Prescription Entry and Verification 3.) Dispensing Process 4.) Dispensing Verification and 5.) Patient Counseling, with the latter being done by the pharmacists as required in all the three models (M. Kimber, et al, 2006) According to a recent cost-benefit study conducted by Westerlund and Marklund (2009) in Sweden, when pharmacists are involved in primary care, out of 151 patients used in the study, 68 patients (13%) were saved from drug related problems and 16 patients (3%) were saved from future hospitalizations.

Quality pharmaceutical services have been described as: dispensing, supply and distribution of medicines; provision of knowledge and information about drugs, with the primary objective being the promotion and assurance of quality use of medicines (QUM); and provision of pharmaceutical care, which <https://assignbuster.com/the-problem-and-review-of-related-literature-and-studies/>

involves pharmacists responding to patients' drug-related needs to assist them achieve their desired health outcomes. (M. Kimber, et al, 2006).

The fact that the Telepharmacy service permits delivery of effective pharmaceutical care to more patients at a distance, this contribution will offer greater edge on the practice of Pharmacy as a whole and is consistent with the main goal of the practice which is pharmacists being an indispensable part of the health care system as the experts in drug use. In addition to the contribution of telepharmacy to the practice, it also offers significant advantage on the health care system on its ability to provide workers in more remote settings.

The main aim of tele-pharmacies is to provide maximum coverage in areas with few pharmacies and increase the revenue for pharmacy operators (Riley, 2010). Telepharmacy arrangements have been proposed as a way for smaller rural hospitals with limited pharmacist coverage to obtain additional pharmacist resources (Lordan, Vorhees, and Richards, 2002; Peterson et al, 2007). Since half of the Philippine population lives in rural and remote communities, this calls for immediate attention on providing adequate and quality pharmaceutical care in the said locations.

According to the Report of the Commission on the Future Care in Canada by Romanow (2002), telepharmacy, as part of telehealth, is considered as a mechanism for improving access to health care services for rural and remote communities. The telepharmacy is equipped with video cameras so that the pharmacy technician can be supervised by a registered pharmacist. The location of the remote pharmacy is often linked to central pharmacy

software to make this process smother and ensure timely and correct delivery (Riley, 2010).

With the dynamic and transitional improvement of the telecommunication technology in present time, the counseling of pharmacists to patients at a distance will be delivered with ease and convenience. Adoption of telepharmacy has been slow, but the convergence of available technology and renewed interest in a new pharmacy practice model has created a unique set of circumstances that may present the perfect opportunity for telepharmacy.

(Fahrni, 2012) Telepharmacy significantly offers advantage on addressing medication queries through telephone by eliminating all barriers of communication when it comes to discussion of personal and confidential issues of the patients. According to the study of Louderback (2007), situations such as “ traveling two to five hours for appointments is not only time consuming, but costly” influence patients’ decisions to approach treatments. This is one of the reasons why treatments results in poorer control of chronic health condition especially to the elderly people living in the remote towns.

Research also confirms that “ economic pressures and geographic barriers are difficulties that rural elders face when they seek to obtain prescription medications” (Collins, 2007). It obviously calls for the fact that there is a need for telepharmacy to improve the management of chronic conditions and reduce the expenditures required to transport patients for medication treatment, especially those who incurred drug related problems. Given the

numerous factors that the telepharmacy can address when it is widely implemented, any possible medication errors will be avoided accordingly.

In the Philippines, the practice of Telepharmacy is not widely recognized due to various factors that affect the successful operation of the service, plus the fact that the country is still far from the full implementation of the service. However, the Pharmaceutical Society of Singapore has proposed some guidelines which can be followed in order to successfully operate a Telepharmacy service. The proposed set of guidelines provide the framework for implementation of telepharmacy service designed to restore and retain retail and hospital pharmacy services in remote rural communities that are located in medically underserved areas.

Telepharmacy services produce the same quality of pharmacy services as the traditional mode of delivery and provide additional value-added features that are not found with traditional pharmacy practice. (C. Peterson, H. Anderson et al. 2004) Having been studied pharmacy enables one to develop many skills. Some of these skills and abilities are specific to the role of a pharmacist. Skills are the ability wherein individual uses his knowledge effectively in doing something. Practice is an act of applying; to carry out; to work repeatedly to be proficient or to be professionally engaged (Merriam Webster, 1995).

Synthesis Methods of giving information have been a trend in developing countries. There was once a state in America which started to recognize the use of telepharmacy. The North Dakota Telepharmacy Project was established in 2002 for the purpose of restoring, retaining, or establishing pharmacy services in medically underserved rural communities through the <https://assignbuster.com/the-problem-and-review-of-related-literature-and-studies/>

use of telepharmacy technology. Telepharmacy offers a pharmacist/business owner the opportunity to expand the professional and financial sides to their operation. (Boudjouk) According to the comparison study of D.

Friesner, et al (2011) on the rate of medication error incurred in a remote pharmacy site that utilizes telepharmacy and community pharmacies that do not adopt the technology, greater use of technology has the potential to reduce medication errors. Advancement in computer technology, videoconferencing, and voice over IP (VoIP) technology, ubiquitous internet access, and mobile computing will make the use of telepharmacy simpler than ever before. Combined with improvements in pharmacy automation and pharmacy technician practice, the use of telepharmacy as a tool to help build a new practice model has become a reality.

(Fahrani, 2009) In agreement with the previous study of D. Friesner, et al, the researchers indeed believe that facilitation of telepharmacy in the delivery of pharmaceutical services will contribute to the reduction of medication error. However, the proposed study aims to determine whether Community Pharmacists in the Philippines are ready to deliver and practice the standard North Dakota Telepharmacy Program. Previous studies were solely devoted to determining the rate of medication error of two pharmacy sites, with or without telepharmacy.

The proposed study will be focusing on the crucial participation of pharmacists to raise the acceptance level for Telepharmacy in the Philippines as mean to deliver efficient pharmaceutical service to patients at a distance. Rendering the registered pharmacists ready for the facilitation of telepharmacy will enable a quality telepharmacy to be delivered, equating to <https://assignbuster.com/the-problem-and-review-of-related-literature-and-studies/>

a quality traditional pharmacy only with the use of communication technologies to patients at a distance. Fahrani and Boudjouk studies showed how telepharmacy can make a difference in the practice of pharmacy. The studies also included how telepharmacy works in the community.

Advancement of technology helps the development of the pharmacy practice. The researchers' study will evaluate the skills of a registered pharmacists based on the skills that a telepharmacist must possess in order to deliver efficient telepharmacy service. Pharmacists work within a code of professional ethics that encompasses their relationship with other pharmacists, other health professionals and the public. A well-developed sense of responsibility is essential and an ability to communicate effectively with other health professionals and the general public is important.

Pharmacists just need skills' that helps in improving patients' quality health care. A licensed pharmacist shall do their tasks and responsibilities. A professional, technical and communication skills are essential to be able to deliver a better service. Pharmacist must make patients comfortable with the Telepharmacy technology prior to receiving services. Pharmacists need to work on changing patient expectations and behaviors related to mandatory patient education counseling so that patients learn to expect it as a routine part of pharmacy practice regardless of the mode of delivery.

Patient interaction with the pharmacist is important that just mean that patient is learning in the counselling process, which is a good sign afterwards there will be compliance. (Peterson and Anderson, 2004). Conceptual Framework The fast-paced, ever-changing and exciting technology has created a new thinking in Pharmacy. Telepharmacy is one of the outputs of <https://assignbuster.com/the-problem-and-review-of-related-literature-and-studies/>

technology. With telepharmacy information can be delivered to patients at high-speed.

Needless to say, the application of telepharmacy in other countries has greatly improved the internal operations of counselling making it possible for clients to develop their knowledge and gain services more quickly and reduce internal costs. Establishing the perception of the community pharmacists themselves on the development of the Telepharmacy program to better accommodate patients from afar and give them optimum access on what the pharmacy has to offer regardless of the distance will be regarded as one of the aspects to consider for the full implementation of the program.

A pharmacist who believes on the goals of the Telepharmacy is important for its successful implementation and therefore will improve the efficiency of the healthcare to underserved areas. More than the aim to gain competitive advantage, telepharmacy is an effective way to minimize medication errors, cope with a small number of pharmacists in a country. Telepharmacy is really an ideal method of counselling which is difficult to achieve in its totality. However, Pharmacy boards' commission must take actions to transform the ideal to a reality. Conceptual Paradigm of Study

Statement of the Problem This study aims to describe the perception of community pharmacists on their own skills as being prepared to deliver the Telepharmacy service. The researchers will gather data through the use of questionnaires in which various queries will be addressed. Specifically, the following questions will be answered: 1. What is the community pharmacists' best definition of 'Telepharmacy'? 2. What are the requirements needed in

order to operate a Telepharmacy service? 3. How do the community pharmacists perceive their own readiness for Telepharmacy? 3.

1 Professional Skills 3. 2 Technical Skills 3. 3 Communication Skills 4. What other ways can the program be developed? 5. What is the relationship between the demographic profile of the pharmacist and their skills? 5. 1 Age 5. 2 Gender 5. 3 Civil status Hypothesis Medicinal compliance of patients increases with the utilization of effective telepharmacy service delivered by Pharmacists capable of successfully carrying out the procedures of the program. Accordingly, Telepharmacy will pave a way for a much more systemic & effective drug information dispensing to patients at a distance.

Significance of Study By gaining a better understanding on the pharmacists' own perception on their skills being ready for the delivery of Telepharmacy, it will greatly aid the utilization of this service in improving the practice of Pharmacy in the Philippines by establishing Pharmacists as crucial for optimal health care delivery. Pharmacists will be regarded as a much more indispensable part of health care since their knowledge in drug information will be available at a distance through Telepharmacy.

This program also poses an advantage in addressing the insufficiency of pharmacists in remote towns as well as the various factors associated with the hindering of successful facilitation of quality pharmaceutical services such as geographical barriers, transportation, availability of medicines, etc.

Scope and Delimitation of Study In this study, the researchers would like to determine the community pharmacists' self-evaluation of their skills necessary to deliver an efficient Telepharmacy and therefore efficient healthcare service to the patients regardless of their distance.

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The study is limited to the community pharmacists practicing in the city of Las Pinas. It will also determine the pharmacists' perception on what Telepharmacy really is and what they think composes a Telepharmacy program. Definition of Terms Telepharmacy – the provision of drug information to patients at a distance by the use of telecommunication technology. Licensed Pharmacist – A pharmacist who has completed the full program of education, and has passed a state licensing examination.

Remote Site – a full service pharmacy staffed by a registered pharmacy technician with access by computer, audio and video link to a licensed pharmacist at a central pharmacy site while open. The “ remote site” is analogous to “ originating site”, where the patient is located. Central Site – refers to a Pharmacy with a registered pharmacist, who is trained to carry out dispensing of P medicines and POM via telepharmacy. Telepharmacist – a Licensed Pharmacist who review medication orders, oversees dispensing of the pharmacy assistants and facilitates patient counselling remotely through telephone and other communication technologies.