**Literature Support**

**Prescription Cascading**

Bushardt et al. (2008) describes polypharmacy as a highly misleading term to use in clinical evaluations of geriatric populations. From a pharmaceutical perspective, there exists a confusion regarding how much is referred as being too much or wrongly presented. From the confusion of the presentation of polypharmacy, there is evidence that fixed definition quantity is a measure of polypharmacy and some studies have placed the quantity at 6 prescriptions. On the other hand, from the definition of poly, which means many, it also indicates that there are two perspectives of representing polypharmacy. On the one hand, polypharmacy is associated with the negative results of combining various medications to resolve medical conditions. Among the strategies that lead to these negative results include the prescription of the wrong drugs to administer a medical condition. Another negative outcome would be the drug/drug interaction, and drug/disease interaction. On the other hand, positive polypharmacy has been associated with the management of various conditions under controlled administration.

However, with the confusion on the use of polypharmacy, it is observed that many studies take polypharmacy as a negative strategy in the administration of drugs. However, from a manageability perspective, physicians and clinicians are required to offer education as well as evidence-based interventions to medical. Evaluation of negative results of drug/drug and drug/disease interactions must be conducted to analyze how various conditions can be managed at the same time and placing the patient at the lowest risk.

**Polypharmacy and the Elderly**

Geriatric population has been found to rely on various medications to manage and prevent various medical conditions such as heart attacks and Alzheimer’s Disease (Fulton, & Allen, 2005). Due to illnesses and weakening of the body through the aging process, Geriatric populations are therefore compelled to their drug use in the management of those medical conditions. Studies find that the elderly require care which consists of drug use as well as other therapeutic approaches.

On the drug use, the elderly population relies on doctor prescriptions for management of conditions associated with the aging process as well as the vulnerabilities such as stroke from falls. As a result, polypharmacy is seen as an unavoidable medical intervention outcome that the elderly must be subjected to. However, studies also show that the population of Geriatric patients in medical institutions and those subscribed to home case continue to increase (Hajjar, Cafiero, & Hanlon, 2007). The increase in these patients has also prompted the medical sector and healthcare practitioners to find ways that can prevent negative polypharmacy while trying to improve patient outcomes for the same populations. As a result, best outcomes for Geriatric patients are associated with informed application of interventional methods and prescription drugs. Thus, contemporary studies recommend the application of evidence-based practices in the evaluation of drug effects on the elderly. They also recommend analysis of polypharmacy on the users in terms of side effects, drug interactions, and effectiveness in treating the identified medical conditions.

**Drug Related Complications**

Drug related complications have been reviewed over a couple of years. Geriatric populations have also been associated with the problem due to the number of drugs they were observed to take in a specified timeframe. Farrell, Szeto & Shamji (2011) studied the effects of drugs and the continued use of prescription drugs amongst Geriatric patients. Their results showed that the average number of drugs taken by a sample population was 15 drugs per day with each member suffering from an average of 8.9 drug related problems per patient from the medication they were receiving. Among the cited issues associated with the high prevalence of drug-associated complications include the consumption of drugs that were no longer needed or drugs that were clinically tested for being ineffective. Specific drugs administered to the Geriatric population in this study indicated that Benzodiazepines were highly susceptible of complications (Kalisch et al., 2011).

As a recommendation to limit drug complications, Farrell, Szeto & Shamji (2011) suggests a plan to which pharmacists can control these negative outcomes of polypharmacy amongst the elderly patients. Among these recommendations include the approach of conducting a patient/caregiver in order to interview them of the previous prescriptions from various other drug sources. From here, a pharmacist is required to use structured approach in the development of drug-related problems, prepared a documented care plan, and executes the care plan with integrated approach with the prescribers (Goodheart, Kazdin, & Sternberg, 2006).

In addition to the pharmacist’s role in ensuring proper medication of patients as well as curbing, health care practitioners should also establish a knowledge sharing strategy to educate caregivers or patients on how they should approach the subject of polypharmacy to avoid complications related to the management of various medical conditions. Through the knowledge sharing approach, patients would appreciate the outcomes of drug analysis as well as interactions to avoid the use of unwanted medications or overdose of related drugs. The patient outcome from these approaches is reviewed to improve better patient outcomes (Rochon, &Gurwitz, 1997).

**Summary of Methodology**

The literature support presented above takes into account peer-reviewed journals on the management of polypharmacy related complications and advantages for the elderly population. The database used to acquire the articles is the PubMed using the PICOT search tool. The keywords used for the search included polypharmacy, elderly patients, geriatric populations, and polypharmacy effects. From the criterion of search, 7 sources met the criteria of addressing the problem focus as well as objectives of relating polypharmacy with patient outcomes. The sources for use also indicated a high level of correlation since most gave the impression that polypharmacy has been misrepresented in terms of use and definition. All sources covered the effects of positive and negative polypharmacy with recommendations differing on the addressed issues relating to the use of polypharmacy. The exclusion criteria, on the other hand, included the consideration of secondary data since clinical outcomes were preferred for the study.

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