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PRESCRIPTION DRUG ABUSE AMONGST THE ELDERLY

By

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B.A. UNIVERSITY OF CENTRAL FLORIDA 2016

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for the degree of Master of Science
in the Department of Criminal Justice
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ABSTRACT

This thesis attempts to document and illuminate the growing issue of prescription drug abuse among the elderly population. The average elder in the U.S. takes at least one prescription drug per day, depending upon their health status. Likewise, elders that suffer from multiple chronic conditions are more likely to take multiple prescription drugs. As the lifespan of humankind grows well into their 90's and older, even more elders will be placed on prescription drugs. As part of this study, a narrative literature review was conducted to summarize the topic of prescription drug abuse amongst the elderly. The findings suggest that elderly white women over the age of 80 years old are more likely to take prescription drugs that lead to a higher risk of bodily injuries and death. This study is critically important and essential since the current generation that meets the age requirement to be considered elderly is the "Baby Boomer" generation. The "Baby Boomer" generation, defined as individuals born between 1946 and 1964, is considered one of the largest generations recorded in modern times. This study will be useful for practitioners, residential care facilities, policymakers, and family members to have better oversight and communication with elders suffering from chronic conditions that take prescription drugs to cure their illnesses.

This thesis is dedicated to my grandmother Radie Lee Patton born July 7, 1911, in Mansfield, Louisiana, and passed January 27, 2010, Houston, Texas. I would like to thank my grandmother for giving me an understanding and passion to advocate for all elders in the world. As young adults, many of us are not aware of the difficulties that elders experience daily. Elders of all races, ethnicities, and genders wish for two things in their old age (1) to keep their dignity (2) to not be alone in their journey through elderhood. Radie, you have taught me this and so much more. I am forever indebted to you. May you rest in peace!

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I would like to first thank my mother Joyce Sue Patton for providing me insight as a caregiver who has worked with elders for over 35 years now. I would like to thank my thesis Chairperson, Dr. Lee Ross, and committee members Dr. Mark Winton and Dr. Abby Milon. As a former student in your courses, either in graduate or undergraduate courses, you have had a profound influence by helping me to be a better student and future professional in the field of criminal justice and law. I would like to thank Corinne Bishop, a University of Central Florida library staff member, for assisting me in gathering relevant data and resources for this study.

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LIST OF ACRONYMS

Centers for Disease Control Prevention (CDC)
Collaborative Studies of Long-Term Care (CL-LTC)
Coronavirus (Covid-19)
Cost-Related Medication Nonadherence (CRN)
Death with Dignity Act (DWDA)
Drug Enforcement Agency (DEA)
Food and Drug Administration (FDA)
Inappropriately Prescribed Medication (IPM)
Licensed Practical Nurse (LPN)
Medicare Current Beneficiary Survey (MCBS)
National Center for Health Statistics (NCHS)
National Health Interview Survey (NHIS)
National Institute on Drug and Abuse (NIDA)
Potentially Inappropriate Medication (PIM)
Public Health Division (PHD)
Oregon Health Authority (OHA)

CHAPTER ONE: INTRODUCTION

Health Conditions

The purpose of this thesis is to build upon the current body of research on the ever-continuing growth of prescription drug abuse amongst elders. The growing issue behind prescription drug abuse amongst the elderly is an international issue. Elders in different countries throughout the world are at risk of prescription drug abuse due to myriad forces beyond their control. Elders in the United States of America currently make up approximately five percent of the population across its states. An elder is defined as someone who has reached a certain age in life. The defined age to be classified as an elder varies across different jurisdictions in the United States.

For this research, elders will be defined as someone eligible to apply for federal government assistance based upon their age requirement. For example, the required age for Medicare recipients to apply is sixty-two years of age. The current generation that meets this age requirement in the United States is known as the "Baby Boomers" generation. This generation of elders is massive in population size and societal needs. The statistical data on elders shows that they suffer from various health problems, including mental, physical, and even spiritual for those of faith. Many elders experience chronic illnesses that last until death. To curbe the complications of having chronic illnesses, elders often seek relief from various pain-reducing medications. However, the process of affording, prescribing, and taking prescription drugs is not a simple one for many elders. This creates stages of complexity for elders in the connection between their health and prescription drugs. To define what is prescription drug abuse amongst elders is simple. Prescription drug abuse amongst elders is the knowing or lack of knowing that

prescription drugs affect elders in the categories of affordability, prescribing, and the taking of medication by the elder. Prescription drug abuse amongst elders begins at the time of obtaining prescriptions. Although these are obtained through monetary exchanges, they are hindered through a variety of complex means (such as Medicare, Out-pocket, or insured). There are also inappropriate malpractices of medical professionals (i.e., physicians) who prescribe drugs through methods that violate standard procedures. This includes prescribing to the younger population, along with the taking of prescription drugs that are administered through means that elders have no control over (i.e., caretakers).

Nature of Problem

The problem of prescription drug abuse amongst the elderly has been an ever-growing issue for decades. The examination results over this time have provided a consistent profile on which set of elders' use and abuse prescription drugs. Elderly women are more likely to purchase, to be prescribed, and consume prescription drugs compared to elderly men. When age categories of elders are considered in examinations, older elders (e.g., 80 years or older) experience more abuse from the three complexities of prescription drug abuse. Elders that are 80 years or older experience higher rates of abuse when considered fully dependent due to the immobility of their anatomy. Elders in this category also experience more falls that lead to bodily injuries. Likewise, elders that are in the same group are more likely to experience the illness of dementia. As a result, drugs are more likely prescribed. Comparatively, elders with dementia take more prescription drugs than elders who do not have dementia and are most vulnerable to prescription drug abuse (Lau, Harris, Shega, Trittschuh, Weintraub, 2011).

Elders with dementia solely rely on others to handle all monetary and legal affairs due to their condition. Depending upon the level of severity with dementia, these elders may not be aware that they are taking prescription drugs for dementia or other related illness. The designee of elders with dementia usually is a family member with little to no type of formal training in the science of medicine. For elders with dementia that live in residential facilities (i.e., nursing homes, assisted living facilities, hospice) prescription drug abuse can be experienced at higher levels due to inadequate training by staff members, lack of oversight by drug distribution from the administration of the facility, and the possible malpractice of owner-physician relationship. In residential facilities, ownership can have physicians or nurses on payroll depending upon facility size. Ownership of these facilities cut many procedural steps out in the prescribing and taking phase of prescription drugs for elders. For example, owners can be made aware that an elder is not sleeping well, which turns into disruption to other residents. If possible, family members are made aware of this situation with the suggestion to increase the dosage of their loved ones. Due to lack of knowledge or concern by family members, they will agree with ownership to increase the dosage to calm the elder at night to sleep. Generally, a call is made to the elder's physicians by the family or ownership to inform the physician that a higher dosage needs to be prescribed. The physician is fully aware of the preexisting conditions of the elder before the request for an increase in dosage. Due to either the owner or family relationship with the physician, the physician often time prescribes a new dosage of medication without ever having direct contact with the elder. The elder has now been prescribed a new dosage in prescription without any consultation with the elders themselves. This aspect of prescription drug abuse amongst elders has gained little attention from researchers and policymakers when

examining the malpractice of residential facilities relationship with physicians in correlation to prescribing drugs.

The health condition stage in the relationship with elders taking of the prescription is complicated also. Some drugs are designated to be taken at certain times of the day (i.e., morning, or night). Some drugs are to be taken in six- or twelve-hours intervals. Many drugs can look similar in pill color, size, and dosage amount written on the pill. Distinguishing between which drug needs to be taken now, compared to later, can cause harm to the elder if the wrong drug is taken. Elders that rely solely on caretakers to provide them their prescription for consumption can place elders at higher risk of prescription drug abuse. In addition to that, the loss and theft of drugs can equally cause prescription drug abuse.

When the variable “race” is examined in the relationship between prescription drugs and elders, early research showed black people are less likely to be on prescription drugs compared to their white counterparts. A wide range of reasons is at hand to explain this. Historically, black people in predominately black communities have had limited access to and difficulty obtaining medical resources. The development of medical offices and pharmacies has been limited in predominately black communities. Economic strains of development and employment opportunities have hindered blacks from obtaining the same equal opportunity that whites experience in obtaining economic success and in securing life necessities.

In 1988, examination results between whites and blacks in the usage rate of prescription and non-prescription drugs showed that 74% of black elders took at least one prescription drug compared to 76% of whites who took at least one prescribed drug. In addition, black elders significantly took fewer prescription drugs compared to whites overall. The results also showed that blacks were less likely to take either prescription or non-prescription drugs compared to their

white counterparts. The reasoning for this is possibly a lack of supplementary health insurance, less education, and severe economic strain (Brock, Corder, Fillenbaum, Hanlon, Walls, Ziqubu-Page, 1988).

The relationship between elders taking prescription drugs and the mortality rate has had little research covered on this specific correlation of topic. Elders who take multiple prescriptions per day at any given time are at higher risk of side effects from drugs that is related to bodily injuries from falls. Elders that experience side effects are also more likely to be older within the elderly population (e.g., 80 or older), suffer from cognitive impairments and have poorer health conditions. Elders that took only one prescription drug had a higher rate of survival when medicated as a result of the prescription. Elders that used prescription drugs at a rate of 4.6 per prescription yield a mortality rate of 37% (Enlund, Hartikainen, Jyrkka, Korhonen, Sulkava, 2009). These elders were more likely to die from multiple drug use than a comparative group of elders in the population.

Prescribing Complexity

The next stage of complexity for elders in obtaining prescription drugs comes from physicians who are medical practitioners licensed to prescribe drugs to patients. When prescribing drugs to an elder, there is no federal drug prescribing databases that track which drugs have been prescribed from other physicians for an individual elder. However, some states have enacted a state by state database for physicians. General questions consisting of, what other medications are you currently taking are typically asked of the elder or representative of the elder. Physicians will use observational expertise to determine which drugs should be prescribed to an elder if cognitive impairment is evident. Other gaps in communication and oversight by the

physician can come from not informing the elder or representative about different choices of drugs to take for a specific chronic illness.

Due to the health problems that are either physical or cognitive, this hinders elders from forming a decision about purchasing prescription drugs. In the elderly population, there are two sets of elders defined by their age group with a connection to their physical and cognitive health conditions. Elders that are between 65 and 79 years of age have fewer health complications compared to elders that are 80 years or older. The older an elder becomes, the higher the risk factors become when suffering from health conditions. Both males and females experience different health conditions in their later years, due in part to their lifestyle choices made in their youth. Elderly women experience more health conditions compared to their male counterparts. As elderly women experiencing more health conditions, they are more likely to be prescribed prescription drugs compared to males. In 1999, 63.3% of prescription drugs were prescribed to elderly women compared to 52.3% of prescriptions prescribed to younger elders (Rokstad & Straand, 1999).

To prescribe prescription drugs, a physician must be present; however, the mobility of elders is usually limited. Elders are seen by a physician in three different ways. First, elders can be seen at a physician's office, which is the traditional way. Second, elders can be seen from home by the physician. These are considered house visitations. Third, is by indirect contact of the elderly. This third form of seeing the elder is overly complicated due to external factors. For example, an elder who is 80 years of age who suffers from dementia and either lives at home or residential care facility needs a prescription. However, due to illness like dementia, the elder's affairs are left to a family member or residential facility owner. The family member calls the physician, which the physician is aware that this specific family member handles all affairs for

the elderly patient. The family member requests a new refill of a prescription for their elderly parent. The physician takes the word of the family member and prescribes a new refill without ever visiting the elder in person. This type of practice is shared amongst physicians who have elderly patients. Rokstad and Straand found that 50.2% of physicians contact with elderly patients were office visits, whereas 43.5% came from indirect contact. The other 6.3% came from a home visitation of elders. Elders who suffer from cognitive impairment rely on family or ownership to communicate on their behalf to physicians to be prescribed drugs.

CHAPTER TWO: INTENDED AUDIENCE

Health Professionals

The intended audience for this research is a long list of different professional fields that interact with the elderly population. The professionals within these fields either interact with elders daily or in severe circumstances (i.e., medical visit). The first set of professionals are physicians and other healthcare-related professionals. Healthcare professionals interact with elders in severe circumstances concerning medical visits to a physician's office, hospital, or visitation at the elder's home. Since health professionals are licensed to prescribe prescription drugs to elders, this research can elaborate on the causes of prescription drug abuse amongst elders with health conditions that increase their chances of experiencing prescription drug abuse. This is intended to inform healthcare professionals to create better methods of communication with elders, along with finding better alternatives for elders seeking prescription drugs with pre-existing health conditions. Having the responsibility to prescribe drugs to patients, most importantly, elders, healthcare professionals will need better communication methods, along with better oversight on their elderly patients when prescribing medication. This also applies to professionals who work in the pharmaceutical industry. This field of professionals interact with elders from a distance; however, they are by far the most important field for this research. This field manufactures prescription drugs in accordance with federal and state laws in the United States. The research that is being conducted on the connection between prescription drug abuse and elders will provide a better understanding of this industry in how to create drugs that will not have addictive properties for a vulnerable population (i.e., elders).

Caretakers

The second professional field of the audience is the caretaker. A caretaker can be licensed or non-licensed; however, the facility that they are employed with must be licensed by law to operate. Caretakers are on the frontlines when interacting with the elderly. This research will provide a better understanding of how their work as caretakers can translate to prescription drug abuse amongst elders. In addition to caretakers, owners of residential facilities will be provided a better understanding of the research on prescription drug abuse amongst elders.

Policymakers

The final targeted audience of this research is policymakers. Policymakers have the power to create legislation that can impact all the previous audiences on how to prescribe and interact with elders when distributing prescription drugs. The research on prescription drug abuse amongst elders will provide policymakers in at least three ways. First, it will identify which set of elders within the population are most vulnerable to abuse. Second, it will identify which professional field contributes the most to prescription drug abuse. Third, it estimates the financial cost and burden contributed to prescription drug abuse. The last set of audience for this research is the non-professional, consisting mostly of family members. Moreover, elders look to family members as a guide in their older years. Elders will designate family members to handle all medical and financial affairs for them due to their health condition, or the member takes it upon themselves to do so. This research on prescription drug abuse amongst elders will inform family members on the dangers of this growing issue.

CHAPTER THREE: RESEARCH METHODOLOGY

Data Collection

The sources of this research were obtained through the University of Central Florida Library criminal justice and Medline database. I have partnered up with the University of Central Florida library personnel to assist me in receiving this information on elders. Also, other pieces of literature were collected from Google Scholar. Other sources were collected from various federal and state statutes on prescription drugs along with the Centers for Disease Control Prevention (CDC). Research terms of elder, elderly, aging, senior, polypharmacy, multimorbidity, prescription drugs, prescription drug abuse, drugs abuse, elder abuse, elderly abuse, Medicare/Medicaid, insured/uninsured, nursing homes, assisted living, and residential care facility was used to gather data on the topics of prescription drug abuse amongst elders. Other related terms of gender, age, race, and education were used as well. The literature review on these terms was gathered from scholarly literature by researchers and experts in the health field.

The data collection was analyzed through the methodology of narrative literature review. The narrative literature examined different pieces of historical literature on the correlation between prescription drugs and elders. Narrative literature will prove an overview summary of the growing issue of prescription drug abuse amongst the elderly. The narrative literature methodology is also capable of identifying related areas of study to further examine the issue of prescription drug abuse amongst the elderly. In this historical literature framework, there are several independent variables associated with the dependent variable elder prescription drug abuse. The research study is guided by four questions: (1) which age group is most at risk for potential prescription drug abuse amongst elders? (2) Which gender is most at risk for potential

prescription drug abuse? (3) Which race is more at risk of potential prescription drug abuse? (4) Is one's socioeconomic status a risk factor for prescription drug abuse? In addition to documenting the issue of prescription drug abuse amongst the elderly, this study also seeks to characterize the demographics of elders most at risk of prescription drug abuse. The narrative literature is the best choice of analysis for this study because of the broad range of issues of prescription drug abuse amongst the elderly.

Who Are the Elderly?

The biases and resulting sample selection within this research excludes elders between the ages of 60 to 64. The reason for this reflects the consensus of agreement on definitions of the elderly. The consensus of research experts in geriatrics, polypharmacy, and government institutions have defined 'elders' as someone who is 65 years or older. However, under the US Medicare requirement, a person who is 62 years of age may apply for benefits. Indeed, they are considered early enrollees and they receive partial medical benefits due to their age.

CHAPTER FOUR: HISTORICAL LITERATURE REVIEW

Medicare Part D Cost

Several financial cost considerations must be addressed in this study. The financial cost can be the determining factor as to why an elder will take one prescription drug over another prescription drug. The financial cost can also determine if an elder will be able to pay for another refill prescription later on. Physicians and family members can also affect elders seeking prescription drugs based upon the current financial status of the elder. Lastly, the financial cost for prescriptions can be determined by outside entities who delegate which prescription is affordable and which ones are not affordable. Due to prescription drugs costing hundreds of dollars, many elders rely on government insurance plans to curve medical costs. As such, the primary government insurance market for elders is Medicare, which has been in existence since 1965. However, Medicare Part D, which pays for an outpatient cost for prescription drugs, was enacted only 17 years ago. Before Medicare Part D's enactment, elders that enrolled in the Medicare system found tremendous difficulty in paying for their prescriptions. Therefore, Medicare Part D was designed to curve the cost difficulties for elders enrolled in the Medicare system. Naturally, elders that suffer from chronic illnesses seek prescription drugs to reduce pain or symptoms. However, the complexity of the affordability of prescription drugs for the elderly is challenging. The U.S. healthcare system has been a prevalent issue for citizens nationally over four decades now. The implementation of Medicare and Medicaid was an initial step toward affordable providing healthcare for those that are over the age of 62 years old with affordability strains. Medicare is a healthcare market that has numerous insurance programs that recipients can buy.

According to the official U.S. Government Site for Medicare, Medicare is a federal health insurance program that has three different parts of service for the medically related cost.

Medicare Part A insurance is designed to cover healthcare-related facility costs. Part A covers hospital visits, nursing homes, assisted living facilities, and hospice care. Most of these facilities accept Medicare recipients. Medicare Part B pays for the cost of services by the people who work in these different facilities. Medicare Part B also pays for physicians' services, medical supplies needed, and preventive services. For purposes of this research, Medicare Part D also covers the prescription drug cost.

Navigating through Medicare Part D is extremely difficult to find out whether the prescription drug will be fully covered or partially covered. Medigap plans are designed to cover costs where there are gaps in the Medicare system coverage. These (Medigap) plans are supplemental insurances that are distributed through private insurance companies. However, Medicare Parts A and B cover most facilities and supply needs, prescription drugs are costly and will need additional coverage plans on top of the Part D coverage. The Medicare Part D system has collaborated with insurance companies to cover the cost of prescription drugs. Before the implementation of Medicare Part D, elders struggled to pay for prescription drugs. In the 2000 Congressional and Presidential election year, prescription drug coverage for people enrolled in Medicare was a top issue for constituents across the country.

Researchers Poisal and Murray (2001) examined the differences between Medicare beneficiaries covered and noncovered for drug spending through 1998-2000. The entire spending on prescription drugs in the United States in 1998 totaled \$91 billion, twice as much from the year before. The increase in total spending on prescription drugs, directly increased the use of prescription drugs, along with increases in pricing for existing prescription drugs on the market.

The data that was used in Poisal and Murray's research resulted from the Medicare Current Beneficiary Survey for the 1998 year. These researchers classified prescription drug coverage into a two-step process. The first set was categorized into "primary supplement health insurance," and the second set was categorized into "self-reports and third-party payment." In their findings, it was reported that, throughout some time in 1998, 73% of Medicare enrollees had some type of prescription drug coverage (Poisal & Murray, 2001). On the other hand, 27% of enrollees did not have coverage in 1998. The results for primary supplement insurance coverage depicted a slight decrease in all categories. Enrollees that bought individual coverage in 1998 saw the lowest level across all insurance groups. Moreover, one out of six Medicare enrollees gained additional supplemental insurance from outside their coverage. Enrollees that did not have prescription drug coverage received and spent less on drugs compared to those with prescription drug coverage. The results in 1998 showed that people without coverage filled 16.7 prescriptions that year. This number showed a decline in prescriptions being filled by 2.7 in the previous year; however, the average cost between both years was similar to \$550 (Poisal & Murray, 2001).

The results for people with coverage showed increases in prescriptions being filled compared to the 1997 numbers. In 1998 people with coverage filled 24 prescriptions per person: a 9 percent increase. The gap between use and spending for covered and noncovered drug plans grew for people between 1997 to 1998. However, both covered and noncovered people did not see a change in health status. People with prescription drug coverage were more likely to experience multiple chronic illnesses compared to those without coverage. People with coverage used approximately eight more prescription drugs compared to those without coverage. Noncovered total expenditures in 1998 were \$453 lower compared to those that have coverage

(Posial & Murray, 2001). When gender was examined, the results showed that women used more prescription drugs compared to men. However, having no prescription drug coverage hindered both women and men in 1996. In 1998, the use of prescription drugs by noncovered men decreased quicker compared to noncovered women. Men who were covered saw a faster usage rate compared to women who were covered. The difference in usage between noncovered and covered men is approximately 40%, whereas for women, the difference is about 27% percent (Posial & Murray, 2001).

1900's literature

Early examination between prescription drug abuse and elders took place in the 1970s. Researcher Michele Basen (1977) examined the prevalence of prescription drug abuse among elders, and factors deemed most responsible. Basen also examined the response of the National Institute on Drugs and Abuse (NIDA) that held a conference about prescription drugs. The reason for examining the NIDA is because of the lack of knowledge on the topic of prescription drug abuse among elders. At the time of this research, there was little research conducted in this area. According to Basen (1977), the term "age" was not stated in the medical school's index nor within their textbooks. In her findings, some experts communicated that the overprescribing of certain medications was a primary cause of prescription drug abuse. Moreover, the nature of elders having some form of chronic illness caused healthcare professionals to rely solely on prescribing medication. In turn, this caused poor oversight by physicians, which lead to multiple prescriptions. Inadequate medication is seen as economic strains of hardship, access to transportation, and the nature of muscles /memory loss for elders. Amongst the experts, there was not a consensus as to which issue is more important to examine. According to Basen (1977,

pp. 46), the NIDA constructed a list of priorities that should be examined to add and build upon the dialogue between experts. The following were the priorities set forth,

"(a) the initiation of research on the physiological changes that occur during aging, effects of drugs on older people, and sociopsychological aspects of aging; (b) the development of specific drug treatment models, consumer education programs, and specific information about medical care and drugs use of the elderly; and (c) the development of resources and provision of additional training for health care personnel to enable them to more adequately manage and respond to the unique drug problems of the elderly".

Race_Effects

In another study, Blazer (et al., 2000) examined the differences in antidepressant use by race within the elderly community. The sample of the research was conducted between 1986 through 1996. In their literature, they stated that antidepressants are one of the most consumed prescription drugs by elders. In 1995, twelve million visits were made by elders to physician offices where antidepressants were prescribed in 55% of the visits (Blazer et al., 2000). Prescribing prescription drugs usually is lower for blacks when compared to their white counterparts, along with lower rates in antidepressant prescribing. An explanation for this can be a lower prevalence of depression within the black community compared to those in the white community. However, black elders are more likely to delay treatment for depression. Once aware, black elders are more likely to respond quicker than their white counterparts in treatment. (Blazer et al., 2000) found that the number of elders who were subjects of research increased in

antidepressant drugs. It was recorded from 1986 to 1987; the number was 3.8% (Blazer et al., 2000).

In the final year of examination, the number had reached 11.0% in 1996-1997 (Blazer et al., 2000). Over ten years, that number tripled in consumption. The researchers conclude that it was due to the creation of more antidepressant drugs sold on the market back in 1988, a year after the research was underway. The findings on the test concerning race produced interesting results. Over the ten years of research conducted, the increase of antidepressants showed higher levels amongst whites in comparison to blacks. However, blacks were more prone to receive their health care needs from a hospital rather than a local community care center. Also, blacks were more prone to delay checking their health status due to higher costs, even though Medicare could offset prices. At the time of this research, Medicare Part D was not implemented. Medigap or supplementary insurance through Medicare could have offset prices. Blacks were less prone to purchase over-the-counter prescription drugs compared to their white counterparts. Blacks were also less likely to report any form of depression compared to their white counterparts. Other results showed that there are negative correlations between antidepressant intake and physical disability, perceived health, and cognitive impairment. Findings, however, varied for white females. In summary, race only accounted for 6% of the overall variance for the difference in intake of prescription drug abuse. Blacks did increase in antidepressant consumption by double what the 1986-1987 numbers were to 1996-1997. However, the overall increase in consumption occurred in whites by triple the amount the numbers were in 1986-1987 (Blazer et al., 2000).

Researchers Linda Simoni-Wastila (et, al., 2005) examined the exposure of prescription drugs with addiction potential in community dwellings of the elderly. These researchers examined all prescription drugs that were classified as controlled substances in accordance with

those listed on the U.S. Controlled Substance Act. The data of elders used by these researchers was collected by the 1999 Medicare Current Beneficiary Survey (MCBS) cost and use documents. Other variables that were examined included gender, race, ethnicity, marital status, and living arrangements. Simoni-Wastila (et al., 2005) arranged elders into age sets (65-69, 70-74, 75-79, 80 and older). In their findings, the MCBS reported that 33 million elders were living in community dwellings for the 1999 year. Of those, 7.2 million Medicare beneficiaries encountered at least one type of prescription drug that had addiction potential related to the other drugs. Fifteen percent of the 33 million elders reported by MCBS obtained a minimum of one opioid drug. In addition, 10.4 % percent obtained one or more depressant type drugs in 1999 (Simoni-Wastila et al., 2005). The number one prescription drug positively associated with addiction during this study was propoxyphene; a drug used by 1.97 million elders on Medicare. Other findings in their research suggest that elderly Medicare beneficiaries tended to be white females, widow status, and older. The health status of these individuals tends to reduce over time. Of the nation's elderly population living in community-dwelling areas, an overall increase was reported. Moreover, eighty-seven percent of elders living in community-dwellings obtained at least one prescription drug was at risk of potential addiction during this time. Thirty-four percent of these elders obtained anywhere from zero to nine prescription drugs annually, where 29.5% of these elders consumed at least ten through twenty-four prescription drugs (Simoni-Wastila et al., 2005).

Other researchers (Thomas et al., 2001) examined the growth in prescription drug spending among insured elders. Their study and data showed a mean increase of 18.5% in elders spending from (\$827) in 1997 to (\$1,378) in 2000. The overall elders' population in consumption only increased slightly from the numbers in 1997 compared to the numbers 2000. In 1997 the

consumption percentage was at 81.9, wherein 2000, it rose to 83.9; however, the expenditure on prescription drugs changed (Thomas et al., 2001). Moreover, the top ten percent of prescription drug spenders incurred \$2,322 or more in 1997 and \$3,579 or more in 2000. Insured elders who spent \$3,000 or more seen, the cost rise from 3.9 percent to 12.6 percent (Thomas et al., 2001). Insured elders who spent \$5,000 or more experienced the fastest growth in cost. Insured elders who spent the highest amount of prescription drugs were also elders who experienced various chronic illnesses when compared to low-cost elders. During the three years of examination, the top ten prescription drugs were accounted for 40% of spending growth. (Thomas et al., 2001) concluded this is due to more elders taking these specific drugs and elders having more than one prescription drug.

Beers Criteria

The American Geriatrics Society developed criteria for prescription drugs to measure their side effects on elders. Beers Criteria for Potentially Inappropriate Medication (PIM) is a recommendation chart for physicians to consider when prescribing drugs for elders. Beers Criteria adds or removes drugs that are potentially harmful to elders. This chart is updated every three years, according to the American Geriatrics Society.

Researchers (Culberson, Martin, & Ziska, 2008) found that medication abuse comes from inadequate treatment of anxiety, pain, and insomnia. Reasons for abuse or misuse resulted from inadequate oversight in prescribing drugs to elders. Beer's Criteria for prescription drugs in elders recommend that drugs like benzodiazepines should not be prescribed to elders due to increasing the odds of falling, fractures, and metabolites. When it comes to opiates, the findings showed that prescriptions for opiates were rising across all ages (Culberson, Martin, & Ziska, 2008). Also, evidence shows that physicians failed to have proper oversight on managing

patients with chronic pain. Lastly, in their findings, Beer's Criteria recommends that all muscle relaxants should not be prescribed to elders due to the risk of adverse effects. For example, a commonly prescribed muscle relaxant called carisoprodol is not recommended for elders. The reason for the lack of recommendation is because that potential addiction can set in a few weeks after taking the prescription. Ten states have classified the drugs mentioned above into Schedule IV.

Other researchers have narrowed their examination to the correlation between prescription drug abuse and elders by examining residential care facilities. In the study conducted by Slone (et. al., 2002), they collected data from four states as part of the Collaborative Studies of Long-term Care (CT-LTC). They found that staff members in these facilities typically lacked licensing. Elders in these facilities usually were women age 85 or older and were impaired in at least one activity of daily living and were required to pay out-of-pocket expenses. It was recorded that most of the elders studied in this research took one to four medications before the seven days out before the data was collected. In smaller facilities, the Inappropriately prescribed medication (IPM) average was 3.3%, where new model homes were 3.2% and traditional homes at 2.9%. The standard prescriptions taken in these three-home sets were cardiovascular drugs at 53%, diuretics/potassium at 40%, laxatives/antacid at 37%, pain medication at 28%, and antidepressant drugs at 28%. This study also found that independent factors of small bed size, turnover from licensed practical nurses (LPN), and absence from physician visitation caused elders to be on (IPM). In their findings, very few elders in these facilities took medication. In small homes, elders who did not take medication accounted for 6.0%, whereas new model homes accounted for 3.4%, and traditional homes at 4.0%.

Researcher Belinda Basca (2008) also examined the Elderly and Prescription Drug Misuse and Abuse. She found that elders 65 years or older accounted for one-third of all medications prescribed; however, they accounted for only 13% of the U.S. population. Basca (2008) defined prescription drug misuse as “not following the direct information provided on how the drug should be used.” Interestingly, the findings show that between 12% to 15% of elders experience prescription drug abuse when seeking medical attention (Basca 2008). The most common prescriptions associated with prescription drug abuse were opiates, central nervous system (CNS) medications, and stimulants. From 1992—2002, prescribed prescriptions increased over 150%. Basca (2008) concluded that when elders sought a prescription for psychoactive purposes it may lead to (1) prescription fraud (2) "Doctor Shopping" (3) the internet for easy access to buying prescriptions, and (4) sharing prescriptions from other elders or family members.

Race

Polypharmacy and chronic illness have been examined on the elderly population; however, the specific examination of low disadvantage on blacks has been relatively neglected. Most recently, Assari (et al., 2020) examined the connection between polypharmacy and cognitive function in black elders. Polypharmacy is defined as five or more prescription drugs taken by an individual elder. According to these authors, black elders have prescribed polypharmacy earlier compared to whites due to the onset of chronic illnesses that arise in blacks earlier compared to whites. The focus of their study was to investigate the linkage between polypharmacy and memory loss in elders. They conducted a cross-sectional study composed of two sections: (1) interview surveys that collected data on variables of physical, mental health, demographics, socioeconomic, and (2) a comprehensive evaluation of prescriptions taken. Their

sample size consisted of 399 black elders. Men accounted for (n=141) and women (n=258). Assari (et al., 2020) found that 75% of the total sample size took at least five prescription drugs per day. The average taking of prescriptions was 7.6, which ranged from two to twenty-two prescriptions. The mean average of chronic illnesses one black elder would have was 3.45 and the memory function's mean average was 52.11. In conclusion, the authors stated that the connection between black elders using five or more prescription drugs and memory loss is evident in low economic communities for black elders.

Another study (Ayonayon et al., 2013) examined the correlation of biracial elders with socioeconomic status. This study also examined the effects of socioeconomic disparities in the incidence of dementia among biracial older adults who may be affected by such. The authors found that black elders are more likely to experience cognitive impaired conditions at a faster rate compared to white elders. Also, black elders were more likely to have a higher prevalence of lower socioeconomic status compared to their white counterparts. By having a higher prevalence in socioeconomic status, black elders were more likely less educated, illiterate, and have a more inferior health status. By having these attributes, the connection between black elders experiencing cognitive impairment is relevant among black elders. This study also examined 3,075 community-dwelling elders between the age of 70—79. The sample of white elders was collected from a random Medicare eligibility section where black elders were sampled from specific zip code areas in Memphis, Tennessee, and Pittsburgh, Pennsylvania. All participants in this study were collected from the Health, Aging, and Body Composition Study. However, the analytic cohorts only consisted of 2,457, which was due to the complete information needed to conduct the study based on the variables examined.

Ayonayon (et al., 2013) found that out of the 2,457 participants, 40% were black, and 50% of them were women. The average age for the 2,457 participants was 74 years of age, and 24% of them did not finish high school. The data showed that 12.8% of black elders had an annual income of less than \$10,000. Participation among black elders showed higher levels of body mass, preexisting hypertension, and diabetes. Other factors found amongst participating black elders are that they were likely to smoke; however, less likely to drink alcohol. The data also showed that black elders were more likely to have dementia, 20.7% compared to their white elders, 16.6%. For black elders that experienced dementia, 38% of them were prescribed drugs for their condition (Ayonayon et al., 2013). It is plausible to assume that the historical difficulties that black elders face in their youth may transpire into their old age. Moreover, the socioeconomics for black elders, along with preexisting health conditions, affects black elders in obtaining adequate medical treatment.

Adherence

There is much literature on the study of prescription drug nonadherence for elders with chronic illnesses. There are many reasons as to why prescription nonadherence may take place for an individual elder. One common reason for prescription nonadherence is associated with cost. Cost-related medication nonadherence (CRN) is associated with 10% to 40% of elders that are not in residential care facilities. The results of CRN is weaker health status, higher cost for medical needs, and a higher chance of mortality to occur (Dowdy et al., 2019). Dowdy (et al., 2019) examined CRN amongst elders who were 65 years or older. Their study data collected from the 2015 National Health Interview Survey (NHIS) which is a cross-sectional household interview survey conducted by the National Center for Health Statistics. They examined elders who reported having hypertension or diabetes and being prescribed prescription drugs for those

health conditions. Their sample size consisted of 4,818 elders. Racial groups were categorized into groups of "whites" and "non-whites, whereas ethnicity was categorized into groups of "Hispanic" and "Non-Hispanic." This study found that the average age within the sample data was 73 years of age. Fifty-five percent of the elders examined were females. White elders accounted for 83% of participants. For elders that reported (CRN) they are likely to be women which accounted for (61.3% vs. 54.0%) and had both hypertension and diabetes (36.5% vs. 26.7%) and were less likely to be white (78.6% vs 83.7%), non-Hispanic or Hispanic (89.4% vs 92.0%). The higher (CRN) was associated with elders, the greater chance of prescription unaffordability was evident.

Role of Physicians

Physicians play an essential role in the connection of prescription drug abuse amongst elders. Due to limitations of health and communication, elderly patients are cared for differently by physicians. Using a qualitative in-depth interview process, Adams (et al., 2005) examined physicians' perspectives on elders suffering from cognitive impairments. The sample consisted of 20 family physicians and practicing internists. These researchers found that cognitive impairment affects the physician's methods in how they care for the elderly.

"It's usually so subtle that before I have noticed it, it's usually been, you know, the family and friends who have brought it to my attention. Personally, I find it difficult to really recognize it in a 15-minute interview or, you know, an appointment every 2 or 3 months. (Dr. J. pp. 234)"

Other physicians have stated similar statements about elders being unaware of cognitive impairment and how family and friends will inform the physician. These researchers also found that prescribing drugs to elders who suffer from cognitive impairment can cause difficulties for the physician and the elder's health.

“Neither of them could remember what medicine she was taking. It was incredibly frustrating, and you know, most of it was just because they were not able to cooperate with bringing in their medications or staying on the medications you asked them to. (Dr. G. pp. 235)”

Overall, the study concluded that physicians that care for elders with cognitive impairments are difficult to treat.

Residential Care Facilities

Generally, residential care consists of either nursing homes or assisted living facilities. Nursing homes are deemed for elders who need around the clock care due to their chronic illness needs. This includes elders who may have cognitive impairments, suffer from bodily injuries that cause them to be wheelchair-bound, and are near death. Assisted living facilities are also used to assist elders in certain activities they cannot perform on their own. This consists of assisting in preparing meals, bathing the patients, and washing and putting on clothes. However, assisted living facilities are not intended for elders who need around the clock help. When examining research on residential care facilities, there is more research conducted on nursing homes concerning prescription drug abuse compared to the research focusing on assisted living facilities.

Some researchers have examined elders living in nursing homes who take antipsychotic drugs that suggest misuse is evident (Federspiel, Ray & Schaffner, 1980). Their study examined 5,902 Medicare patients that resided in one of the 173 nursing homes throughout the State of Tennessee. In terms of demographics, 76% of the elderly subjects were women, 86% were white, and 41% of these elders had an urban background. Sixty-one percent of the elders studied were 80 years old or older. Out of the total population, 97% of elders combined took over 384,326 prescriptions containing antipsychotic drugs. The prescription drug that was prescribed the most for 74% of elders was those geared toward the central nervous system. These consisted of a combination of antipsychotic and sedative-hypnotic as the most common drug for elders in this study. The authors concluded that nursing home record-keeping was not as detailed compared to hospitals and the only practical way to know whether antipsychotic drugs were being misused was to focus on elders in nursing homes.

An international study was conducted on elders living in nursing homes in the United Kingdom to examine the potential for prescription abuse amongst elders. Chambers (1999) stated that due to the elder's chronic illness that can affect the mind, they are more at risk of prescription abuse from practitioners, pharmacists, and staffers from nursing homes. He also found that due to the poor internal organization and management structure of nursing homes, along with unethical practices from practitioners, pharmacists, and staffers, this increased the chance of prescription drug abuse. Ethical issues arise from the practitioners and pharmacists who are owners of nursing homes that continue to inappropriately prescribe medications to a resident at their facility Chambers (1999).

O'Quin and colleagues' (2015) study of elders and caregivers attempted to identify solutions to improve prescription adherence. Their research included nine focus groups with a

sample size of 65 participants from five different communities. The requirement age for elders in the study was 60 years of age who took at least one prescription drug per day. The requirements for a caregiver were any person who worked for elders 60 years or older who took at least one prescription drug per day. They found that the average age for elders in the study was 71 years old and tended to be white at a percentage of 82%, blacks accounted for 16%. The data showed that women represented 77% of the elders participating. When the level of education was measured in the study, 95% of participants had at least a high school diploma while 34% had a college degree or higher. Five different themes were produced out of the study (1) use of personal systems to reduce barriers to medication adherence (2) cost (3) a review of prescription by physicians and pharmacists frequently to remove prescriptions not needed (4) community support system and (5) medical advocates.

Death with Dignity

Elders that are tested in the early stages of illness such as memory loss, dementia, Alzheimer's, or other related chronic illnesses may entertain thoughts of euthanasia in the form of "Death with Dignity Act" (DWDA). Death with Dignity is a lawful act for a person to voluntarily choose to die based upon factors such as declining health due to chronic illnesses that will ultimately lead to death. A person that chooses to die must be able to show they have a stable mental capacity before being granted such rights. Right to die and "Death with Dignity" laws have been enacted through various state legislatures, including the District of Columbia. These laws are to provide guidelines for the person who chooses to die, along with protection clauses for physicians. It also provides a list of lethal prescription drugs available to any person choosing to die. The State of Oregon was the first of eight states to enact the "Death with

Dignity" law. More recently, the states of Hawaii, Maine, and New Jersey have enacted similar laws.

The state of Oregon keeps a record count of persons who voluntarily choose the "Death with Dignity Act." The Public Health Division (PHD), under the Oregon Health Authority (OHA), releases an annual report for "Death with Dignity." According to the Public Health Division, 290 people received prescriptions under DWDA in 2019. The data showed that of the 290 people who had died, 188 of them died from ingesting prescribed drugs, which included 18 of 188 that were prescribed in previous years before 2019. According to the Public Health Division 75% of people were 65 years or older. Other characteristics of patients were that the median age of death was 74 years old. These elders were most likely to be white (96%) and had at least a bachelor's degree (53%). The illnesses associated with these elders were cancer at 68%, and neurological illnesses at 14%. Ninety-four percent of these elders died at home and were enrolled in hospice. Ninety-nine percent of these elders had some form of health insurance. The data showed that 30% of these elders had private insurance, where 69% of elders had Medicare or Medicaid. One-Hundred-twelve physicians prescribed 290 prescriptions for qualified people for DWDA. One or two prescriptions were prescribed by 80% of all physicians. The most common drugs prescribed were diazepam, digoxin, morphine sulfate, and amitriptyline. The Oregon Health Authority (OHA) only referred one physician to the state's medical board for improper compliance with DWDA laws.

The State of Washington records annual reports on patients who participate in DWDA. Their last published report data to 2018 participants collected through the state's death certificate filling system. According to Washington's State Disease Control and Health Statistics, 267 people were prescribed prescription for DWDA. The total number of physicians prescribing

prescription was 158, and 61 different drug stores distributed prescriptions. Forty percent of participants were between the age of 65 through 74, where 96 percent of these participants were white, with 46% of the total participants held at least a bachelor's degree. Ten percent of these participants suffered from neurodegenerative disease, where 15% of participants suffered from other illnesses such as heart and respiratory disease. Ninety-four percent of participants had some form of private, Medicare, Medicaid, or other supplement insurance.

Covid-19

At the time of this thesis, the world [is] experiencing its first pandemic in over one hundred years. This virus has affected the majority of all countries in the world. Inside the United States, the first case of COVID-19 dated back in late January 2020. In the beginning months of 2020, elders in residential care facilities experienced high exposures of COVID-19 that lead to high spikes in mortality rates. This was mainly in the State of Washington. As the virus spread across the U.S., elders were considered most at risk for getting the virus along with mortality.

According to the Centers for Disease Control and Prevention (CDCP) report on Morbidity and Mortality Weekly Report, over one million people have contracted the virus and over one hundred thousand people have died from Covid-19 in the United States. During February—April 2020, elders 65 years or older with chronic illnesses were more at risk of getting the virus. Chronic illnesses that were associated the most with people who contracted the virus were cardiovascular, diabetes, and chronic lung disease. Initially, mortality rates were vastly higher among people with chronic illnesses compared to those who do not have chronic illnesses. Within elderly populations, elders who were 80 years or older died from the virus regardless of not having or having chronic illnesses. In the (CDCP) report, cases related to race

and ethnicity, 33% were Hispanic, 22% were black, and Alaskan natives were 1.3%. When examining these three races and ethnicities populations, the data shows that these three groups are disproportionately affected by Covid-19.

Independent research was conducted on elders who contracted Covid-19 in the U.S. Bhatt (et al., 2020) defined Covid-19 as a respiratory syndrome coronavirus 2 (SARS-CoV-2), an infection that causes Covid-19. When examining the mortality rate amongst the elderly population, the data showed that elders in the U.S. who contracted the virus suffered from chronic illnesses such as cardiovascular at 17%, diabetes 26.8%, and hypertension 63.1%. For elders who died from Covid-19 that had chronic illnesses, 13.2% had cardiovascular, 9.2% of elders had diabetes, and 8.4% had hypertension while living.

When examining treatment for elderly patients who contracted (Covid-19), there is no Food and Drug Administration (FDA) approved treatment. The data stated that studies are being conducted for the vaccine (Covid-19). At the time of this writing, the only (FDA) approved drug that gives possible relief from Covid-19 is Chloroquine. The way that Chloroquine works in fighting off (Covid-19) is by increasing the endosomal that is needed for viral-cell fusion (Bhatt et al., 2020). A non-(FDA) approved drug that has shown relief in (Covid-19) symptoms is Remdesivir. An in-depth investigation of this drug is being examined to see effects on patients with (Covid-19) (Bhatt et al., 2020). At the time of this research, no (FDA)-approved treatment and vaccines are available (Bhatt et al., 2020).

Federal, State Regulation

In the United States of America, the federal government has classified drugs into different schedules that can be legal or illegal by law federal law. According to the United States Drug Enforcement Agency, hereafter known as (DEA), there are five different schedules of

drugs. Drugs are classified in different schedules due to potential drug addiction that may occur once taken. Schedule I drugs are the highest for potential drug addiction for the consumer. This schedule consists of drugs like heroin, LSD, cannabis, and ecstasy. Schedule I drugs can also be viewed as "street drugs." It is essential to mention that cannabis is recognized as a legal, medical substance drug in individual states. However, cannabis is still unlawful under federal law.

Schedule II drugs consist of oxycodone, fentanyl, and Ritalin. These drugs as well have high-risk levels for potential addiction that leads to abuse.

Surprisingly, some of these drugs are authorized by the medical community for treatment on patients. Schedule III drugs consist of Tylenol with codeine substances, including testosterone and steroids. Schedule III drugs are low for the addiction rate compared to drugs on schedules I and II. Schedule IV drugs consist of Soma, Talwin, and Tramadol, and lastly, Schedule V consists of drugs like Lyrica. Schedule V drugs carry the lowest potential for addiction; however, addiction and abuse can still be relevant for people. When new drugs are being created, they must be placed into one of these five schedules by federal law before prescribing, and distribution takes place. The United States Attorney General oversees which drugs will be classified where and whether changes should occur in classification for current drugs.

According to the Center for Disease Control and Prevention (CDC), states have produced little information on how well a state effectively regulates prescription drug abuse and diversions. The (CDC) and partnership with the National Center Injury Prevention and Control compelled summary briefs of state legal measurements on how to prevent prescription drug abuse. The (CDC) 's, "Prescription Drug Time and Dosage Limit Laws" article discussed various individual state laws concerning drug time and dosage. There was no comparison assessment conducted between the states in the (CDC) 's article. According to the (CDC) 's article, time

limitations are distinguished by "hours or days" in response to the supply of prescription drugs. In addition, other time limitations factors are determined by drug type, geographical population, and case scenario. In the CDC 's example, Florida is a state that regulates all prescription drugs per time limitation. In another example, CDC's reported that twenty-three states have time limitation laws based upon the scheduling of the drug. In addition, several states have imposed time limitations on oral prescription according to the (CDC) 's article. To further examine the scope of a drugs' life span and dosage, some states, including the District of Columbia, have enacted time limitation laws on individuals who receive Medicare or Medicaid assistance. Legislation on dosage is solely based upon the schedule of the drug. States that have enacted this type of legislation include Florida, Oklahoma, Illinois, Wyoming. Terms that are used in legislation are "dosage unit" this can be interpreted as a single capsule or tablets. In the CDC 's conclusion of time and dosage article of state laws, practitioners whose duties require licensing, authorizations, or sale should consult with their respective legal counsel for better interpretation of state regulations. The CDC 's article titled "Prescription Drug Physical Examination Requirements" discusses physical examination requirements in prescribing drugs. In this article, most states require a physical examination to be taken before prescribing medication. Some states have added language like "appropriate" or "sufficient" to their physical examination requirements. Other legislative languages consist of, "Patient-Practitioner Relationship," where there must be a stable connection between the patient and practitioner. There must be documentation that patient A has visited and been examined by practitioner A enough times before the request of prescription medication can be authorized by practitioner A.

According to another CDC's article titled "Doctor Shopping Laws," "doctor shopping" is interpreted as a patient shopping through various healthcare professionals in search of obtaining

prescription medication without prior professionals' knowledge. In this situation, the burden of truth and ethical reasoning is placed on the patient and not the prescriber. States that have general doctors shopping laws has viewed acts of fraud, deceit, subterfuge as methods of unlawfulness. States like California, Delaware, Rhode Island, Maine, Kentucky, and Kansas has enacted these laws to prevent fraud and deceit when shopping for physicians while there are general doctor shopping laws, there are also specific shopping laws as well in states. The next section addresses the recent developments found by experts in the medical, sociological, pharmacist fields in the connection between elders and prescription drug abuse.

A 2019 Florida statute on elder abuse does not address the connection of prescription drug abuse amongst the elderly. However, the State of Florida Statute Chapter 825 does address the physical or psychological abuse that an elder may experience. Under Chapter 825 of Florida Statutes, abuse on an elder is defined as intentional infliction to cause physical or psychological harm on an elder. Encouraging or knowingly aware of someone attempting to commit abuse upon this an elder is grounds for conspiring to commit elderly abuse. Florida Statute 825.102 governs on who will be accountable for elderly abuse. This specific section addresses caregivers, who are normally the primary person who interacts with elders in daily activities

The Florida Statute chapter 825.102 also defines elder neglect. Specifically, elder neglect is defined as a caregiver who failed to provide specific necessities for the elder's daily routine. Neglect can be in the form of care, supervision, mental health, prescription drugs, and medical services. The Florida Statute elaborates that if negligence is detected, possible results may lead to a substantial increase in chances of death. The crime for a caregiver who engages in culpable negligence that results in disability or disfigurement can be charged with a second-degree felony.

If there is no detection of great bodily harm found on the elder, the caregiver will be charged with a third-degree felony.

The State of Florida Statute Chapter 893 also addresses prescription drug abuse in prevention and control. The statute addresses those who are licensed to prescribe prescription drugs. Physicians, pharmacists, hospitals, and other related professional fields who examine cognitive functions are only licensed to prescribe prescription drugs in the State of Florida. Potential abuse under Florida statute are prescriptions like the central nervous system, depressant, and hallucinogen that can produce health concerns for users not following the direct information provided by authorized professionals. Nowhere in chapter 893 of the Florida State statute specifically address prescription drug abuse amongst elders.

In the State of Florida, two different case laws have been presented before Florida's District Court of Appeals to address who deemed a caregiver, and another specifically addressing the connection between prescription drug abuse amongst elders. The first case law presented is the case of Peterson v. State (2000) The appellate, Mr. Peterson appealed his case on the grounds that he was not the primary caregiver of his deceased mother. Mr. Peterson stated that his younger brother James Peterson took care of their mother's daily affairs, even though all three family members lived in the same household for nineteen years straight. Before death, Mr. Peterson's mother was found to have horrific bed sores on her body and laid in urination and feces while under the care of her two sons. Florida's Fifth District Court of Appeals ruled in favor of the State. The appeals court ruled that section 825.102(2) applies to Mr. Peterson in that he had an obligation to provide adequate care for his mother. The reason as to why Mr. Peterson was held accountable is that even though he did not handle the daily affairs of his

mother, he was still providing caregiver duties by checking in on her before or after work and living under the same household as the elder which implies that he has a duty to act for the elder.

In the next Florida case Maxwell v. State (2013), the appellate Maxwell was a caregiver at a residential care facility, working the overnight shift . During Maxwell's shift, she would tie up the elder and give her Ambien medication to help her sleep at night. By doing so, Maxwell would have more downtime to talk with her boyfriend at night. The State of Florida charged Maxwell with elderly abuse, under section 825.102(3)(a)(1). However, the Florida Fourth District Court of Appeals ruled in favor of Maxwell. The appeals court ruling stated that the courts role is not to elaborate on the intentions of the state legislature when it comes to section 825.102(3)(a)(1), but to interpret the law when it pertained to criminal acts such committed by Maxwell. Under 825.102(3)(a)(1), it does address the criminal act or behavior of someone who forces elders to take medication. By not addressing what is prescription drug abuse amongst elders when related to caregivers in section 825.102(3)(a)(1), the district court had to rule in favor of Maxwell.

CHAPTER FIVE: CONCLUSION

Results

The finding in this study concludes that there are two different set groups of elders based on age and health status that are at high risk of prescription drug abuse. The first set group of elders who are at risk of prescription drug abuse is elders that are between 74 to 79 years old. The data collected in this study shows that these elders are beginning to take polypharmacy prescriptions in this age group. The data also shows that in this age group of elders, multiple chronic conditions start to develop for this set group. In this set age group of elders, they are most likely to be white women, who have some form of a college education.

Another age group of elders who are risk of prescription drug abuse is those who are 80 years or older. In this age group, multiple chronic conditions have usually set in. Also, chronic illnesses that affect brain function can become serve in this age group as well. Illnesses such as memory loss, dementia, Alzheimer's affects this age group more compared to the first age set group of elders. The difficulties of being cognitively impaired create a higher risk for these elders to experience prescription drug abuse. The data shows that these specific elders will take on the average take at least five prescription drugs per day. The only similarities found between both age set groups are that both elderly groups will be most likely white women who have some form of a college education. The findings in the data suggest that elderly minority groups are less likely to be prescribed prescription drugs; however, once prescribed prescription drugs, they take a similar amount of prescriptions compared to their white counterparts.

Discussion

The ever-growing issue behind prescription drug abuse amongst elders must be addressed in all areas that encounter the elderly community. The majority of communication in today's world consists of digital communication (i.e., internet). For the current generation of elders (i.e., Baby Boomers), and a few remaining from the Lost Generation, digital communication is a foreign language to them. These elders need personal face to face interaction with their physician, and pharmacist to better understand what their health conditions are and what other alternative can take place from only prescribing them more prescriptions.

At the timing of this study, the global world experienced pandemic coronavirus (Covid-19). Due to there being no vaccine for this virus, countless lives have been lost in the U.S. and worldwide. Elders in the U.S. will continue to experience higher contractions and deaths (Covid-19) due to their health status, and the lack of prevention taken place at elders' residents. As researchers and pharmacists move steadily in creating a vaccine, serious thought should be given to how this vaccine will affect elders. Study trials should be examined on different age groups within the elderly population, along with testing elders of different demographics since minority elders experience higher rates of death compared to their white counterparts.

Future Study

Future studies on the topic of prescription drug abuse amongst the elderly need to examine the correlation between physicians and residential facilities ownership/family members for nonadherence situations. This gap in research can present the missing link for elders who are suffering from prescription drug abuse in residential care facilities. Family members can be at fault in these occurrences between the physicians and residential care facilities. Also, the closer examination needs to be focused on assisted living facilities since mandatory licensing for

ownership, and caregivers are not as thorough compared to nursing homes. Lastly, research is needed on the consequences elders will experience if a vaccine is not found for (Covid-19).

In conclusion, the elderly population in the U.S. and abroad will experience prescription drug abuse due to factors they have little control over. An elder will take at least one prescription drug for their health conditions at some point in their life. As elders get older, it increases the chances they will experience some form of prescription drug abuse. Elders are essential to our society and reducing prescription drug abuse amongst elders needs to be addressed to society.

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