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# A Descriptive Study of the Elderly in California Substance Abuse Treatment Programs

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# A DESCRIPTIVE STUDY OF THE ELDERLY IN CALIFORNIA SUBSTANCE ABUSE TREATMENT PROGRAMS

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A Project

Presented to the

Faculty of

California State University,

San Bernardino

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In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

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by

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ABSTRACT

As gerontologists may know, there are a great deal of studies and a variety of academic literature on the misuse of alcohol and prescription medication amongst the elderly population. While there is a plethora of information on alcohol and prescription misuse, there is little reported data about the prevalence of other substance misuse experienced by this population. This study aims to help to fill that gap in the data by using quantitative methods to describe the scope of substance abuse of individuals 55-years or older. This study utilizes data from the Treatment Data Set Admission (TEDS-A). The TEDS-A is a public data set which includes admissions data from multiple substance abuse treatment facilities associated with the Substance Abuse and Mental Health Services Association (SAMHSA). This is a regional study, therefore this study focuses only on individuals 55-years or older who have been admitted into substance abuse treatment facilities in the state of California in the year 2014.

The TEDS-A is a data set that is supported and conducted by members of SAMHSA. Most of their public data sets, including the TEDS-A, can be accessed on their website (https://www.datafiles.samhsa.gov/study/treatment-episode-data-set-admissions-teds-2014-nid16949). The data available in the TEDS-A involves a number of admission questions, including demographic data, reasons for intake, primary through tertiary substance concerns, questions regarding social status, information on medical insurance, and more.

This study looks at the descriptive frequencies of the use of alcohol, crack/cocaine, marijuana/hashish, heroin, other opiates & synthetics, methamphetamine, and other substances. The study includes 13,512 cases, of which 9966 (73.8%) of cases were male, 3539 (26.2%) were female, and 7 (0.1%) were missing and/or invalid. The results of the data suggests that, while alcohol abuse is a problem, those over 55 are admitted into substance abuse clinics for many other reasons, not just alcohol abuse

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# CHAPTER ONE

# INTRODUCTION

## Problem Statement

We all have different perceptions of senior life. However, few would likely agree that their perception of a senior includes heavy substance abuse addictions. While we do not always picture seniors struggling with addictions, some seniors have great difficulty with heavy drug use. There are seniors and late-life adults who may be struggling with substance abuse issues of very potent and serious drugs, yet few may get the recognition or treatment they need.

In looking at the research and available literature, there is little wonder as to why few picture seniors as struggling with severe substance abuse concerns. Much of the available literature focuses their studies on topics of alcohol misuse (Mackel, 1992) (Yee, 2004) (Fahs, 2010) (Maipruz, 1992) (Coulson et al., 2014) (Forlani et al., 2014) (Steffens et al., 2000 (O'connell, Chin, Cunningham, & Lawlor, 2003) (Sherlock, 1994) (Lieber & Leo, 1992) (Reuben, 2007) (Fisher, 2013) (Best, Hartroft, Lucas, & Ridout, 1949) (Keshavarzian et al., 1999) and medication misuse (Culberson & Ziska, 2008) (Ostrom, Hammarlund, Christensen, Plein, & Kethley, 1985). (Compton & Volkow, 2006) (Barnea & Teichman, 1994) (Memmott, 2003). However, there are only a few articles that spends time looking at other substances. This gives to light the fact that we really do not know or understand the breadth of substance use among the senior population. Thus, we may be overlooking a population that is vulnerable and in

need of services. This research, at its heart, hopes to help fill that gap in information.

## Significance to Social Work Practice

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## Conclusion

In summary, there is a drastic need for more research in this area. With the lack of available data, the need for studies that incorporate a broader range of substance abuse is necessary. Social workers should be particularly invested in this topic, because it relates directly to the professional and ethical values the field embraces. Additionally, it is a great opportunity for funders to look into other ways to help the population and provide resources that can address this issue. In that, this study seeks to answer the following research question:

## Research Question

What is the prevalence of substance abuse problems amongst aging Californians admitted into substance abuse treatment facilities?

# CHAPTER TWO

# LITERATURE REVIEW

## Introduction to the Literature

In this chapter, we will discuss several different aspects of substance Abuse amongst the senior population. To start, we will talk a little about substance abuse treatment. Then, there will be a section about the abuse of alcohol. Following, there is to be a small section in regards to medication abuse amongst the elderly. Finally, the section will conclude with the topic of the abuse of other substances, finished by a short summary.

## Substance Abuse Treatment

There are many potential treatment methodologies used in substance abuse treatment. In some cases, it is expected that treatment interventions for substance abuse would be as effective to the aging population as it would to any other age group. However, there are a few notable treatments and predictors that can be important in examining substance abuse among this population. For the remainder of this section, we will discuss a few of the most identifiable treatments, methodologies, and information about substance abuse. In some of these cases, substance abuse studies may focus on other age groups. However, the information in these studies are valid practices for the older adult populations.

While there is some variety to the effectiveness for substance abuse treatment, there are common themes in effect treatment. Like other populations, group and individual therapy has been shown to improve treatment and

substance abuse outcomes in substance abuse treatment programs that include the elderly (Reed, 2010) (McLoughlin, 2000) (Hampton, 2015) (Fahs, 2010). Some addictions treatments include a medication assisted component, depending on the substance (Center for Substance Abuse Treatment, 2005) (Friedman et al., 2012) (Roman et al., 2011) (Volkow, Frieden, Hyde, & Cha, 2014) (White, 1998). In most of cases, medication assisted treatment is reserved for opioid use. In addition, elderly clients who attended private treatment organizations may have better treatment outcomes when compared to others who attend public nonprofit treatment organizations (Reed, 2010). However, this could be misleading information. It is possible that those who are able to afford private treatment organizations simply have a greater access to resources, making their outcomes more favorable.

Substance abuse treatment, in general, focuses on a few specific approaches and generalized models. In modern years, there appears to have been a push in addiction treatment methodologies for family-oriented and recovery treatment models (Hill, 2005) (Munguia, 2005). While there are many different methods of treatment, treatment outcomes can vary by individual and cultural factors. Thus, other successful models include some degree of community treatment aspect. Community treatment models have also been shown to be effective in addressing substance abuse issues, especially with elderly clients (Guida, Unterbach, Tavolacci, & Provet, 2005). In some aspect, community treatment models may make sense, because it gives the clientele a

strong support system. Community treatment can empower clients to manage themselves more effectively, especially when faced with a dual diagnosis (Barry, Zeber, Blow, & Valenstein, 2003) (Drake et al., 1998) (McHugo, Drake, Teague, & Xie, 1999).

Though there are many potential challenges when working with the elderly and adult populations, there are several positive aspects of working with this population. For example, there has been some evidence that suggests older adults are more likely to complete substance abuse treatment programs than their younger counter-parts (Munguia, 2005). This can be an encouraging quality for workers who experience burnout and feel clients do not have consistent program completion rates. Matching clients with the services that best fit is a vital aspect of substance abuse treatment and an important factor to keep in mind during any clinical consideration. This particularly comes into focus when discussing treatment for people with different cultural backgrounds. Like other age groups, elderly populations require culturally appropriate treatment modalities (Terrell, 1993).

Alcohol Abuse

While there are a number of studies done in regards to substance abuse, one focus of geriatric research includes elderly alcohol abuse. These studies differ in nature and range anywhere from intensive studies on alcohol assessments (Mackel, 1992), to prevalence rates of alcohol use (Maipruz, 1992) (Yee, 2004), to negative health consequences (Fahs, 2010) (Maipruz, 1992), and

much more. With all of the literature on alcohol misuse amongst the aging, there is certainly a plethora of information. In this section, we will spend some time discussing the available literature regarding aging and alcohol abuse.

With that said, there are a few social and psychological implications that are important to note. The first implication is the relationship between alcohol and depression. With the increased use of alcohol, there has been documentation of an increase in depressive symptoms of seniors (St John, Montgomery & Tyas, 2009). As seniors enter a new phase of their life, alcohol problems can become a challenging burden to carry. Rates of alcohol problems and depression tend to increase when symptoms of both are co-occurring (Coulson et al., 2014) (Forlani et al., 2014) (Steffens et al., 2000). Alcohol abuse problems amongst the elderly is nothing new (O'connell et al., 2003). However, the addition of mental health concerns can complicate alcohol addictions (Boden & Fergusson, 2011).

Keeping that in mid, there are a number of treatment facilities that address alcohol abuse. Some of these facilities can employ a number of substance abuse counselors and social service workers, including social workers. While social workers can provide treatment for the aging struggling with alcohol abuse issues, Masters level social work students also show a degree of unpreparedness in working with this population (Durante, 2003). Other students in other counseling fields also show a need for increased education in working with the aging population (Santiago, 2013). This could suggest that there is a need for more awareness and educational focus regarding elderly substance abuse.

In knowing treatment facilities are available, there are a few important factors that can contribute to treatment outcomes for alcohol treatment amongst seniors. In most residential treatment facilities, outcomes do not significantly differ by age, marital status, or living alone (Holland, 1989). Social supports may also serve as an important factor in alcohol treatment (Hanson, Isacsson, Janzon, &Lindell, 1989). And, even though alcohol is a publically accepted substance, withdrawal symptoms can be intense (Karounos, 2015). In understanding the factors of alcohol symptoms and treatment, there can be measures taken that help ease the transition away from alcohol abuse. It is important for researchers and clinicians to provide care and attention to populations struggling with alcohol abuse.

In addition to social and psychological concerns, health concerns are a major part of alcohol abuse treatment. One major concern regarding alcohol abuse is the effects on the liver. As we age, the liver tends to become less efficient and may experience reduced effectiveness in blood cleansing (Scott & Mitchell, 1988). Because alcohol is a substance that has direct impact on the liver, there is much literature on the potential damage it can cause (Sherlock, 1994) (Lieber & Leo, 1992) (Reuben, 2007) (Fisher, 2013) (Best et al., 1949) (Keshavarzian et al., 1999). Moreover, the liver might experience additional damage in the elderly population, especially if the alcohol spends a prolonged amount of time in the bloodstream (Scott & Mitchell, 1988). It has also been noted that, in some cases, the hippocampal areas of the brain tend to be smaller

in those who had a history of alcohol misuse (Agartz, Momenan, Rawlings, Kerich, & Hommer, 1999). That said, It is not fully determined if alcohol is the cause of these changes in the brain. The Agartz et al. (1999) study merely shows there may be some relationship between alcohol abuse and changes in the brain.

While the role of alcohol on the body is well documented, the interplay between alcohol and the brain is still a topic of interest. The effects of alcohol and the brain are further highlighted when one begins to include the impact of traumatic brain injury and mood disorders (Jorge et al, 2005). While alcohol abuse effects social and psychological factors of an individual, the interplay between the physical and biological aspects can also be affected. It is important that mental health and social service workers continue to coordinate with medical professionals in addressing alcohol abuse at an early age, because Alcohol abuse treatment outcomes may be effected by the age of first use and current health status of patients (Grant, 2015).

Medication Abuse

While alcohol abuse is an important topic, it is also important to understand medication abuse. Even though sources may have different beliefs, there are a few factors that tend to show up in the literature. Gender, social isolation, substance abuse history, and mental health are all factors that seem to be a consensus in how they relate to medication misuse (Culberson & Ziska, 2008) (Ostrom et al., 1985). Addictions to medications may be of great concern (Compton & Volkow, 2006). The risk of prescription drug abuse has many

variables. Some of these variables may not be fully understood. However, in understanding that there are multiple perspectives and distinctions, we must be aware that responses to medication abuse may differ. For example, some reports have interesting interpretations of the prevalence of prescription medication abuse than others. Some studies suggest that the rates of elderly medication abuse are as high as 11% in females (Culberson & Ziska, 2008), while others claim more complex results (Barnea & Teichman, 1994) (Memmott, 2003). Either way, there is an apparent need for services and attention to prescription abuse.

While there is a plethora of data on the misuse of prescription medications, there is also some research in the misuse of over-the-counter (OTC) medications. In understanding elderly substance abuse, it is conceivable that pursuit of relief comes in many forms. Amongst them, OTC drug abuse has some history in the literature (Fincham, 1986). OTC drugs, for instance, may be more readily available and accessible. Without a prescription, some of these medications are untracked and can go unreported. Despite having access to medical resources, OTC medications may be an inexpensive way to get a respite from sobriety. Sometimes, medications can also be coupled with alcohol to create a greater euphoric effect (Schonfeld, Rohrer, Zima, & Spiegel, 1993). This can cause some challenges for professionals, because OTC data is tracked by self-report (Lessenger & Feinberg, 2008). For the system-savvy user, this is an addiction that may easily go untreated.

## Other Substance Abuse

While there is much literature on alcohol abuse and medication abuse amongst the elderly, there appears to be a severe lack of data on other substance abuse for this population. In researching this section, there were only a handful of articles that directly addressed substance abuse problems of other specific drugs (Clark, 1998) (Taylor, Paton & Kerwin, 2005). There is some literature that addresses underreporting of other substance misuse (McGrath, Crome & Crome, 2005) (McInness & Powell, 1994), but there are relatively scarce topics that discuss specific drugs directly. Other data regarding the misuse of other substances is largely unavailable. Clark (1998) mentions the increased use of Heroin usage among the elderly, at a time in which heroin use is being addressed in school anti-drug programs. However, other literature on this topic was largely undiscovered.

## Summary

In finishing this chapter, we have discussed several different aspects of substance abuse amongst the senior population. In starting, we have talked about the treatment of substance abuse. Then, there was a section about the abuse of alcohol. Following, there was a small section in regards to medication abuse amongst the elderly. Finally followed by a section on abuse of other substances.

# CHAPTER THREE

# METHODS

The following chapter depicts how data was collected and analyzed for the current study. Some topics that will be covered in this section include the study design, sampling, instruments used, data collection, and data analysis.

## Study Design

The current study seeks to describe the prevalence of the abuse of substances in those who are 55 or older and have been admitted into a substance abuse treatment facility associated with SAMHSA in the state of California in the year 2014. Admissions data was collected by the agencies, and that data was submitted to members of SAMHSA's TEDS-A research team which then compiled the responses into data sets for public use. The data was then complied and distributed to the public. The data was analyzed through IBM's Statistical Package for the Social Sciences (SPSS) Version 24.

Using a quantitative methodology allows for larger sample sizes and data that can be applied to vast groups. Studies like these are large and expansive, therefore, these types of studies are usually more generalizable. Several limitations to the current study include the possibility of sampling error, respondent bias, inaccurate information, etc. Sometimes large data sets are not always enough to describe complex social phenomenon, and sometimes large

data sets do not do an adequate job at describing social issues that require context.

On that note, it is important to make clear that studies with large data sets must be understood within context. For example, as this information is from substance abuse treatment facilities, it is important to keep in mind that this is may not be generalizable to the average citizen. Rather, this is information is generalizable only to its specific population – that is, those over the 55 or over that have substance abuse concerns and have visited a substance abuse treatment facility in California. It is important to keep in mind, as you will see in later sections that heroin abuse is the most prevalent reason individuals of this age cohort are admitted into these facilities. But, just because there is a high rate of heroin admissions into these facilities, it is not realistic to assume that California – or the elderly in general for that matter – can be associated with having severe heroin problems. Rather, these high rates occur because heroin is such a powerfully addictive drug that drug treatment facilities are the most equipped to handle these problems. In other words, these rates are high, because drug treatment facilities may focus on severe drug abuse recovery. So, naturally, they would receive increased admissions of individuals experiencing these types of challenges. However, because of the unusually bulky size of the data, these limitations are minimized, and the data should be considered applicable if used correctly. As with most quantitative studies, increased numbers of cases usually reduces margins of error.

Sampling

For the goals of this project, secondary data from the 2014 Treatment Data Set Admissions (TEDS-A) was used. The TEDS-A is an annual collection of data from multiple substance abuse treatment facilities located within the United States that includes treatment facilities that either volunteer or are mandated to submitted data to SAMHSA with the purpose of measuring and providing information on drug and alcohol use. The original data set contained 1,614,358 cases. The inclusion criteria for this study relates to being admitted into a substance abuse treatment facility in the state of California in the year 2014. Inclusion for this study also involves being at least 55-years-old or older. While there is likely similar data on other states, this study chose to focus on the population in California, because those who would most likely have access to this information would be residents, students, and/or academics residing in the state of California. After the inclusion criteria for this study was factored into the data set, the remaining number of cases that were applicable included 13,512 cases.

Procedures

The data was collected throughout the year of 2014 by SAMHSA substance abuse treatment facilities. The data was collected and compiled into usable formats and then made available to the public. The data set was taken from the online SAMHSA research database (Files can be found at https://www.datafiles.samhsa.gov/study/treatment-episode-data-set-admissions-teds-2014-nid16949 ) in March, 2017 and the data was run through statistical

measures the same month. After collected, the data was put into IBM SPSS-24 for analysis, and cases were matched for inclusion criteria. After inclusion criteria were matched, the data was run through the IBM SPSS-24 statistics software for frequencies. Once the frequencies were run, it was found that the data held insignificant frequencies (prevalence's rates less than 1%) in both the Primary and Secondary Substance Abuse Problem tables. The insignificant frequencies were then restructured and included into the category listed as "other". The substances with insignificant frequencies were as follows: Non-prescription methadone (Primary 0.4%, N=58; Secondary 0.6%, N=76), PCP (Primary 0.2%, N=31; Secondary 0.1%, N=20), other hallucinogens (Primary ~0.05%, N=3; Secondary ~0.08%, N=6), other amphetamines (Primary 0.1%, N=13; Secondary 0.1%, N=20), other stimulants (Primary ~0.03%, N=2; Secondary ~0.08%, N=6), benzodiazepines (Primary 0.2%, N=33; Secondary, 0.7%, N=95), other-non benzodiazepine tranquilizers (Primary ~0.05%, N=3; Secondary, 0.2%, N=25) barbiturates (Primary 0.1%, N=7; Secondary 0.1%, N=11), other non-barbiturate sedatives or hypnotics (Primary 0.1%, N=11; Secondary 0.2%, N=25), inhalants (Secondary ~0.03%, N=2), over the counter medications (Primary ~0.05%, N=3; Secondary ~0.03%, N=2), and other (Primary 0.3%, N=41; Secondary 0.5%, N=69).

Data Analysis

The research question was answered via descriptive statistics. Descriptive statistics is comprised and described in a number of ways. However, for the most

part, descriptive statistics use numbers and digits to describe and summarize characteristics, similarities, or traits of a sample (Johnson & Christensen, 2008; Ostle & Mensing, 1975; Slavin, 2007). The descriptive statistics were created and expressed in a series of tables. These tables can serve as visual expressions of the comparisons of different substance abuse categories experienced by this population. The percentages were calculated for each item by collecting the number of responses for that item (N) and comparing them for difference to the accumulated total for all responses (TN), or the formula N ÷ TN = X% where X is a digit and TN is considered equivalent to 100% of the total sample population. This was used to collect the necessary information in order to answer the research question.

## Summary

This chapter discussed the methodology that was used in order to form this study, which attempts to identify the prevalence of substance abuse amongst the elderly population. The design of this study was posted in this section, in that it most closely follows a case-series descriptive design. Additionally, some of the background information regarding sampling from the population and data set were included. Finally, data analysis for this project was discussed in terms of statistical measures in the form of descriptive frequencies and percentiles.

# CHAPTER FOUR

# RESULTS

## Presentation of the Results

The primary objective of this study is to understand the pervasiveness of substance abuse amongst the aging populations and to help increase awareness of the issue by adding to the existing literature. This chapter will discuss the results of the study. We will look at three major topics, including the demographic data of the respondents, the Primary Substance Abuse Problem upon admission, and the Secondary Substance Abuse Problem upon admission.

### Demographics

In discussing the demographics of the sample population, there are five main areas that will be discussed. These areas include sex, race, education, employment, and living status. This demographic data is important in that it can give us a look at any particular base and/or bias toward any particular group, if one exists

Sex. In this study, there were a total number of 13512 total applicable cases. Of these cases, 73.8% identified as biologically male (N=9966), and 26.2% of cases identified as biologically female (N=3539), and 0.1% of cases had missing or unknown values (N=7). (See Table 1).

Race. Of the cases, there were a number of different groups included. Several races constituted less than 1% of the total sample size. These categories were small, and therefore recoded in the “Other Single Race” category. Of the

races described in the cases, the number of American Indian (Other Than Alaska Native) attributed a total of 1.5% of cases (N=201). Black or African American accumulated a total of 23.7% of cases (N=3197). Whites contributed the largest portion of the population at 54.9% (N=7417). Asian attributed to 1.6% of the sample size (N=215). The category of Other Single Race constituted a total of 15.5% of the total sample size (N=2103), and Two or More Races composed 2.8% (N=379) of the total cases. (See Table 2).

The data did not include demographic information on ethnic differences. The sample included Hispanic/Latino/Central & South American populations in the White race category, because Hispanic/Latino/ Central & South American are ethnic distinctions and not racial distinctions.

Education. The cases also included information on the total number of years in formal schooling. Of the sample population, only 5.9% (N=731) had eight years or less formal education. At 19.7% (N=2659) of the total sample, some could be considered high school dropouts with having 9-11 years of formal education. Those who graduated high school with 12 years of education consisted of 46.5% (N=6283) of cases. Those who attended college or had 13-15 years of formal education included 19.7% (N=2667) of the cases. Those who spend 16 years or more of formal education encompassed 7.8% (1060) of the total cases. Additionally, 0.4% (N=54) of cases were invalid or had missing information in this category (See Table 3).

Employment. Information on employment type was also collected. Employment had a total of four main categories. Of the cases included in this study, 5.7% (N=772) were employed full-time, 4.5% (N=612) were employed part-time, 16.8% (N=2276) of cases were unemployed, and 72.9% (N=9852) of cases were considered not in the labor force (See Table 4).

Living Arrangements. In addition, information on living arrangements were gathered. Of the cases that fit this study, 28.9% (N=3909) of cases were considered homeless, 20.2% (N=2724) were engaged in dependent living, and 50.9% (N=6879) had independent living situations (See Table 5).

Primary Substance Abuse Problem

Substance abuse was reported in terms of primary and secondary substance abuse problems. There are a number of similarities in substance abuse patterns in both primary and secondary concerns. While there was a vast number of reporting options, substances that had a less than 1% sample prevalence was recoded and included in the “other” substances category.

Primary substance abuse problems varied on intake. From highest to lowest, Heroin had the greatest frequency of intake at 36.0% (N=4869). Then came alcohol abuse at 31.8% (N=4298), methamphetamine abuse at 12.3% (N=1663), and crack/cocaine use at 8.8% (N=1190). On the tail end, other opiates and synthetics comprised 6.7% (N=899) of the sample, followed by marijuana/hashish at 2.9% (N=388), and the other substances at 1.5% (N=205) (See Table 6).

Secondary Substance Abuse Problem

On intake, some cases had more than one major substance abuse condition. For those that had more than one substance abuse condition, a second tally was taken with the list of substances that were classified as a co-occurring addiction. While 58.3% (N=7863) of cases only presented with one substance abuse condition on intake, 41.4% (N=5613) of cases presented with at least two co-occurring substance abuse conditions, and 0.3% (N=36) of cases were invalid or unknown due to sample collection or data error. Of the cases that had at least two substance abuse conditions on intake, the second category was listed as a secondary substance abuse problem.

Of the cases that came into admission with a secondary substance abuse problem, the prevalence rates varied by substance. Because there were a few cases that had invalid or missing data, the following description of the results will focus on the valid percent. Alcohol appeared to be the most frequently reported secondary substance abuse condition, with 10.3% (N=1397) of the sample having alcohol abuse as a secondary problem. Marijuana/Hashish came in second with 9.1% (N=1228), followed by methamphetamines at 7.3% (N=989), and crack/cocaine at 7.2% (N=970). On the lower end, other opiates and synthetics were listed as a secondary substance abuse problem for 2.7% (N=370) of the sample population, other substances at 2.5% (N=339), and finally heroin with the lowest secondary substance abuse concern at 2.4% (N=320) (See Table 7).

## Summary

In recapping, this chapter focused on reporting the results of this research. Demographic descriptions of the sample cases were given in terms of biological sex, race, education, employment status, and living situation at time of admission. The prevalence of substance abuse amongst this population was reported via descriptive frequencies. Data on primary substance abuse problems reported at admission and secondary substance abuse problems reported at admission were recounted in this chapter.

# CHAPTER FIVE

# DISCUSSION

This is chapter will include a discussion of the results and potential implications. Beginning this chapter, we will have a general discussion of the findings and results. Afterwards, we will discuss a few of the implications of this research, specifically as it relates to social work. Then, we will have a brief section of recommendations and notes for future studies. In following, there will be a short summary to end the chapter.

## Discussion

In understand human development, it is important to acknowledge that development is a life-long process. As we venture through our lives, growth can have both dynamic and static phases. This is an essential thing to keep in mind as we discuss the following chapter, as substance abuse is a complex behavior and can go through many dynamic and static phases. This complexity can even further compound when paired with underserved populations. The number of factors that can be examined are expansive and can range from the behavioral, to the biological and physical, to the emotional, to the experiential, and beyond. As we work through this chapter, it is important for readers to understand that this research is only a glimpse of substance misuse amongst the elderly. For those who wish to use this research in order to understand this population, it is paramount to be aware that this research cannot be taken as a stand-alone text.

While research is important, there is no standard or prescribed pedigree to this population. Everyone is different and must be treated with human kindness, dignity, and respect. Therefore, anyone who seeks to effectively use this research can do so by using it as a descriptor of the frequency of substance abuse that occurred within this specific sample population at the time the data was collected. In knowledge of this, we can begin to disseminate and discuss the research described in the previous chapter.

Examining the data, we can see that heroin was the substance most frequently illustrated to be the primary substance abuse problem on admission (See Table 6). This is interesting for a number of reasons. Firstly, there appears to be a significant lack of documentation of elderly involvement with heroin use. While there have been some reported studies of heroin use amongst the elderly (Clark, 1998), much of the research focuses attention on other substances (Holland, 1989) (Fahs, 2010). In looking at the prevalence rates of substances as a secondary substance concern, heroin ranked the lowest in terms of prevalence with only 2.4% of the sample with heroin as a secondary concern. This is to be expected. There are many reports of the highly addictive nature of heroin (Chou et al., 2014) (Cicero et al., 2014) (Compton, Jones, & Baldwin, 2016) (Fatseas et al., 2015) (Hedegaard, Chen, & Warner, 2015) (Wiers, Gladwin, Hofmann, Salemink, & Ridderinkhof, 2014). Therefore, it is reasonable to assume that those entering these facilities for heroin use will assume heroin to be the primary concern for addiction admissions due to the extreme physical and psychological

addiction markers of this drug. In other words, it is appropriate to conclude that heroin use is ranked a higher priority for treatment than most other substances, because heroin is more physically and psychologically addictive than other drugs listed. This inference is supported when examining the low rates of heroin use as a secondary substance abuse problem. That is, heroin is so highly addictive, there would only be rare cases in which other substance addictions would be more severe.

As there are a number of articles on alcohol misuse amongst the aging, the data helps validate some of the concern. Alcohol abuse rated the second highest primary abuse concern and the highest secondary abuse concern in the sample. While heroin use showed itself to be the most intensively addictive substance and the substance with the most emphasis for concern, alcohol abuse appears to be the most widespread. Because this is only a descriptive study, the results cannot depict the reasons why alcohol abuse is so widespread. However, the data shown in the previous chapter does validate the need for extensive alcohol abuse studies amongst this population.

When looking at the rates of other substances, there is a potential stigma in the view of the public. Some individuals may be under the misconception that the elderly fall into a specific archetype. However, the data suggests seniors are just as versatile and diverse as other age groups. While methamphetamines and crack/cocaine addictions represent only a small portion of sample, it does exist.

This is important to understand, because it helps emphasize the need for more attention and services to the aging populations who struggle with addictions.

Primary substance abuse problems varied on intake. From highest to lowest, Heroin had the greatest frequency of intake at 36.0% (N=4869. Then came alcohol abuse at 31.8% (N=4298), methamphetamine abuse at 12.3% (N=1663), and crack/cocaine use at 8.8% (N=1190). On the tail end, other opiates and synthetics comprised 6.7% (N=899) of the sample, followed by marijuana/hashish at 2.9% (N=388), and the other substances at 1.5% (N=205). While the data shows information on other drugs listed, the most prevalent findings were in regards to heroin abuse, alcohol abuse, and crack/cocaine abuse. Other drugs listed had less significant findings.

Implications for Social Work

In light of this, the implications of this research for social workers working with addictions and elderly populations is high. As the data shows, heroin use is fairly prevalent amongst this population. Yet, research and data in regards to specialty treatment for this population could use improvement and support. In some ways, this could be a signifying call for social workers to help guide attention and services to the aging population, especially as we begin to reach the peak of the baby boomer generation's ascent into late life. With further research, social workers may begin to divulge effective prevention and treatment programs and interventions that could alleviate much potential social and psychological strife. Social workers play a key role in addressing this concern,

because social workers are versed in the roles of advocacy, treatment, research, politics, management, and research. These are all areas that this specific population need in order to get the support and services they deserve.

## Implications for Future Studies

Because there is potential growth in understanding heroin issues amongst the elderly population, this gives an abundance of opportunities for future studies to pursue research into heroin abuse amongst the aging. The implications of this research can be used as a starting point to help researchers delve into the causes, treatments, and prevention of elderly abuse of heroin.

While the research presented in this study is important, there are always ways to improve. For example, this study fails to examine the degree or prevalence in which prescribed medications were abused by the aging population. However, this allows other studies to expand upon this literature by examining the degree and prevalence in which prescribed medications are abused by this population. Further studies may also wish to explore if there are any prejudices and/or stigmas in regards to alcohol and medical abuse amongst the elderly.

## Summary

In summation, this chapter has spent some time discussing the results and the potential implications of this research. In that, we have spent some time discussing the findings listed in Chapter four, particularly in regards to heroin and alcohol use. Additionally, we have reviewed some of the implications this

research has in the field of social work. Finally, we have talked about some of the ways future studies can improve this research. While substance abuse is a concern, it is important to keep in mind that every person has a story to tell. And, it is important that we remain aware that substance abuse can effect anyone, regardless of age, gender, sexual orientation, or other demographic information. The future is uncertain. But, it is important to hold fast to the ideals of human dignity, respect, and the pursuit of cooperative, mutual growth.

# APPENDIX A

# TABLES

**Table 1.**

**SEX**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | MALE | 9966 | 73.8 | 73.8 | 73.8 |
| | FEMALE | 3539 | 26.2 | 26.2 | 100.0 |
| | Total | 13505 | 99.9 | 100.0 | |
| Missing | MISSING/UNKNOWN/NOT COLLECTED/INVALID | 7 | 0.1 | | |
| Total | | 13512 | 100.0 | | |

**Table 2.**

**RACE**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | AMERICAN INDIAN (OTHER THAN ALASKA NATIVE) | 201 | 1.5 | 1.5 | 1.5 |
| | BLACK OR AFRICAN AMERICAN | 3197 | 23.7 | 23.7 | 25.2 |
| | WHITE | 7417 | 54.9 | 54.9 | 80.1 |
| | ASIAN | 215 | 1.6 | 1.6 | 81.7 |
| | OTHER SINGLE RACE | 2103 | 15.5 | 15.5 | 97.2 |
| | TWO OR MORE RACES | 379 | 2.8 | 2.8 | 100.0 |
| | Total | 13512 | 100.0 | 100.0 | |

**Table 3.**

**EDUCATION**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 8 YEARS OR LESS | 791 | 5.9 | 5.9 | 5.9 |
| | 9-11 | 2659 | 19.7 | 19.8 | 25.6 |
| | 12 | 6283 | 46.5 | 46.7 | 72.3 |
| | 13-15 | 2667 | 19.7 | 19.8 | 92.1 |
| | 16 OR MORE | 1060 | 7.8 | 7.9 | 100.0 |
| | Total | 13460 | 99.6 | 100.0 | |
| Missing | MISSING/UNKNOWN/NOT COLLECTED/INVALID | 52 | 0.4 | | |
| Total | | 13512 | 100.0 | | |

**Table 4.**

**EMPLOYMENT STATUS**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | FULL TIME | 772 | 5.7 | 5.7 | 5.7 |
| | PART TIME | 612 | 4.5 | 4.5 | 10.2 |
| | UNEMPLOYED | 2276 | 16.8 | 16.8 | 27.1 |
| | NOT IN LABOR FORCE | 9852 | 72.9 | 72.9 | 100.0 |
| | Total | 13512 | 100.0 | 100.0 | |

**Table 5.**

**LIVING ARRANGEMENT**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | HOMELESS | 3909 | 28.9 | 28.9 | 28.9 |
| | DEPENDENT LIVING | 2724 | 20.2 | 20.2 | 49.1 |
| | INDEPENDENT LIVING | 6879 | 50.9 | 50.9 | 100.0 |
| | Total | 13512 | 100.0 | 100.0 | |

**Table 6.**

**SUBSTANCE ABUSE PROBLEM (PRIMARY)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | ALCOHOL | 4298 | 31.8 | 31.8 | 31.8 |
| | COCAINE/CRACK | 1190 | 8.8 | 8.8 | 40.6 |
| | MARIJUANA/HASHISH | 388 | 2.9 | 2.9 | 43.5 |
| | HEROIN | 4869 | 36.0 | 36.0 | 79.5 |
| | OTHER OPIATES AND SYNTHETICS | 899 | 6.7 | 6.7 | 86.2 |
| | METHAMPHETAMINE | 1663 | 12.3 | 12.3 | 98.5 |
| | OTHER | 205 | 1.5 | 1.5 | 100.0 |
| | Total | 13512 | 100.0 | 100.0 | |

**Table 7.**

**SUBSTANCE ABUSE PROBLEM (SECONDARY)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | NONE | 7863 | 58.2 | 58.3 | 58.3 |
| | ALCOHOL | 1397 | 10.3 | 10.4 | 68.7 |
| | COCAINE/CRACK | 970 | 7.2 | 7.2 | 75.9 |
| | MARIJUANA/HASHISH | 1228 | 9.1 | 9.1 | 85.0 |
| | HEROIN | 320 | 2.4 | 2.4 | 87.4 |
| | OTHER OPIATES AND SYNTHETICS | 370 | 2.7 | 2.7 | 90.1 |
| | METHAMPHETAMINE | 989 | 7.3 | 7.3 | 97.4 |
| | OTHER | 339 | 2.5 | 2.6 | 100.0 |
| | Total | 13476 | 99.7 | 100.0 | |
| Missing | MISSING/UNKNOWN/NOT COLLECTED/INVALID | 36 | 0.3 | | |
| Total | | 13512 | 100.0 | | |

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