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Exploring the Intersectionality Between Homelessness and Addiction: A Review

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Abstract

The homelessness crisis and drug epidemic have been, and continue to, ravage the nation in a manner that is both detrimental to society and humanity. The correlation between substance abuse and homelessness is enormous, though not necessarily causal. The conditions of being homeless coupled with the prevalence of mental illness drastically increases the susceptibility to substance abuse and addiction. On the other hand, addiction and substance abuse can contribute to someone entering homelessness. The intersectionality between the two is frequently ignored, yet critical to address. Informed by research regarding both conditions, the implications for public policy and reform are huge. This project aims to investigate and analyze the relationship between homelessness and addiction by reviewing existing literature and history, detailing the intricacies of addiction, and examining further implications and solutions.

Definition(s) of Homelessness

To define homelessness, or what is meant when someone is homeless, it is critical to examine where a specific definition is coming from. For example, homelessness can be described as "one or more concepts of being without a place, without a family, or without housing" (Burt, 2016). This provides a very broad generalization about what can be considered a home. In accordance with this definition, a home may be a car, a group of people, or a roof over one's head. In contrast, the government defines homelessness as lacking fixed, regular, and adequate nighttime residence (US Department of Housing and Urban Development, 2021). As a formal institution that is tasked with passing legislation to aid and assist those who are experiencing homelessness, a narrower definition of who qualifies for assistance plays into the governments fiscal interest. However, a definition that is completely on either end of the spectrum is problematic, as it either addresses too much or too little and proposed solutions are ineffective. The first definition of homelessness is extremely broad to the point that most anyone could consider themselves as homeless. The second is a very pointed definition in which people may fluctuate in and out of and may not be applicable at any single point in time. For the sake of this analysis and its implications, a middle-ground definition will be used. From Snow and Anderson and their triangulated research on homelessness, "a condition that consists of many shared features, yet varies drastically in pathways, experiences, and even mechanisms of exiting" (Snow & Anderson, 1993) will serve as our definition of homeless. To better understand the experience of being without a home, there must be an investigation into all aspects of the experience including structural and individual factors that impact this population as well as the historical events that have contributed and resulted in the crisis we have today.

A Historical Perspective of Homelessness

Although the severity of homelessness is extremely prevalent today and numbers have grown significantly over the past century, there was not always a large presence of individuals living in shelters or on the streets. Though there are many factors that have impacted the rise of homelessness across the country, a basic timeline that details some of the main historical contributors to an increase in people experiencing homelessness is necessary to understand the crisis across the United States.

Institutionalization and Deinstitutionalization

Institutionalization has been a prevalent practice that has been closely tied to American hospitals and the health care system since the eighteenth century. Historically, individuals with severe mental illness were cared for at home, by family members, but any extreme symptoms were too violent or disruptive for such individuals to remain within the community (Koyanagi, 2007). Originating on the East Coast, public and private hospitals began to set aside specific wards for those suffering from severe mental illness. New and private institutions arose, paid for by wealthy family members of those who were mentally unwell, and adopted the label of "asylum". Within these asylums, new ideas about how to care for the mentally ill came forth with a promising new "moral treatment" gaining popularity as a cure (Yohanna, 2013). This treatment revolved around the assumption that mental illness was caused by society inflicting maladies upon the soul, and the solution being isolation from society with the implementation of rigidity and order in combination with rest and reprieve (Lolas, 2016). Early institutions supposedly focused on meaningful activities and rejected the use of harsh punishments and long periods of isolation. It is important to note that this "moral treatment" was not well-supported from a

medical standpoint and was ineffective in providing any sort of treatment for those with severe mental illness, but rather functioned primarily to protect vulnerable individuals from society and vice versa (Yohanna, 2013).

As private asylums gained popularity, there was a call for increased accessibility to these escapisms from men and women who were unable to pay for private care. States began to build and publicly fund such institutions, and each state had at least one public asylum established by the 1870's (Lolas, 2016). Problems arose with these state institutions quickly, as growing numbers of patients led to a higher demand with insufficient resources as well as the reality of ineffective moral treatment. Furthermore, new treatments including insulin or shock therapies, psychosurgery, and a large variety of medication cocktails were experimented with on these patients. The narrative around asylums began to shift, and such institutions were seen as cruel or inhumane (Yohanna, 2013). The growing fiscal burdens of mental asylums, negative reputation, and promises of new and effective drug therapies were large contributors of what is now known as deinstitutionalization.

Deinstitutionalization refers to the processes that took place around the 1960's in the United States to empty psychiatric hospitals. The rationale behind these shifts in policy were focused on the assumptions that community-based care provided a higher quality of living than hospital-based care and that it was also more cost-effective. There is little evidence, however, that suggests that these assumptions were anything more than just assumptions (Talbott, 2004). Advocacy for reform of mental institutions began as early as 1866, by E.P.W. Packard, after she was committed by her husband. She was held in an institution for three years after her husband

called physicians to her home, they took her pulse, and thereafter declared her insane (Yohanna, 2013). Later court cases also began to define and shape requirements for admission. A 1966 court case, *Lake v. Cameron*, dictated hospitals to release patients into less restrictive environments than the institution itself offered (Yohanna, 2013). The Lanterman-Petris-Short Act of 1967, signed by President Ronald Reagan, eliminated the ability for someone to be admitted to a psychiatric hospital without their consent (Talbott, 2004). Mental asylums and psychiatric hospitals began discharging patients and stopped admitting new ones. A 1975 case, *O'Conner v. Donaldson*, implemented a federal requirement that to be committed, an individual had to pose a danger to themselves or to others (Yohanna, 2013). The 1999 Supreme Court case, *Olmstead v L.C.* forced state hospitals and government agencies to end institutionalization and move people into community treatment instead (Yohanna, 2013). As mental hospitals and asylums were emptied, the assumption was that community-based services would undertake mental health care and provide resources for those who were previously institutionalized. The consequences of federal legislature for deinstitutionalization, however, had detrimental effects on an already vulnerable population. Overcrowded and underfunded, these community resources were no match for the patients being discharged from mental asylums. To be effective, accessible and comprehensive services for the most severely disabled individuals were needed.

Deinstitutionalization and Homelessness

While deinstitutionalization is largely regarded as a main contributing factor to rising homelessness, it is the lack of alternative resources that did not accompany the elimination of mental asylums from our society that led to the displacement of mentally ill individuals (Lamb & Bachrach, 2001, Lamb, 1984). The idea behind deinstitutionalization had good intent, to move

dependent populations into communities rather than maintain them locked in isolation, but had unintended consequences nonetheless (Kemp et al., 1989). One of the most evident consequences was the drastic increase in people on the street.

Often dirty or ill-dressed, shouting or talking to themselves, ghettos of mentally ill individuals began to arise on the streets as well as in areas with low-income housing or run-down neighborhoods (Talbott, 2004). As a result, "modern homelessness" was born (Coalition for the Homelessness, 2023). In urban cities, homelessness had been primarily contained to "skid row" establishments, whereas modern homelessness saw homeless individuals sleeping on the streets as well as an increase in injuries and deaths amongst this population (Coalition for the Homeless, 2023). The number of residents in psychiatric centers fell from 535,000 to 137,000 in 1980, nationally, but the lack of invested resources after the closure of mental asylums coupled with the recession of the 80's prevented many discharged patients from finding housing or mental health resources (National Academies of Sciences, Engineering, and Medicine, 2018).

The Recession of the 1980's

Prior to the 1980's, those who experienced homelessness were predominantly single, white, men living on skid rows in urban cities. The processes of deinstitutionalization saw an increase in numbers of individuals who are homeless but did not significantly impact the demographics of those experiencing homelessness. The recession of the 80's, however, forced many families to the street and there was a dramatic increase in women and family homelessness (Rossi, 1990). Along with the recession came the deterioration of public and government support for those without a home and the risk of becoming homeless increased drastically. More specifically,

funding for the Department of Housing and Urban Development was cut drastically, from $29 billion in 1976 to $17 billion in 1990 (National Academies of Sciences, Engineering, and Medicine, 2018). These budget cuts directly impacted housing assistance and subsidized housing, and the resources offered for those without a home decreased dramatically. The Social Security Act of 1980 narrowed the requirements for disability and complicated the process so that eligibility for these benefits was more difficult (Collin et al., 1987). Individuals who were homeless with mental illness faced new barriers in accessing resources that were already underfunded and insufficient.

During the recession, property value of land and housing in urban cities also increased so dramatically that skid rows, single room occupancy (SRO) units, and low-cost housing decreased in availability. This forced many out of their homes, and they were forced to go to shelters or live on the street. Furthermore, many states at this time decriminalized public intoxication, which led to many individuals who were previously locked up, released to the streets. Many suffering with mental illness as well as alcohol dependence yet had limited resources and no intervention before leaving jail (National Academies of Sciences, Engineering, and Medicine, 2018). Without proper funding for low-cost housing, adequate shelters for increasing demand, or mental health centers and resources, the number of people experiencing homelessness skyrocketed in the 80's.

The Crack Cocaine Epidemic

The crack cocaine epidemic, in conjunction with the recession, also had detrimental effects on an already vulnerable population. A highly addictive substance, crack cocaine grew in popularity as a cheaper, more accessible version of powder cocaine (Rui, 2021). It was initially

produced in the 1980's and led to the increase of cocaine use (Rossi, 1990). The War on Drugs and the heavy criminalization of crack cocaine use and possession, lead to the incarceration of many struggling with addiction. Often, there were very few rehabilitative resources for those in jail or prisons and once released, individuals would fall back into the cycle. Decreased social capital from time spent away, as well as a criminal record, combined with mental illness and addiction, led to the inability of many to support themselves. Furthermore, the likelihood of these individuals having little to no social connections to call on for help was often a result of addiction (Rui, 2021). A common theme, federal and state resources lacked the capacity to support the overwhelming number of these individuals, and many fell into homelessness (Snow & Anderson, 1993). The streets and shelters became ridden with drug use, mental illness, and addiction.

Neuroscience and Addiction

Early studies on the neuroscience behind drug addiction focused largely on the acute effects of using. More specifically, a comparison of the neurobiology with and without the prevalence of drugs. In accordance with the increasing potency of drugs and a change in the pharmacological makeup of substances, there has been a shift towards examining how chronic use affects the neuroadaptive response that leads to chronic relapse, even with prolonged abstinence from drug use (Koob & Volkow, 2010, Liu & Li, 2018). A chronic and recurrent brain disorder, addiction affects various neural networks in the brain.

Neurocircuitry of Addiction

Mesolimbic System

Though there are various factors at play, such as individual chemistry and genetics (Lewis et al., 2021), when looking at the neurological proponents of addiction, there is an abundance of research supporting the reinforcing effects resulting from the dopaminergic pathways in the mesolimbic system (Pierce & Kumaresan, 2006, Juárez Olguín et al., 2016, Lewis et al., 2021). The mesolimbic system is comprised of neuronal projections of DA neurons in the VTA to other structures of the limbic system such as the striatum, the prefrontal cortex, amygdala, and hippocampus (Lewis et al., 2021). Notably, the ventral striatum is involved in reward while the dorsal striatum is involved in action selection, decision making, and habitual behavior (Lewis et al., 2021). These structures work in conjunction to transmit physiological stimuli into reward signals and create an association between the two (Lewis et al., 2021). Drugs act as reinforcers within this system by impacting the dopaminergic pathways within the mesolimbic system, specifically by increasing or decreasing dopamine release signals of DA neurons (Pierce & Kumaresan, 2006).

Dopamine

Dopamine (DA) is a dominant neurotransmitter in the brain, produced in the substantia nigra, the ventral tegmental area (VTA), and the hypothalamus of the brain (Juárez Olguín et al., 2016). Within the mesolimbic system, DA is produced in the VTA, released into the nucleus accumbens and the prefrontal cortex (Lewis et al., 2021) as well as to the striatum, the amygdala, and hippocampus. Dopamine has many critical functions, including the encoding of salient events and contributes a major role in the reward pathway (Lewis et al., 2021). As a function of the mesolimbic system in the brain, dopamine mediates the reward value of everyday life experiences such as eating, drinking, social interactions, and drug use (Lewis et al., 2021).

There are a total of five different DA receptors, with D1 and D2 receptors being amongst the best understood and most abundant (Bhatia et al., 2022, Mishra et al., 2018). In fact, neuroscientists have categorized all dopamine receptors into two categories, D1-like and D2-like receptors (Bhatia et al., 2022). D1 receptors have functions relating to memory, attention, and impulse control and are the most abundant DA receptor in the central nervous system (CNS) and have a lower affinity for dopamine binding than D2 receptors (Wise & Jordan, 2021). They are noticeably abundant in the striatum and nucleus accumbens, both a part of the mesolimbic system, and are critical in regulating the reward circuit (Bhatia et al., 2022). D2 receptors are primarily found in the striatum, nucleus accumbens, hippocampus, and amygdala (Bhatia et al., 2022, Mishra et al., 2018), and function in learning and memory (Mishra et al., 2018). These dopamine receptors have a high affinity for dopamine binding and are sensitive to decreases in DA release whereas D1 receptors regularly have less dopamine bound, so are more sensitive to increases in dopamine within the synapse (Wise & Jordan, 2021).

Function of Dopamine Within the Mesolimbic System

Fluctuations in dopamine levels in the mesolimbic system and dopaminergic transmission are critical in the mediation of information and processing of stimuli (Pierce & Kumaresan, 2006). Dopamine release is activated by three stimuli: rewarding, punishing, and new or novel stimuli (Wise & Jordan, 2021). At the most basic level, the mesolimbic and reward system are tasked with recognizing the importance of a stimulus and whether to seek or avoid it, as well as assigning priority (Lewis et al., 2021). From a neurological perspective, any addictive drug

essentially takes over the mesolimbic system by providing an unnatural cause for reward and signaling the prioritization of the drug due to the rewarding sensation that occurred when it was administered (Lewis et al., 2021). With prolonged use and addiction, however, the reward aspect is lost, and physical dependency develops, as the brain stops signaling the release of dopamine naturally (Pierce & Kumaresan, 2006).

Sensitization

Extensive research has led to the belief that repeated exposure to addictive substances leads to molecular and cellular changes in the neuronal projections of the mesolimbic pathway (Baik, 2013, Nestler and Carlezon, 2006; Steketee and Kalivas, 2011). There has also been research to support the role of such neuronal alterations contributing to substance dependence, though the mechanism(s) behind how the synapses in this pathway undergo modifications due to drug use requires further research. The process of sensitization, however, has been well documented and supported in its role in development of addiction.

Sensitization occurs after repeated exposure to a certain stimulus (Steketee & Kalivas, 2011). In relation to drug addiction, Robinson and Berridge detailed their incentive sensitization theory of addiction, that has framed the way many have thought about substance abuse. This theory outlines how repeated exposure to addictive drugs leads to the increased sensitivity to both the substance as well as the associated stimuli that comes with the substance. For example, the room in which one administers drugs or the person someone does drugs with may both trigger the "want" to do drugs, regardless of if drugs are present or not. Drug-related stimuli cause the mesolimbic reward system and other pathways in the brain to signal increased incentive salience.

This increased salience is important in motivational behavior and increases drug "wanting" (Robinson and Berridge, 1993). The extreme motivation to use displayed by individuals who are addicted to drugs can be explained through this theory and process of sensitization and has been crucial in explaining the neurological basis of addiction. Further research is necessary, however, to determine effective methods of intervention to prevent or reverse drug sensitization, as it occurs after just a few times using drugs and is thought to be an early occurrence throughout the development of addiction.

Substance Use Disorder and Addiction Diagnostics

The fifth edition of the Diagnostic and Statistical Manuel of Mental Disorders (DSM-5) has four categories of symptoms for diagnosis of a substance use disorder. These include impaired control, social problems, risky use, and physical dependence (American Psychiatric Association, 2013). Impaired control is when an individual has difficulties controlling how much of a substance is used or maintains the desire to cut down or stop using but is unable to do so. Social problems include the neglection of relationships and responsibilities, decreased participation in activities previously enjoyed, and the lack of ability to complete daily activities (American Psychiatric Association, 2013). Risky use encompasses the use of a drug nor substance and continued use even knowing the problems associated. Physical dependence is needing more of the drug or substance to produce the same effect, or tolerance to it, and the onset of withdrawal symptoms whenever a substance isn't used (American Psychiatric Association, 2013). According to the DSM-5, there are varying degrees of severity with substance abuse disorders that typically occur chronologically. The order of drug use typically moves from occasional, to recreational, to regular, resulting in addictive use (Liu & Li, 2018). Once categorized into addictive use, the

severity of the disorder is determined by the number of symptoms present within an individual. Mild substance use disorder is characterized by two or three symptoms, moderate substance use disorder by four or five, and severe substance use disorder by six or more (American Psychiatric Association, 2013). Addiction is present when the threshold for a severe substance use disorder is reached. Addiction is defined as a chronic disorder characterized by drug seeking and administering behaviors, uncontrollable intake, and the emergence of a negative affect when withdrawal occurs (American Psychiatric Association, 2013). Rehabilitation and ongoing treatment and recovery support are recommended and are necessary for continued treatment of substance abuse and addiction (American Psychiatric Association, 2013).

Withdrawal

Opiates

Drugs classified as opiates include codeine, heroin, hydrocodone, morphine, and more, have a longstanding history of being very effective pain relievers as they effectively block neurons in both the central nervous system and peripheral nervous system (Chahl, 1996). These drugs are in theory, only available with a prescription and taken after surgeries or for painful medical conditions. Opiates and narcotic pain relievers are highly potent and addictive and can cause physical and psychological dependence quickly. Regardless, about 11.4 million people in the United States used narcotic pain relievers without a prescription in 2018 (AHFS Patient Medication Information, 2020). Once an individual who is addicted to opiates stops using the drug, withdrawal symptoms ensue. Because the body has been accustomed to the chemical for so long, it needs time to recover and adapt without it. Early symptoms of opiate withdrawal include anxiety, muscle aches, insomnia, and sweating. These usually begin within 10 to 12 hours after

the last opiate exposure. As withdrawal progresses, abdominal cramping, diarrhea, dilated pupils, nausea and vomiting often occur (AHFS Patient Medication Information, 2020). While opiate withdrawal is difficult, it is not life threatening. Treatment of withdrawal often occurs in medical settings and rehabilitation centers. Treatment of opiate withdrawal include the administration of other medications to help alleviate symptoms as well as provide support for those fighting addiction. It is crucial to note that withdrawal from opiates lowers tolerance of a drug, and relapse increases the likelihood of someone overdosing on the drug (AHFS Patient Medication Information, 2020).

Conclusion

The extreme prevalence of mental illness amongst those who are homeless, as well as the horrific conditions that accompany life on the streets, often drive people to use drugs. Living in constant stress, both physical and mental, puts most people at a higher vulnerability of trying different substances as coping mechanisms, and then developing an addiction for them. Furthermore, the lack of resources that are available to those in homelessness or those with an addiction, never mind to someone who is both, are hugely lacking. Structural forces, both on federal and state levels, have deeply contributed to the homelessness crisis that has existed since the 1980's. There needs to be a push for reform and real political change, and that push needs to happen now.

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Addendum: HP Presentation

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Presentation

When I think about Seattle, my home for the past four years, I tend to smile. The relationships I have built, the memories I have made, and the numerous opportunities I am fortunate to have had, are all products of the city that I have come to love. Other striking aspects of the city include unsanctioned tent encampments under the freeway, people curled up in doorways or bus stops, dirty cardboard signs pleading for help, and the ever-prominent scars of drug use: scabs and injection marks on faces, arms, and legs. These are all aspects of our city that are prominent, yet unfortunately they are not unique to Seattle. You've seen it, I've seen it, the question is- what are we doing about it? The answer, not enough.

The homelessness crisis and drug epidemic have been, and continue to, ravage the nation in a manner that is both detrimental to society and humanity. The correlation between substance abuse and homelessness is enormous, though not necessarily causal. Media often blames the rise of individuals falling into homelessness on increasing cases of addiction. While the correlation between substance abuse and homelessness is undeniable and enormous, it is not that simple. The intersectionality between the two conditions is often overlooked, yet critical to address. In an

attempt to investigate and analyze the relationship between homelessness and addiction, my honors project reviews existing literature and history of homelessness, details the intricacies of addiction, and examines further implications and solutions.

Although the severity of homelessness is extremely prevalent today and numbers have grown significantly over the past century, there was not always a large presence of individuals living in shelters or on the streets. Many factors have contributed to the rise of homelessness across the country. Key historical events that led to significant nationwide increase in numbers include the processes of deinstitutionalization, the recession of the 1980's, and the crack cocaine epidemic. The processes of deinstitutionalization across the United States occurred in the 1960's, when legislation was passed to essentially empty out psychiatric hospitals. Also known as mental asylums, these total institutions were meant to provide rest and reprieve for those suffering with severe mental illness. Early, private, institutions focused on meaningful activities and rejected the use of harsh punishments and long periods of isolation. They also developed a "moral treatment" that quickly gained popularity. Treatments revolved around the assumption that mental illness was caused by society inflicting maladies upon the soul, and the solution was isolation from society with the implementation of rigidity and order. These "moral treatments" were not well-supported from a medical standpoint and were ineffective in providing any sort of treatment for those with severe mental illness but functioned to protect vulnerable individuals from society and vice versa.

As private asylums gained popularity, there was a call for increased accessibility to these escapisms from men and women who were unable to pay for private care. States began to build and publicly fund such institutions, and each state had at least one public asylum established by the 1870's. Problems arose with these state institutions quickly, as growing numbers of patients led to a higher demand with insufficient resources as well as the reality of ineffective moral treatment. Furthermore, new treatments including insulin or shock therapies, psychosurgery, and a large variety of medication cocktails were experimented with on these patients. The narrative around asylums began to shift, and such institutions were seen as cruel or inhumane. The growing fiscal burdens of mental asylums, negative reputation, and promises of new and effective drug therapies were large contributors for the shift towards deinstitutionalization.

The rationale behind this movement was focused on the assumption that community-based care provided a higher quality of living than hospital-based care and that it was also more cost-effective. As mental hospitals and asylums were emptied, the assumption was that community-based services would undertake mental health care and provide resources for those who were previously institutionalized. The consequences of federal legislature for deinstitutionalization, however, had detrimental effects on an already vulnerable population. Overcrowded and underfunded, these community resources were no match for the patients being discharged from mental asylums. To be effective: accessible, and comprehensive services for the most severe cases were needed.

While deinstitutionalization is largely regarded as a main contributing factor to rising homelessness, it is the lack of alternative resources that did not accompany the elimination of mental asylums from our society that led to the displacement of mentally ill individuals. The idea behind deinstitutionalization had good intent, to move dependent populations into communities rather than maintain them locked in isolation, but had unintended consequences, nonetheless. One of the most evident consequences was the drastic increase in people on the street and the birth of modern homelessness.

Often dirty or ill-dressed, shouting or talking to themselves, groups of mentally ill individuals began to arise on the streets as well as in areas with low-income housing or run-down neighborhoods. In urban cities, homelessness had been primarily contained to "skid row" establishments, whereas modern homelessness saw homeless individuals sleeping on the streets as well as an increase in injuries and deaths amongst this population. The number of residents in psychiatric centers fell, but the lack of invested resources after the closure of mental asylums coupled with the recession of the 80's prevented many discharged patients from finding housing or mental health resources.

The recession of the 80's, forced many families to the street and there was a dramatic increase in women and family homelessness. The recession also deteriorated public and government support for those without a home and the risk of becoming homeless increased significantly. More specifically, funding for the Department of Housing and Urban Development was cut drastically. These budget cuts directly impacted housing assistance and subsidized housing, and the resources offered for those without a home decreased. The Social Security Act of 1980 narrowed the requirements for disability and complicated the process so that eligibility for these benefits was more difficult. Individuals who were homeless with mental illness faced new barriers in accessing resources that were already underfunded and insufficient.

During the recession, property value of land and housing in urban cities also increased so dramatically that skid rows, single room occupancy (SRO) units, and low-cost housing decreased in availability. This left many without homes, and they were forced to go to shelters or live on the street. Furthermore, many states at this time decriminalized public intoxication, which led to many individuals who were previously locked up, released to the streets. Many suffered with mental illness and or alcohol dependence, yet had limited resources and no intervention before leaving jail. Without proper funding for low-cost housing, adequate shelters for increasing demand, or mental health centers and resources, the number of people experiencing homelessness skyrocketed in the 80's.

The crack cocaine epidemic, in conjunction with the recession, also had detrimental effects on an already vulnerable population. A highly addicted substance, crack cocaine grew in popularity as a cheaper, more accessible version of powder cocaine. It was initially produced in the 1980's and led to the increas of cocaine use. The War on Drugs and the heavy criminalization of crack cocaine use and possession, lead to the incarceration of many struggling with addiction. Often, there were very few rehabilitative resources for those in jail or prisons and once released, individuals would fall back into the cycle. Decreased social capital from time spent away, as well as a criminal record, combined with mental illness and addiction, led to the inability of many to support themselves. Furthermore, the likelihood of these individuals having little to no social connections to call on for help was often a result of addiction. A common theme, federal and state resources lacked the capacity to support the overwhelming number of these individuals, and many fell into homelessness. The streets and shelters became ridden with drug use, mental illness, and addiction.

Addiction, from a neurological standpoint has been argued as a disease as well as a disorder. Regardless of its classification, it is evident that the consequences of addiction are detrimental either way. Within the brain, there is a system known as the mesolimbic system that has been largely attributed to reward and functions in addiction. Dopamine, a dominant neurotransmitter, is the chemical messenger that is largely attributed with reward. Fluctuations in dopamine levels in the mesolimbic system are critical in the mediation of information and processing of stimuli. Dopamine release is activated by three stimuli: rewarding,

punishing, and new or novel stimuli. At the most basic level, the mesolimbic and reward system are tasked with recognizing the importance of a stimulus and whether to seek or avoid it, as well as assigning priority. From a neurological perspective, any addictive drug essentially takes over the mesolimbic system by providing an unnatural cause for reward and signaling the prioritization of the drug due to the rewarding sensation that occurred when it was administered. With prolonged use and addiction, however, the reward aspect is lost, and physical dependency develops, as the brain stops signaling the release of dopamine naturally.

This process of sensitization has been well documented and supported in its role in development of addiction. The theory of sensitization outlines how repeated exposure to addictive drugs leads to the increased sensitivity to both the substance as well as the associated stimuli that is paired with the substance. For example, the room in which one administers drugs or the person someone does drugs with may both trigger the "want" to do drugs, regardless of if it are present or not. In homelessness, many individuals frequent the same spots and trigger this need for drugs. Drug-related stimuli cause the mesolimbic reward system and other pathways in the brain to signal increased incentive salience. This increased salience is important in motivational behavior and is what increases drug "wanting. The extreme motivation to use, displayed by individuals who suffer from addiction, can be explained through this theory. As drug use is prolonged, that pathway is reinforced and addiction becomes more difficult to escape. Further research is necessary, however, to determine effective methods of intervention to prevent or reverse drug sensitization, as it occurs after just a few times using drugs and is thought to be an early occurrence throughout the development of addiction. This is an additional reason as to why rehabilitative resources, especially for the recently dislocated homeless, is so critical.

The extreme prevalence of mental illness amongst those who are homeless, as well as the horrific conditions that accompany life on the streets, often drive people to use drugs. Living in constant stress, both physical and mental, puts most people at a higher vulnerability of trying different substances as coping mechanisms, and then developing an addiction for them. Furthermore, the lack of resources that are available to those in homelessness or those with an addiction, never mind to someone who is both, are hugely lacking. Structural forces, both on federal and state levels, have deeply contributed to the homelessness crisis that has existed since the 1980's. There needs to be a push for reform and real political change, and that push needs to happen now.

This next slide shows the pictures of several people that have or are currently experiencing homelessness. Public perception sees homelessness as inescapable, or a lost cause. That is not true. Many people escape homelessness, with the proper help and support, which can be less difficult than many imagine. Neglected, shamed, and ignored, many individuals who are homeless lose an aspect of their humanity. They adopt a stigma, or spoiled identity, and begin to believe that they themselves, are everything people believe about them. Which is not true. Most homeless people had lives, personalities, were their own person before becoming homeless. It does not take much on our part to help them retain that sense of identity. These images come from the faces of homelessness, a project by the coalition on housing and homelessness. The coalition puts it nicely:

The best way to "see" the homeless is to view them as people.

when you make the attempt to see them as individuals you realize they each have their own story … why they lost their housing … how they are surviving without a home … what barriers need to be overcome for them to regain housing

The reality of it is that the homeless and those who suffer from addiction are still people and deserve compassion and love as much as anyone else. As individuals, and as a society, we need to do better. Within the honors program, and as a culmination of my time at SPU, many hours have been spent thinking and discussing what it means to be human. To me, it means that I have a responsibility to use my abilities, resources, and knowledge to help other people in whatever capacity I can. As one of the most vulnerable populations in society- and one that is often ignored and neglected- I hope to change the narrative on people without a home. Everyone has a story, and many people who experience homelessness have endured more pain and trauma than anyone can know. The least we, as fellow human beings, can do, is not contribute to it.