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CONTRIBUTING FACTORS TO DRUG ABUSE IN THE APPALACHIAN REGION

By: William Holcombe

An Undergraduate Thesis Submitted in Partial Fulfillment of the Requirements for the University Honors Scholars Program Honors College and the Department of Media and Communications East Tennessee State University April 4, 2022

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10 mos

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Abstract:

The Appalachian region faces wide scale drug use and opioid addiction that exceeds the national average, and the crisis needs more attention in order to properly address the epidemic. Many previous studies have documented the problems Appalachian residents face regarding opioid addiction and other diseases of despair. However, this study focuses on two specific contributing causes of the opioid crisis: a lack of access to medical care and over-prescription of opioids. Additionally, while the problems of substance abuse, particularly opioid abuse, are well represented in media accounts, there is an under-representation of drug recovery and the positive aspects of the crisis within the media continue to uphold and prolong the image of an unsurmountable problem that is no closer to being solved than when preventive efforts were first initiated. This study seeks to examine what factors contribute to opioid use in the Appalachian region, with a specific focus on lack of healthcare, over-prescription and media misrepresentation.

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I. Introduction

During 2018, a total of 67,367 drug overdose deaths occurred in the United States, and 46,802 (69.5%) involved an opioid (Wilson et al., 2020). The nation's substance abuse disorder crisis disproportionately impacts Appalachia, where in 2018 overdose mortality rates for people ages 25–54 was 43 percent higher in the region than the rest of the country (Appalachian Regional Commission, 2021). While drug overdose is a nation-wide issue that has become a reality of life in many different communities, Appalachia in particular suffers the most from the opioid crisis. Through a combination of over-prescription, a lack of healthcare infrastructure and media misrepresentation, the Appalachian region has become one of the most affected areas within the United States.

Opioid addiction has been a major problem for the Appalachian region for several years. Purdue Pharma introduced OxyContin in 1996 and marketed it aggressively. Sales grew from \$48 million in 1996 to almost \$1.1 billion in 2000, high availability of OxyContin correlated with increased abuse, diversion, and addiction, and by 2004 OxyContin had become one of the most abused drugs in the United States (Van Zee, 2009). Even with increasing awareness surrounding the problems of opioid abuse, Appalachia has not received the same quality of attention and response as other parts of America. Although the issue may seem isolated to a specific demographic (opioid abusers), the problems of opioid addiction extends into many other parts of Appalachian community life. This affects all Appalachians, not just opioid abusers.

This study intends to go beyond a cursory glance at distribution methods or initiatives to end opioid abuse in the Appalachian region. Instead, this study explores two primary reasons

influencing opioid addiction. This study investigates how cultural, economic and environmental factors have shaped the perceptions, attitudes and behaviors of Appalachian residents concerning drug abuse in the Appalachian region.

This study has the following goals:

1. To weave a cohesive narrative that demonstrates the multiple factors of opioid abuse in the Appalachian region.

2. To gain insight into current treatment and recovery efforts through interviews with medical professionals regarding opioid treatment and recovery efforts in an Appalachian community.

3. To create an infographic to give the general public a concise briefing on the current opioid situation and the necessity in taking the appropriate steps to resolve it.

This investigative process began with defining exactly what needed to be examined and using that clear goal as a guiding hand in proceeding research. Next, review of past studies and literature to learn more about the issue of opioid abuse in context of diseases of despair in Appalachia. In so doing, I constructed a narrative in response to my research question. Ultimately, this study culminates in an infographic deliverable that provides clear and informative information regarding the current opioid addiction crisis in Appalachia. Most importantly, this infographic takes a positive tone in response to the often overlooked positive efforts in addiction treatment and recovery. This study seeks to consolidate present literature to reframe the problem of opioid addiction and constructing an infographic that will provide a positive, accurate outlook on the current situation regarding drug abuse and treatment in Appalachia.

The topic of drug abuse in the Appalachian region has personal relevance for me. While not an oft discussed and experienced issue, it still occurs fairly often in my hometown. From rumors to outright confirmation, the issue of drug abuse has been a part of many Appalachian communities including my own. However, this was not an issue that I had explored with any sort of intensive scrutiny until my involvement with East Tennessee State University and this project. I wanted to focus my project on an issue that intrigued me and that had a personal effect on my life somehow, hence my topic choice. This issue was interesting to me because of how it affected members of my community, but not myself. After all, we both lived in the same community, so what were the characteristics or circumstances that resulted in our separate paths. Was it economic, generational or something else entirely? This curiosity eventually expanded into an investigation into what factors contributed to the decision process of opioid users within the Appalachian region.

II. Literature Review

The Appalachian Regional Commission (ARC) reported that in 2015, deaths due to "diseases of despair"—such as drug overdose—in Appalachia occurred at a rate that was 37% higher than the rest of the United States. Appalachia's classification as a High Intensity Drug Trafficking Area (HIDTA) through a 1988 Congressional program and subsequent targeting in a 2015 HIDTA Heroin Response Strategy initiative make the area a particularly important intersection of economic problems, unique cultural norms, and thriving drug trade (Schalkoff et al., 2020). Per this study, the ARC determined that the region suffered from diseases of despair as a result of economics, culture and drug trade of opioids. To better understand the problem at

hand, one must examine the cultural norms, needs, and economics of the Appalachian region to fully understand the motivations and causes upholding drug use, abuse and distribution within the Appalachian region.

The opioid crisis within Appalachia falls under the term diseases of despair, which also includes alcohol, prescription drug and illegal drug overdose, suicide, and alcoholic liver disease/cirrhosis of the liver. These are all issues that contribute to rising mortality rates both in Appalachia and the rest of the country. In 2017, the combined diseases of despair mortality rate was 45% higher in the Appalachian Region than the rest of the country, and when looking at just overdose mortality, this disparity grows to 65% higher in the Appalachian Region (Meit et al., 2019). Though this study primarily focuses on opioid abuse and overdose specifically, multiple diseases of despair contribute to the problem and occur in Appalachia at higher rates than in other regions of the country.

When concerning opioid overdose, with individuals ages 25–54, traditionally considered the working-age population, the overdose mortality rate was 55 percent higher in the Appalachian Region (53.2 deaths per 100,000 population), compared to 34.3 deaths per 100,000 in the non-Appalachian U.S. (Meit et al., 2020). While the burden associated with overdose mortality is higher among males (53.6 deaths per 100,000 in Appalachia compared to 39.3 deaths per 100,000 in the non-Appalachian U.S.), the disparity is greater for females in the Appalachian Region at 74 percent higher than the overdose mortality rate in the non-Appalachian U.S. (Meit et al., 2020).). Another part of the fallout of substance abuse is the birth of babies that are addicted to opioids. Not only do pregnant mothers face the potential for overdose through substance abuse, but it also causes their unborn babies to build an opioid dependency before they are even born. Opioid addiction and mortality bring about adverse changes to communities and

residents in the Appalachian region at a rate that is disproportionate to the rest of the country. .However, one study suggests that the contribution to mortality provided by diseases of despair cannot be contributed to a singular factor, such as opioid addiction and overdose. Rather, it suggests that growing income inequality, partnered with state government decisions on public health legislation, pre-emption laws¹, Medicaid expansion and investments in education have been major contributors to the growing health gap between states (Woolf et al., 2019). This gap exists because states with Medicaid expansion offer better access to health care, especially for working poor individuals. States not expanding Medicaid do not offer expanded health care access, causing the gap in access to health care grew larger. Behringer & Friedell discovered that poor communication between health professionals and patients created complications in health care delivery and represented a barrier to patients pursuing cancer screening, diagnosis, and treatment (2006). While this second study is dated, it still references an important point and a substantial obstacle to treatment of opioid addiction or other diseases of despair: health communication. No matter the health resources on hand, proper communication and trust between healthcare providers and patients is necessary to get patients to seek help in the first place. So while there are diseases of despair, such as opioid addiction, that adversely affect Appalachians, other factors need to be examined and addressed. Effectively addressing opioid addiction and diseases of despair are not simple and require a multi-pronged approach. For example, better proximity and availability of medical resources more affordable health care are important for addressing opioid addiction and treatment. In addition, better educational and job opportunities, health legislation and more effective health communication are also needed to combat the problems of drug addiction and overdose within the Appalachian region. While communication, health infrastructure and informed and effective legislation are important ¹The preemption doctrine refers to the idea that a higher authority of law will displace the law of a lower authority of law when the two authorities come into conflict (Legal Information Institute).

aspects in addressing opioid addition, attitudes about addiction and treatment need to be examined. Attitudes such as an absence of hope, depression, anxiety and a stigma against drug use can perpetuate the problem and ultimately lead to many individual turning to opioids in an attempt to "self-medicate" (Oak Ridge Associated Universities, & Appalachian Regional Commission, 2017). This study demonstrates how personal feelings like anxiety and depression can lead individuals to start taking opioids to help counter-act these negative feelings. Additionally, it reveals a societal stigma against substance use disorder. Some of the study's participants described opioid addiction as "the new leprosy," and that those suffering from substance abuse disorder face judgmental and contemptuous attitudes from community members, city officials and health care providers (Oak Ridge Associated Universities, & Appalachian Regional Commission, 2017). This evidence leads to the identification of a lack of hope, depression, anxiety and social stigma as some of the primary attitudes influencing drug abuse in Appalachia.

Lack of proper resources, including access to treatment centers, is another major factor that upholds opioid abuse in Appalachia. One such study examining the re-entry of opioid users back into society following a prison sentence discovered that three community level barriers inhibited substance use disorder treatment post-release from prison: easy access to opioids, limited availability of treatment resources and lack of community support (Bunting et al., 2018). Additionally, in a 2009 evaluation of a community response to opioid abuse in Appalachia , Dunn et al. reported that Appalachia has a strong culture of individualism and self-reliance that influences many health behaviors (2009). This study revealed a reluctance for substance abusers to seek professional assistance. This reluctance, coupled with availability and access barriers to opioid treatment, are critical factors in need of research and response to increase utilization of

substance abuse services. By extension, substance abuse in Appalachia has been viewed as a response to community and regional socioeconomic conditions, thus leading to a more permissive and tolerant attitude in communities of individuals' substance use (Dunn et al., 2009). Also, government policies , procedures and employees can become barriers to individuals seeking recovery from substance abuse disorder. *RX Appalachia: Stories of Treatment and Survival in Rural Kentucky* by Leslie-Marie Buer, focuses on women's encounters with substance abuse treatment. Each individual's treatment varies from person to person and Buer's book seeks to document how state policies and employees affect the lives of women seeking treatment for substance abuse. The book details how some women would receive less help or resources depending on if they were pregnant, had children or said particular things in treatment programs. This demonstrates yet another barrier to recovery primarily faced by women.

Together, these studies start to shed some light on how lack of necessary medical care, societal attitudes and biased state policies and employees contribute to the issue and impede recovery. They also offer insight into the cultural and societal views and opinions of Appalachians concerning drug abuse and use. Self-reliance, a trait often associated with Appalachia and its people, in conjunction with a lack of resources, affects medical decisions made by many Appalachians. Self-medication is viewed as a way to fill in the gaps left by a lack of public health resources, and in a community where self-help is prevalent, self-medication is not viewed as abnormal even if the outcome is destructive.

Examples of the normalcy of drug use are found in studies of non-opioid drugs. While the following information relates to drug use as a whole rather than opioids specifically, opioid use behaviors do contribute to drug use behavior as a whole. Among a group of people who inject drugs (PWID) surveyed in Cabell County, WV, the mean age of first injection was 24.9 years

and on average, participants reported injecting 4.5 times per day. The drugs most commonly injected in the past 6 months were heroin, methamphetamine, and fentanyl (Allen et al., 2019). Association and co-habitation with other users has also been shown to correlate with opioid abuse in the Appalachian region. Most people who transition to drug injection are injected for the first time by established PWID who are in their social networks, such as friends, acquaintances, and intimate partners (White et al., 2020). The study found that 17 percent of rural PWID had recently initiated someone into injection drug use for the first time, and that injection in front of injection-naïve individuals had been shown to lessen negative attitudes and fears toward injecting and may have also inadvertently educated people about the injection process. Another study focused on the relationship between drug use and incarceration in Appalachian women discovered that living in a high-risk home environment where family and friends use drugs, having relatives with drug use problems, and losing custody of children were significantly and positively associated with incarceration history for rural women (Staton, Ciciurkaite, Oser, et al., 2018). These studies demonstrate that frequency of interaction and co-habitation with drug users often creates an environment that encourages and normalizes drug use.

Additionally, opioids and other addictive substances are distributed in similar ways. In *Dreamland: The True Tale of America's Opiate Epidemic* by Sam Quinones, Quinones focuses on the distribution of both OxyContin and black tar heroin throughout the United States. The book details how both Purdue Pharma and Mexican drug dealers both used drugs to make a profit, while also demonstrating the parallels between the two. This comparison also reveals more details on the opioid abuse issue within the Appalachian region. Purdue Pharma and drug dealers in Mexico both sought to turn a profit through the distribution and sale of addictive substances. Through this comparison, as well as discussion of injection rates and normalization,

similarities between Appalachia and the rest of the country are revealed. The contents of these comparisons also factor into the overall community and societal perception of drug use and abuse.

Another purveyor of drug use in the Appalachian region is the over-prescription of opioid drugs. A study focused on correlating factors of injection drug use with rural Appalachian women found that a number of factors have been associated with the drug abuse epidemic in this region, including overprescribing pain medication among some rural physicians, targeted marketing of addictive pain medication by some pharmaceutical companies and limited affordable treatment options (Staton, Ciciurkaite, Havens, et al., 2018). Dopesick: Dealers, Doctors and the Drug Company that Addicted America by Beth Macy details the stories of the families affected by the promotion of the drug OxyContin by the pharmaceutical company, Purdue Pharma. It focuses on the how Purdue Pharma made an effort to over-promote and overprescribe opioids to communities and the resulting fallout. This book in particular highlights just how widespread the devastation caused by over-prescription can be. Similarly, Schalkoff et al, also found that among prescription opioid users, two distinct populations emerged, chronic pain patients and nonmedical users, groups that showed demographic and drug use differences (2020). Pain patients were more likely to obtain prescription opioids from a healthcare provider, though they often co-used other medications (such as benzodiazepines or other types of prescription opioids) obtained illicitly; nonmedical users were more likely to obtain prescription opioids from a dealer or a friend. Over-prescription provides a means for both pain patients and medical users to obtain drugs, which provide a more readily available source of medical attention than public health resources that are difficult to access or are simply not present in many parts of

Appalachia. Over-prescription of drugs coupled with a lack of health resources has led to selfmedication as a form of healthcare, which in turn leads to normalization.

As demonstrated in the previously discussed literature, there is evidence to show that a lack of medical resources and over-prescription had been major driving factors of the opioid crisis in the Appalachian region. A lack of medical resources in the region created a need for medical assistance. This need was met by a large number of opioids which had been brought to the region primarily by large pharmaceutical companies such as Purdue Pharma. Through over-promotion and over-prescription, an overabundance of opioids filled the Appalachian region. These two factors, as well as income inequality, media representation, government policies and employees and societal attitudes are some of the biggest contributors to the opioid crisis.

III. Methodology

For this study, several research methods were utilized. The first method consisted of consultation and review of past research studies to build a foundation for the study to rest upon. This process primarily consisted of consultation with a medical library representative in conjunction with a review of the PubMed database and the studies contained within the database. Accessing the database and narrowing search criteria to focus on studies pertaining to drug use and the Appalachian region produced a wide variety of results. The remaining studies were then compiled into a bibliography that was further studied to find themes that inform the contents of this study's literature review.

Second, this study engaged the use of interviews. Two interviews were conducted with ETSU faculty (adults over the age of 18) who were knowledgeable about the subject of drug abuse in the Appalachian region. These interviews supplemented the literature review regarding substance abuse and treatment within the Appalachian region. These interviews were conducted both virtually and in-person, and the Interview Questions are available in the Appendix. These interviews provided professional perspectives on opioid abuse in the local area while also providing specific information regarding the treatment and perception of addicts within the Appalachian region..

Lastly, this study engaged in design and media research. These research initiatives were pursued in an attempt to create an infographic that accurately portrayed the current situation regarding recovery rates within the Appalachian region. The research for this project informed the design of a theme that maintained an attitude of positivity and strength across the infographic. This research also investigated recent media representation regarding drug addiction in the Appalachian region, which provided information about how this issue is perceived by those outside the region.

IV. Interview Summary

In addition to consulting previous research and studies, this study also employed interviews with two individuals knowledgeable on the subject of drug abuse and recovery in the Appalachian region. These individuals were consulted due to their professional knowledge and expertise as well as their association with the Addiction Science Center located at East Tennessee State University, which will be discussed more in-depth in the following section.

These interviews provided professional insight and information regarding the opioid crisis, as well as information regarding treatment, recovery and the messages being communicated about addiction and recovery.

These interviews provided additional insight on several different topics. Firstly, the interview process featured some discussion regarding some brief history behind the introduction and distribution of opioids. Large pharmaceutical companies such as Purdue Pharma were responsible for the first influx of drugs in the mid-1990s. Through over-promotion and overprescription, these companies flooded the region with large amounts of opioids. Oftentimes patients were given more than they needed or were unnecessarily given opioids. This in turn created a large number of unused opioids in the Appalachian region. The opioids were then borrowed, sold and spread through a number of different methods, eventually creating a demand for the opioids for recreational use. The pharmaceutical companies were eventually held liable, however this merely removed one supply avenue. Treatment options were not available and users soon began to search for an alternate source. The supply changed and the demand remained. This newer source manifested itself in the form of fentanyl, a synthetic opioid manufactured in Mexico and spread via cartels into the United States. The distribution of opioids then correlated with death rates in the regions where they were spread, with higher death rates occurring in areas where heavier distribution of opioids took place.

Another point of insight gained from these interviews were some of the social contributors to the opioid crisis. Prior trauma, stigma and stress from living on land that is owned and devastated by companies are just a few of the factors that can lead to opioid addiction. Additionally, access to opioids was a major contributor in youth users, as easy access to opioids, via the bathroom cabinet for example, was a major proponent of youth addiction. Another factor

that arose during the interview process was how a lack of job opportunities created space for the economy of drugs. When the industries upon which many Appalachian towns depended closed and new economic opportunities are not present, that economic void can be filled by drug sales. People still need resources and money, and when their only option is the drug economy, they are funneled into engaging in the drug economy as a way to provide for themselves. So, just as many Appalachians have to turn to opioids because of a lack of healthcare options, others also have to engage in the drug economy instead of another industry because of a lack of economic opportunities.

Lastly, the interviews provided information on recovery and positive messaging concerning the opioid crisis. The interviewees expressed that negative media messaging is a major component of negative outlooks on drug users. Media messaging can cause viewers to take on the perception that drug users are somehow fundamentally different from themselves, decreasing relatability to drug abusers as community members in need. Despite the fact that this type of messaging is commonly portrayed, the reality is that one out of every ten people is a drug abuser and almost half recover from their addiction. Additionally, another message that needs to be communicated is that many abusers do, in fact, get better and recover from their addiction. Many times messaging can convey the false belief that drug users are beyond recovery and assistance, belying the hope and fact that they can and do get better. Furthermore, 30 million people, roughly ten percent of Americans, say that they are living in recovery and about half have resolved their substance use disorder on their own. Proper messaging needs to include that recovery is not an exception, rather that it is expected. People who recover from substance abuse disorder often find new purpose and become highly motivated and driven individuals. This messaging is vital, because not only does it help to form an accurate picture concerning drug

abuse for the public, but it also demonstrates to active users that recovery is a viable and achievable outcome of substance use disorder.

V. Addiction Science Center

The Addiction Science Center (ASC) was another integral piece of this study. In addition to the interviewing of two professionals associated with the ASC, the center's online resources were also utilized to provide information to this project. The center's resources contained both studies conducted by ASC employees, as well as external data resources, including the Overdose Mapping Tool. This tool provided an interactive map which displayed Appalachian overdose rates relative to county, race, economic standing and a number of other factors. This tool helped to provide a visual picture of the mortality rate faced by the Appalachian region, along with information about mortality rates.

The Addiction Science Center was originally founded in 2016 as The ETSU Center for Prescription Drug Abuse Prevention and Treatment. The change was part of a concerted effort to keep pace with the evolving nature of the opioid crisis, and to provide an opportunity to expand research efforts to include the study of co-morbid health conditions and poly-substance misuse (Addiction Science Center, 2021). The organization's mission is to see a Central Appalachian region free from the burden and consequences of illicit drug abuse, a mission to which they are working to accomplish through conducting innovative research and evaluation, educating and training health professionals and providing evidence-based, high quality care, in addition to other efforts (Addiction Science Center, 2021).

The efforts of the Addiction Science Center and its employees are direct counter-agents to many of the negative aspects of the opioid crisis. This includes direct care, research on the subject and providing assistance to other researchers to name a few. The center is mentioned in this study in part due to the assistance and contribution of the center's resources and staff, but also because the center is actively addressing the opioid crisis on a number of fronts. The Addiction Science Center and other organizations like it are necessary in the fight against the opioid addiction crisis, and substance use disorder in general. The organization is working to bring about actual, measurable change in the Appalachian region, and more efforts like the ASC are needed in order to adequately combat the opioid crisis in the Appalachian region.

VI. Media Portrayal

Another important facet that necessitates examination is the portrayal of the opioid crisis within modern media. While other economic, infrastructure and societal factors influence the crisis within the region, the cultural representation of the Appalachian region and its people influences outside perceptions regarding the issue. Many news sources and articles portray Appalachia as a region that is mired in poverty, with a lack of education and unhealthiness. The reality of the region is a much more complex picture.

The use of negative Appalachian stereotypes is nothing new to residents of the region. Whether through entertainment, government programs or sensationalist news reporting, Appalachia and her people have oft been the centerpiece of media that fails to accurately portray and represent them. This same outcome still holds true when confronted with the representation

of the Appalachian region and the people who live there in regard to drug abuse and the opioid crisis. These articles and representations are not limited to local news or small-time publications. One news magazine, The Weekly, which carries subscribers both in the United States and the United Kingdom, published an article entitled "Appalachia: the big white ghetto." The article states,

Thinking about the future here and its bleak prospects is not much fun at all, so instead you have the pills and the dope, the morning beers, the endless scratch-off lotto cards, healing meetings up on the hill, the federally funded ritual of trading cases of food-stamp Pepsi for packs of Kentucky's Best cigarettes and good old hard currency, tall piles of gas-station nachos, the occasional blast of meth, Narcotics Anonymous meetings, petty crime, the draw, the recreational making and surgical unmaking of teenaged mothers, and death (The Week Staff, 2015).

While Appalachia does in fact have its share of problems, the region is not as bleak as portrayed in the above article. Characterizing Appalachia as a place with no hope or future has negative impacts on both residents and outsiders. Outsiders perceive the region as a place that lacks value and is full of crime, drugs and broken people. Residents have to be confronted with an image that funnels them into stereotypes of welfare-dependent, uneducated drug-addicts who only remain in the Appalachian region due to their lack of agency. In addition to being false, these misleading representations can affect cultural aspects and societal expectations within the Appalachian region, as well as the mental health of its residents. Incidentally, these negative impacts perpetrated by the media contribute to the issue at hand, as well as any attempts to rectify it.

Another well-known publication, the *Guardian*, published an article featuring Beattyville, KY. In this article, the town is described as being an area devoid of jobs and overrun with drug abuse. The article enumerates Beattyville's issues and displays it as a town distinguished by the drug epidemic, financed by the welfare system and lack of opportunity or future (McGreal, 2015). While Beattyville does face the issues described within the article, there is also a distinct

lack of hope or opportunity to be found within the article's contents. This is also a common theme found within Appalachian-centric publications. In addition to misrepresentation, Appalachia is often portrayed both as a location that is desperately in need of assistance and as one that is in many ways too far gone for help. Once again, this stereotype causes outsiders to write off the region as a place beyond saving and whose residents should have moved on from long ago and residents to perceive their region as a hopeless place. These mindsets can be detrimental to the Appalachian region, as they make it more difficult for communities to receive adequate assistance and can cause residents to look to drug use or other diseases of despair to ease the hopelessness. Because of these factors, as well as those previously discussed here, it is vital that the issue of drug use and abuse within the Appalachian region be portrayed truthfully, including positive reports of recovery. Representation needs to contain factual information on the situation but enumerating negative situations with no discussion of how these problems can and are being overcome can lead to negative side effects for both residents and outsiders. A combination of both positive and negative reality is needed to accurately represent the issues in need of attention and assistance, as well as give people hope that those same problems are being addressed and solved.

A report released by the Oak Ridge Associated Universities and the Appalachian Regional Commission in 2017 entitled "Communicating about Opioids in Appalachia -Challenges, Opportunities, and Best Practices," featured key messages needing to be communicated regarding opioids in Appalachia. The messages were gathered from both professionals and focus group participants. The study advocated for comprehensive and coordinated communication strategies that featured messages about stigma, proper storage of prescription opioids, addiction help, the risks of taking prescription opioids, addiction signs and

promotion of hope and recovery from addiction (Oak Ridge Associated Universities, & Appalachian Regional Commission, 2017). The most important takeaway from this report are messages generated by focus group participants, particularly the message concerning hope and recovery. Rather than large outside news reports telling the story of Appalachia and her communities, actual Appalachian residents are the authors of the messages contained within the report. Residents who are more than familiar with the realities of living in the Appalachian region, both the good and the bad. However, the messages that these residents want to convey is not that their communities are simply hopeless places filled with drugs, poverty and a lack of opportunity. Rather the messages should convey that while those issues exist, so does hope. The messages that need to be conveyed need to combat drug abuse and provide aid, not just relate that the issue exists and focus on all the negative aspects of the region.

This marks the importance in proper media portrayal of drug abuse, as well as other issues in Appalachia. Firstly, proper representation accurately informs on the issue at hand. Secondly, this representation focuses on the positive recovery efforts, not just the lack of opportunity and destruction brought about by drug use. Finally, it focuses on putting out the messages that residents want to send out. Residents are invested in bringing about positive change in their communities and want the information that is being put out to reflect those interests. By accurately portraying drug abuse in Appalachia, hope can be spread, the truth made known and publications can take an active role in combating drug abuse, rather than simply adding onto the problem.

VII. Analysis

Heretofore, this study has utilized information from a variety of different resources including published research studies, texts, organizational resources, interviews and online articles and reports. Throughout the research process and through review of prior research literature, this study has identified three major contributing factors to drug abuse in the Appalachian region: a lack of necessary medical resources, over-prescription of opioids and misrepresentation and improper messaging in the media. These three components working in concert together are major proponents of the opioid crisis in the Appalachian region.

A lack of proper medical care as a result of income inequality, government decisions on public health legislation, pre-emption laws and avoiding Medicaid expansion has left a hole in Appalachian public health that has been filled in many places by opioids. This has resulted in a shift toward opioids and other drugs as a lack of necessary medical infrastructure has supported their use among Appalachian residents. Additionally, the traditional attitude of self-help among many Appalachians has resulted in a normalization of self-medication with opioids among Appalachian communities. When Appalachians are funneled towards self-medication because of a lack of medical resources and the societal attitude of self-help, drug use both medicinally and recreationally becomes more normalized and in many cases, becomes a source of economic opportunity to communities lacking job opportunities. Therefore, a lack of necessary medical resources combined with societal attitudes and a lack of economic opportunities, has created an environment in which the opioid crisis has flourished.

Secondly, the over-prescription and over-promotion of opioids by pharmaceutical companies has been a driving factor in actually placing the opioids within the Appalachian

region. While a lack of medical infrastructure created a hole, large pharmaceutical companies filled it. By recommending and distributing opioids on a mass scale in order to make a profit, these companies flooded the Appalachian region with more opioids than it could possibly need. With that excess came recreational drug use, the drug economy and a trend of self-medication via opioids. While the pharmaceutical companies were later investigated and found liable, the damage had already been done and a dependence on opioids for a variety of reasons had been put in place. Even though the source of prescription opioids had been slowed, demand in increasingly filled via fentanyl produced in Mexico and distributed by cartels. What started out as a large-scale financial venture perpetrated by the pharmaceutical industry, later morphed into communities that had more opioids than they needed or knew what to do with. Self-medication, recreational drug use and financial opportunity arose in the wake of over-prescription and began to meet both medical and economic needs within many Appalachian communities.

The final component is the representation of the opioid crisis and the Appalachian region within conventional media. Appalachia has long been misrepresented in media for a variety of reasons, reasons which tend to trend towards the negative. The modern iteration of this representation is found within the media's representation of the opioid crisis. Negative representation has adverse effects for both viewers and Appalachian residents. Viewers are shown an image of Appalachia that portrays the region as a dead-end, hopeless area that has nothing to offer besides drugs and poverty. Residents are funneled into negative stereotypes that are both untrue and potentially damaging to their mental health. While it is true that the region does face difficulties with these issues, negative portrayals can make the Appalachian region appear to be a lost cause with little value. What is needed instead is accurate, yet hopeful portrayals. No one knows as well as Appalachians what the negative parts of the region are,

given that they actually reside within the area in question, but they are also aware that the region is greater than drug abuse and poverty. Rather than a message of weakness and despair put out by news companies and writers that lack understanding, a story of resilience and hope needs to be shared. This will create dialogue that will bring about positive change for the Appalachian region and her people, dialogue that is founded on truth and hope instead of misinformation and hopelessness.

Through this study, information and evidence has been shown in support of these three factors as primary contributors to drug abuse in the Appalachian region. Through the creation of a healthcare gap, the erroneous filling of that gap and by misrepresentation, opioids have been able to cause an abundance of negative effects for the Appalachian people. However, the Appalachian people have been and will continue to face these trials with resilience. Even though there are many who have been harmed by the opioid crisis, many have also been able to experience healing and new purpose. Despite the perceptions of many, the story of Appalachia does not end with the opioid crisis.

VIII. Conclusion

Ultimately, this study has been an attempt to discover some of the root causes behind the opioid crisis and drug use within the Appalachian region. Through examination of previous studies, interviews, the viewing of data resources and other methods, it has reached the conclusion that a lack of medical resources, over-prescription and media misrepresentation have all played major roles in initiating and continuing the opioid crisis within the Appalachian

region. More importantly, these areas reveal fundamental needs that need to be addressed. While work to halt the influx of fentanyl and the creation of organizations and resources to help drug users are worthwhile and necessary, there are root problems that need to be addressed. The situation needs to be represented fairly and accurately, so that it receives the necessary attention it deserves and so that dialogue can arise. Changes need to be made to provide adequate medical resources that are both economically and physically accessible, so that residents do not have to turn to self-medication to resolve their health problems. More job opportunities are need for Appalachians so that residents are not forced to turn to the drug economy to make a living. The effects of opioids trickle down and contribute to many other issues. These issues need to be addressed at their most immediate point, but they also need to be addressed at the source. Only by addressing the root causes of the opioid crisis can lasting, positive change be brought about to the Appalachian region.

Bibliography:

Addiction Science Center. (2021, April 26). *Addiction science center*. ETSU The Center for Prescription Drug Abuse Prevention and Treatment. Retrieved April 1, 2022, from https://www.etsu.edu/cph/addiction-science-center/default.php

Allen, S. T., O'Rourke, A., White, R. H., Schneider, K. E., Kilkenny, M., & Sherman, S. G. (2019). Estimating the Number of People Who Inject Drugs in A Rural County in Appalachia. *American journal of public health*, *109*(3), 445–450. https://doi.org/10.2105/AJPH.2018.304873

Appalachian Regional Commission. (2021, November 16). *Addressing Substance Use Disorder in Appalachia*. Appalachian Regional Commission. Retrieved March 20, 2022, from https://www.arc.gov/addressing-substance-abuse-in-appalachia/

Behringer, B., & Friedell, G. H. (2006, October). *Appalachia: Where place matters in health*. Preventing chronic disease. Retrieved March 30, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1779277/

Bunting, A. M., Oser, C. B., Staton, M., Eddens, K. S., & Knudsen, H. (2018). Clinician identified barriers to treatment for individuals in Appalachia with opioid use disorder following release from prison: a social ecological approach. *Addiction science & clinical practice*, *13*(1), 23. https://doi.org/10.1186/s13722-018-0124-2

Dunn, M. S., Behringer, B., Bowers, K. H., & Jessee, R. E. (2009). Evaluation of a community approach to address substance abuse in Appalachia. *International quarterly of community health education*, *30*(2), 171–183. https://doi.org/10.2190/IQ.30.2.f

Legal Information Institute. (n.d.). *Preemption*. Legal Information Institute. Retrieved April 12, 2022, from https://www.law.cornell.edu/wex/preemption

McGreal, C. (2015, November 12). *America's poorest white town: Abandoned by coal, swallowed by drugs*. The Guardian. Retrieved March 23, 2022, from https://www.theguardian.com/us-news/2015/nov/12/beattyville-kentucky-and-americas-poorest-towns

Meit, M., Heffernan, M., & Tanenbaum, E. (2019, July). *Investigating the impact of the diseases of despair in Appalachia*. UKnowledge. Retrieved March 28, 2022, from https://uknowledge.uky.edu/jah/vol1/iss2/2/

Meit, M., Heffernan, M., Tanenbaum, E., Cherney, M., & Hallman, V. (2020, October). *Appalachian diseases of despair*. Appalachian Regional Commission . Retrieved March 29, 2022, from https://www.arc.gov/wp-content/uploads/2020/11/Appalachian-Diseases-of-Despair-October-2020.pdf

Oak Ridge Associated Universities, & Appalachian Regional Commission. (2017, June 14). *Communicating about Opioids in Appalachia - Challenges, Opportunities, and Best Practices.* www.orau.org. Retrieved March 23, 2022, from https://orau.org/healthcommunication/documents/key-findings-report-opioid-communication-in-appalachia.pdf

Schalkoff, C. A., Lancaster, K. E., Gaynes, B. N., Wang, V., Pence, B. W., Miller, W. C., & Go, V. F. (2020). The opioid and related drug epidemics in rural Appalachia: A systematic review of populations affected, risk factors, and infectious diseases. *Substance abuse*, *41*(1), 35–69. https://doi.org/10.1080/08897077.2019.1635555

Staton, M., Ciciurkaite, G., Havens, J., Tillson, M., Leukefeld, C., Webster, M., Oser, C., & Peteet, B. (2018). Correlates of Injection Drug Use Among Rural Appalachian Women. *The Journal of rural health : official journal of the American Rural Health Association and the National Rural Health Care Association*, *34*(1), 31–41. https://doi.org/10.1111/jrh.12256

Staton, M., Ciciurkaite, G., Oser, C., Tillson, M., Leukefeld, C., Webster, J. M., & Havens, J. R. (2018). Drug Use and Incarceration among Rural Appalachian Women: Findings From a Jail Sample. *Substance use & misuse*, *53*(6), 931–941. https://doi.org/10.1080/10826084.2017.1385631

The Week Staff. (2015, January 8). *Appalachia: The big white ghetto*. The Week. Retrieved March 23, 2022, from https://theweek.com/articles/452321/appalachia-big-white-ghetto

White, R. H., O'Rourke, A., Bluthenthal, R. N., Kral, A. H., Kilkenny, M. E., Hazelett, T. D., Sherman, S. G., & Allen, S. T. (2020). Initiating Persons into Injection Drug Use in Rural West Virginia, USA. *Substance use & misuse*, *55*(2), 337–344. https://doi.org/10.1080/10826084.2019.1669660

Wilson, N., Kariisa, M., Seth, P., Smith, H., 4th, & Davis, N. L. (2020). Drug and Opioid-Involved Overdose Deaths - United States, 2017-2018. *MMWR*. *Morbidity and mortality weekly report*, 69(11), 290–297. https://doi.org/10.15585/mmwr.mm6911a4

Woolf, S. H., Schoomaker, H., Hill, L., & Orndahl, C. M. (2019, April). *The Social Determinants of Health and the Decline in U.S. Life Expectancy: Implications for Appalachia*. UKnowledge. Retrieved March 31, 2022, from https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1009&context=jah

Van Zee A. (2009). The promotion and marketing of oxycontin: commercial triumph, public health tragedy. *American journal of public health*, *99*(2), 221–227. https://doi.org/10.2105/AJPH.2007.131714

Appendix

Appendix A

Interview Questions

Why does the Appalachian region have such high drug abuse and fatality numbers in comparison to the rest of the country?

What are the Center's goals and expected outcomes, and has the Center accomplished those goals?

What kind of work/research is performed at the Addiction Science Center?

Why is it important for East Tennessee to have an Addiction Science Center?

Of the course of your work, have you noticed any particular trends regarding drug abuse in the Appalachian region?

What are the major factors leading to drug abuse in Appalachia?

What impact do you think that a lack of accessibility to necessary medical resources plays on drug abuse in Appalachia?

What kind of impact do you think has been brought about by overtreatment and the wide availability of opioids?

How do economic factors influence drug abuse and the underground drug economy? What changes do we need to make?

What kind of message needs to be communicated regarding drug abuse in Appalachia?

Is this message currently being conveyed effectively? Who needs targeted with this message?

What public relations needs does the center have, and what message does the Center need to get out?

Is there anything that I haven't asked about that I should know?

Appendix B

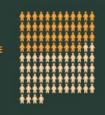
Infographic

APPALACHIAN HEALTH: RECOVERY AND RESILIANCE



22.35 MILLION U.S. ADULTS REPORT HAVING HAVING RESOLVED A SIGNIFICANT DRUG OR ALCOHOL USE PROBLEM.

46% of individuals who have resolved a significant drug or alcohol problem did so without the use of any formal treatment or recovery support services.





STUDENTS AND WORKERS HAVE BENEFITED THROUGH THE APPALACHIAN REGIONAL COMMISSION'S INSPIRE INITIATIVE.

TREATMENT OF SUBSTANCE USE DISORDER IS EFFECTIVE AND PEOPLE DO RECOVER!



Information sourced via the Recovery Research Institute the Appalachian Regional Commission and the Oak Eldge Associated Universities