Substance Abuse in the United Arab Emirates: Why a Needs Assessment is Necessary.

by

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A doctoral project submitted to the faculty of
the California School of Professional Psychology
in partial fulfillment of the requirements for the degree of
Doctor of Psychology at
Alliant International University, Los Angeles

April 2014

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April 2014

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The doctoral project of Shaima Al Fardan, directed and approved by the candidate's

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Psychology in partial fulfillment of the requirement for the Degree of

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ACKNOWLEDGEMENTS

I would like to express my gratitude to all the individuals that have helped me and supported me in attaining and completing my doctorate in clinical psychology. I would like to express my appreciation and gratitude to His Highness Sheikh Khalifa bin Zayed Al Nahyan, the President of the United Arab Emirates (U.A.E.) and Ruler of AbuDhabi and to Sheikh Mohammed bin Rashid Al Maktoum, the Prime Minister and Vice President of the U.A.E. and Ruler of Dubai. I would especially like to thank His Highness Sheikh Nahyan bin Mubarak Al Nahyan, head of the United Arab Emirates Ministry of Culture, Youth, and Social Development, and previous head of the Ministry of Higher Education and Scientific Research for granting me a sponsorship to complete a doctorate in the United States of America.

I would like to express my gratitude to my committee chair, Dr. John Bakaly, whose guidance, feedback, and passion for the field of psychology have made my graduate experience valuable and memorable. Thank you for giving me the courage to contribute to my community and country in a way that I never thought possible. I would also like to thank my academic consultant, Dr. Joan Murray for the assistance she provided throughout the project. Thanks as well to my field consultants who generously contributed to my doctoral project.

Last, but not least, I would like to extend special gratitude to my friends and family. Thank you all for your support and faith in me. I would like to thank my father for his guidance and encouragement in pursuing my dreams. I would also like to thank my mother for her unconditional love and faith in my abilities to complete this degree.

To my soul-mate, best-friend, and sister, thank you for everything you have done for me.

No words can express the gratitude that I feel.

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ABSTRACT

Substance Abuse is an illness that affects every community in every country. The United Arab Emirates had been used as a transportation hub for drug trafficking for a number of years. The exposure to illegal and legal substances has left individuals in the community susceptible to the effects of substance use and addiction. The changes in the country, due to globalization, have increased the level of stress and prevalence of depression.

Substance use is a method that individuals use to cope with these changes. Studies need to be conducted to create or tailor treatments for substance abuse in the United Arab Emirates. However, the country practices Sharia law, which perceives substance use as a sin. As a result, prison is seen as an appropriate punishment for such a sin against religion. This doctoral project aims at identifying and increasing awareness of the factors involved in substance abuse in the United Arab Emirates and at determining the best method to research this topic given the social, legal and religious barriers.

CHAPTER I

Introduction

Substance abuse has disastrous consequences for individuals, families, and communities. The United Nations (U.N.) Drug Control Program has undertaken a mission to eradicate illegal substance use, production, and distribution, with the aim of making it a drug free world (Coomber & South, 2004). Since the United Arab Emirates (U.A.E.) has been a transportation hub for drug trafficking over the years, this area has been of interest to researchers in the substance abuse field and to international organizations such as the U.N. and the United States Drug Enforcement Administration (United States Department of State, 2013).

Substance abuse research has been lacking in the U.A.E., despite evidence that such abuse exists. Some studies on the prevalence of psychiatric disorders in the U.A.E. detected the presence of drug and alcohol abuse (Abou-Saleh, Ghubash, & Daradkeh, 2001; Eapen, Jakka, & Abou-Saleh, 2003). However there have been few prevalence studies that assessed current levels of substance abuse, which are necessary to examine the factors involved in use and treatment. Such factors include religious issues affecting disclosure of substance use, legal concerns that affect disclosure of use, the limited number of dedicated treatment facilities, and the attitude of professionals in the substance abuse field who are currently working in the U.A.E. An examination of the epidemiology of use is warranted to inform measures to eradicate abuse.

The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-5) has identified classes of drugs related to substance abuse disorders (American Psychiatric Association [APA], 2013). These are alcohol, caffeine, cannabis,

hallucinogens, phencyclidine, arylcyclohexylamines, inhalants, opioids, sedatives, hypnotics, anxiolytics, stimulants, and tobacco. Excessive drug use directly activates the brain reward system, which influences the reinforcement of behavior and the production of memory. Intense and constant activation of the reward system may encourage the neglect of normal everyday activities. The pharmacological makeup of how each drug produces rewards is different. However, the use of drugs results in the activation of the reward system, which, in turn, produces feelings of pleasure commonly referred to as being high.

Substance abuse disorders include cognitive, behavioral, and physiological aspects (APA, 2013). When exposed to a drug, change occurs in brain circuits and often persists after detoxification as seen through relapses and cravings. According to the DSM-5, a diagnosis of a substance abuse disorder involves a pathological pattern of behavior related to use of a substance. This pattern of behavior is characterized by impaired control, social impairment, risky use, and pharmacological criteria. Impaired control, in this context, refers to frequent failed attempts at quitting use of a substance despite a desire to quit. This often occurs after large amounts are used over a long period of time. Impaired control, in this context, is also related to an individual's craving, which is an intense desire to use a preferred substance that may occur at any time and is more likely in an environment where the substance was previously obtained or used.

Social impairment occurs when frequent substance use results in an inability to fulfill obligations at work, school, or home (APA, 2013). The individual may continue use despite recurrent and persistent social or interpersonal problems. Social, occupational, or recreational activities are ignored and the individual withdraws from

family activities and personal hobbies to continue use. Increased time is spent in obtaining, using, or recovering from the substance and daily activities often revolve around the substance. Risky use refers to the frequent use of the substance in situations that are physically hazardous and despite their potential to result in psychological and physical problems.

Pharmacological criteria, when diagnosing substance abuse disorders, mainly revolve around tolerance. Tolerance occurs when an individual must increase the dosage of the preferred substance to get the desired effect. It can also be defined as a reduced effect when the usual dosage is taken. Withdrawal syndrome is commonly associated with tolerance and has been found to occur when the blood concentration of a substance declines after prolonged heavy use resulting in use of the substance to relieve withdrawal symptoms. Tolerance and withdrawal syndrome may present differently in different people who may display a range of symptoms depending on the substance used.

The U.A.E. has undergone many changes over the past few decades. The country and its inhabitants have experienced and received positive effects from these changes, specifically improvements in healthcare, technology, transportation, and standard of living (Davidson, 2008). However, due to the economic boom, a massive increase in the population over a short period, along with less restrictive controls on imports and exports, the country has become vulnerable to the introduction, distribution, and use of illegal substances (Al Marri & Oei, 2009; Amir, 2001; Okasha, 2003).

No contemporaneous research has been conducted that measures the psychological and social effects of these changes on those living in the U.A.E. Some mental health professionals have suggested that recent and rapid societal changes gear

individuals toward a reliance on substances to cope (Okasha, 2003). Substance use may be a means of escape, while society re-evaluates its values and culture in order to incorporate them into a new contemporary modern society. Alexander (2000) has suggested that the introduction of free market economies, defined as "a system in which people have the maximum freedom of choice in shopping, hiring, firing, and investing" (p. 502), has encouraged a breakdown in family and religious ties, as individuals become more focused on increasing income. This focus reduces engagement with family members and the community, which in turn gears individuals toward substance use as a way to replace that engagement that they would have otherwise achieved through contact with family and community members.

Research in substance use has been especially difficult to conduct in the U.A.E. due to legal, religious, and cultural ramifications (Al Marri & Oei, 2009). The official religion of the country is Islam and the country is ruled by Sharia law. Sharia law is considered God's will that uses teachings from the Quran and the prophet Mohammad to enforce a moral and religious code that addresses all matters in daily living ranging from politics to diet (Hefner, 2011). Sharia law prohibits production and consumption of mind-altering substances such as alcohol and drugs. Consequently, disclosure of drug use could result in dire consequences. However, with all these prohibitions in place, it has not stopped some individuals from using drugs (Abou-Saleh et al, 2001; Al Marri & Oei, 2009, Amir, 2001; Eapen et al., 2003; Younis & Saad, 1995).

The U.A.E. is adjacent to the Indian Ocean and has a long Arabian coast line which has made it vulnerable to drug smuggling (Al Marri & Oei, 2009; Amir, 2001). Countries such as Iran and Afghanistan have had a long history of drug growing and

exporting and are separated from the U.A.E. by the Indian Ocean, a direct sea route for trade. As a consequence, the U.A.E. has been a prime location for drug smuggling and exporting illegal substances (United States Department of State, 2013). This encouraged the U.A.E.'s long-standing zero tolerance policy toward drug use, which mandates that any individual caught using drugs could face a minimum sentence of four years in prison. Dealing or trafficking drugs has even greater consequences, with individuals facing up to life sentences, depending on the amount being sold or trafficked (Dubai Police, 2005).

In the U.A.E., possession, sale, or consumption of alcohol by Muslims is illegal (Al Marri & Oei, 2009). If a Muslim has engaged in any of these behaviors and has been caught, the consequences include imprisonment or fines. These same behaviors do not procure any penalty for non-Muslims in the U.A.E. Over the past few years, the U.A.E. has become a major hub for tourism with many facilities catering to non-Muslim individuals engage in alcohol use (Davidson, 2008). Alcohol is readily available in bars, restaurants, nightclubs, and hotels. Most facilities attached hotels may apply for an alcohol license. Alcohol can also be bought in specifically licensed stores. Driving under the influence of alcohol and public intoxication are punishable by imprisonment or fines. Alcohol is the only drug that is permissible in the U.A.E. All other narcotics obtained without a prescription or illegally can result in imprisonment and payment of fines (Dubai Police, 2005).

Substance abuse treatment facilities in the U.A.E. are scant. Some research has reflected the presence of outpatient psychiatric facilities that treat drug and alcohol problems (Younis & Saad, 1995). However, much of the data revealed drug use rates of the native people of the U.A.E., who are a minority of the overall population. This

provides a biased number of substance misusers in the U.A.E. Other research used data collected from individuals who were incarcerated in a corrective institution for drug abusers in the U.A.E., with no mention of treatment protocols (Amir, 2001). Centers geared toward treatment of drug and alcohol abuse do exist, but no available research has evaluated the methods or effectiveness of the treatments provided (Okasha, 2003).

The stigma associated with being labeled as a substance abuser with the additional legal and social consequences has acted as a barrier to treatment. Even when data has been collected in order to get a true picture of mental illnesses and substance abuse in the U.A.E., interviewers have resorted to an indirect line of questioning in order to get information about substance abuse (Abou-Saleh et al., 2001). In addition, many of the studies conducted their research in prisons, due to the high rate of incarceration for substance possession, production, or trafficking (Amir, 2001). Admitting to substance use in the U.A.E. is associated with admitting to criminal activity.

Purpose Statement

The purpose of this doctoral project was to design and deliver a presentation to educate mental health professionals currently working at a public hospital in the U.A.E. on the needs of the community with regards to substance abuse. This hospital was selected because it is the only acute psychiatric unit currently available in Dubai that would have the capacity to treat substance abuse disorders or any emergencies that may arise subsequent to substance abuse. The doctoral project describes the current literature on substance abuse disorders and the factors involved that are relevant to the U.A.E. The project also contains interviews with experts in the field of substance abuse and/or the population of the U.A.E. These interviews act to fill the gaps in research with regard to

substance abuse in Middle Eastern populations. The purpose of the presentation is also to increase interest and awareness in generating data on the severity of substance abuse disorders and applying a needs assessment. Addiction is a social problem that affects the community and creates costs to society (Royse, Staton-Tindall, Badger, & Webster, 2009). Needs assessment will aid in understanding the extent of the gap in the services provided in order to create or tailor treatment modalities and facilities relevant to this population. A needs assessment will also generate enough information about the current issues with substance abuse so that changes in policies can occur.

The following chapters present a description of the U.A.E., with a focus on the history of substance abuse in the country. The chapters include an overview of the illegal substances that individuals in the U.A.E. have commonly used as well as a discussion of the factors related to use. Influences affecting substance abuse are reviewed from an individual and societal perspective. This doctoral project describes the individual biological and psychological dynamics that are associated with substance abuse (Maxmen, Ward, & Kilgus, 2009). From a societal perspective, the economic changes, demographic changes, and social stressors that have occurred are discussed, specifically in terms of how substance abuse is used as a coping mechanism (Alexander, 2000; Davidson, 2008; Nelson & Prilleltensky, 2010). Changes in the economy and in society have dramatically affected the traditional support networks, such as the family unit, extended family, and community gatherings, and substance abuse has become one of the methods that people use to cope with ongoing stress (Grumer & Pinquart, 2011; Razvodovsky, 2004). Existing drug treatments will also be identified, with a discussion

of the barriers that individuals who have a substance abuse disorder face when accessing treatment in the U.A.E. (Okasha, 2003; Younis & Saad, 1995).

Goals

The primary goal of this doctoral project was to increase knowledge and awareness of mental health professionals working with substance abuse in the U.A.E., specifically regarding the prevalence and factors that have contributed to substance abuse in the U.A.E. An additional goal was to increase interest in gathering data to measure the extent of the substance abuse problems in the community and in applying a needs assessment. Understanding the unique factors that contribute to substance abuse in the U.A.E. will clarify avenues to begin constructing treatment modalities and facilities tailored to the inhabitants of the U.A.E. An examination of the barriers to treatment will also help clarify the issues that need to be addressed in order to make treatment accessible for those who suffer from a substance abuse disorder.

Objectives

Needs assessment focuses on awareness of services, availability of services, accessibility of services, and acceptability of services (Royse et al., 2009). These elements are addressed in this doctoral project. The document and presentation had three main objectives. The first objective was to identify and discuss the substances that are currently being used in the U.A.E. The second objective aimed at examining the factors related to use. The third objective was to assess the barriers to treatment, which included non-disclosure of substance abuse issues due to fear of legal repercussions, stigma around substance abuse issues, lack of treatment facilities geared toward treating substance abuse issues, and lack of appropriate training in substance abuse treatment.

CHAPTER II

Critical Literature Review

History of the U.A.E.

The U.A.E. is a federation that consists of seven emirates (Davidson, 2008). These emirates are Dubai, Abu Dhabi, Ajman, Ras Al-Khaimah, Sharjah, Umm Al-Quwain, and Fujairah. This federation became united in 1971 after the treaties that mandated British protection ended. Britain has played a large role in the development of the U.A.E. The U.A.E. lies on the southeast of the Arabian Peninsula, with land size that is 83,600 square kilometers long (Al Marri & Oei, 2009; Amir, 2001). The country has a long coastal line where many inhabitants live. According to the National Bureau of Statistics for the United Arab Emirates (2011), the total population in 2010 was 8,264,070. The native population consisted of 947,997 individuals compared to the immigrant population, which was composed of 7,316,073 individuals. This paper discusses the substance abuse issues in a number of these emirates with a focus on Dubai. This is considered in relation to the U.A.E. being a relatively new country that achieved its independence from Britain and how that has affected the management of alcohol and drug issues.

Britain essentially got involved with the U.A.E. to protect their Indian colony's interests in the late 1800s (Davidson, 2008). Pirates originating from the U.A.E. attacked British vessels traveling between Britain and India and it was a desire to stop the maritime conflict that essentially drew Britain to the U.A.E., formerly known as the Trucial Sheikhdom. After having established treaties with the royal family in the area, a long and mutually beneficial relationship flourished between Britain and the Sheikhdom.

The Trucial Sheikdom proved to be an asset for Britain in terms of location as it provided space for British planes to land and refuel (Davidson, 2008).

The industrial revolution in the Western world came about with a need for raw materials and encouraged colonization of countries with rich natural resources in the 1800s (Nelson & Prilleltensky, 2010). Due to this colonization, banks in the United States and in Europe began to have an abundance of funds. This encouraged further development in the U.S. and Europe, which in turn demanded more resources from the colonies. Resource extraction mainly benefitted the industrialized countries and not the colonies. Dubai, although not a colony but better defined as a pseudo-colony, suffered from this at first, but as soon as British control was minimized Dubai resumed governance of its economy and natural resources (Davidson, 2008).

Dealings with Britain occurred since the late 1800s, so that British troops readily intervened in any conflict that occurred in Dubai or the neighboring cities (Davidson, 2008). The country was not initially deemed worthy of colonization, but the booming pearl industry in the 1900s, brought the country to the attention of the British Empire. In the following decades, the pearling and oil industries helped move the U.A.E., and specifically Dubai, toward an era of wealth and modernization.

The World Wars that occurred early in the 20th century affected Europe, including Britain, and the colonies, or pseudo-colony in the case of Dubai (Nelson & Prilleltensky, 2010). Britain's restrictions on the pearling industry had allowed other competitors, specifically Japan, to thrive (Davidson, 2008). As a depression ensued in the Western world following World Wars I and II, the demand for luxury items such as pearls diminished. This greatly affected the U.A.E. since British restrictions on Dubai's

pearling industry only allowed them to sell to British merchants and there was no demand at the time. Modernization then occurred as a way to remedy the economic depression that followed industrialization, urbanization, literacy, public education and an attempt at democratization.

The country experienced an economic boom in the early 1970s (Amir, 2001). The increase in the price of oil following the Arab-Israeli war increased incomes and the standard of living for most individuals in all the social classes in the U.A.E. Modernization was accomplished in only a few years and people had to adapt very quickly to new realities. The oil wealth of the country put the population in a privileged position to begin investing in the future. The country changed from a fishing and pearling community in the early nineteenth century to an international hot spot for trading and commerce (Davidson, 2008). The living situation changed from an indigenous tribal way of life where people used to live in village settlements, to a cosmopolitan city that provided an array of accommodations and cuisines to suit any taste. Dubai became an attractive place for re-export trading since taxes and transport restrictions were at a minimum. Due to a dwindling oil reserve, various businesses emerged in order to encourage foreign investors and to support a rising tourism industry. To advance the economy and not be wholly reliant on oil reserves, Dubai introduced free zones, a luxury tourist industry, and attractive real estate geared toward foreign investors. The tourism industry worked at accommodating all visitors by making the environment friendly enough for them. Due to this influx in foreign investments, many individuals moved to Dubai to seek their own wealth.

The economic boom allowed the U.A.E. to accumulate a large amount of wealth, which was distributed among the nationals, of all social classes, to secure loyalty and reduce political opposition, since the U.A.E. was an autocracy with no real political freedom (Davidson, 2008). The royal family helped the natives by providing free housing and an income. The country's wealth aided citizens to gain access to free medical care and education, as well as being guaranteed employment in the public sector. They would be given high positions with assistants that would bear the load of the work. Softer loans were offered to natives who wanted to open up businesses in the private sector. Land was also given for free to the natives, automatically providing the option of becoming entrepreneurs by using the land for commercial purposes. With some privately owned companies, immigrants were able to open up businesses only under the condition that 51% of the shares would be signed over to a native partner to act as a sponsor and guarantor. Given that the native population was so small, it made it easier to distribute the wealth and ensure political stability. Having direct access to free land and shares from immigrant business owners bred an unproductive mentality in the natives, especially the young ones.

Despite all the benefits that were given to the natives, having a growing immigrant community, coupled with the diversification in the economy, affected the religious and cultural values of the native community and the cultural identity (Davidson, 2008). Religious and cultural values changed to adapt to a more modern view of society that used less religious teachings to dictate everyday behavior. Individuals' cultural identities were threatened since religion no longer played a large role anymore (Okasha, 2003). Modern science and technology dramatically affected societies and political

dynamics. Technology, in the form of weapons, transportation, medicine, and farming equipment progressed due to the advancement of science and allowed individuals to excel in their chosen professions and standard of living. Scientific knowledge took precedence over abstract concepts in the form of religion and superstition, and so weakened such influence in society (Nelson & Prilleltensky, 2010).

Many changes can now be seen in Dubai's culture. This influence was directed from the diverse inhabitants, growing financial sectors, and a focus on modernization and technology, which threatened the religious ideology that previously consumed the country (Davidson, 2008). Official weekend days changed to meet international Western norms to better facilitate financial dealings. This jeopardized the Muslim Sabbath day, which falls on a Friday. Although prohibited by Islam, Dubai owns a large number of shares of the casinos in Las Vegas, Nevada, in the U.S., which also seems to be driven by the financial sector. The national mourning periods changed, specifically in Dubai, which has been seen as disrespectful of the cultural values and customs. Traditional long mourning periods have been deemed to negatively affect tourism and foreign trade. Not honoring such periods was deemed as an appropriate change in order to increase productivity and financial dealings. Fewer mosques are being built and there is no real emphasis or focus on maintaining the Arabic language, which follows the Quran. Most schools follow an all-English curriculum and businesses are being named in English with no requirement of an Arabic translation.

The changes also seem to affect the status and level of wealth experienced by the natives and other inhabitants in the U.A.E. (Davidson, 2008). The local elite are affected by status changes due to wealthy foreigners taking up Dubai as their new home. Wealth

was often used to portray status in the community. Many young native men seem to be struggling financially, as the government is not providing as many benefits and as much guaranteed employment as was once promised. Employment has become competitive as natives and other U.A.E. inhabitants are competing with foreign, highly trained individuals. The population's overconsumption through shopping is still an activity in which many partake. This has increased the level of imports and the balance of payments. This overconsumption seems to be rooted in Dubai's political and economic structures. With hyperinflation becoming a growing concern in the U.A.E., many individuals and families seem to be falling into debt. All these sociocultural changes may be affecting individuals' mental health and have encouraged individuals to use illegal or legal mind altering substances to cope with these changes (Abou-Saleh et al, 200; Okasha, 2003).

History of Illegal and Legal Substances in the U.A.E.

The U.A.E has been vulnerable to drug smuggling and exportation of illegal substances (Al Marri & Oei, 2009; Amir, 2001; United States Department of State, 2013). Iran and Afghanistan are in close proximity to the U.A.E. and have a long history of drug growing and exporting. The U.A.E. is a prime location for drug activity due to its geographical location, being adjacent to the Indian Ocean, as well as having a long Arabian coastline. Inhabitants' exposure to such activity could increase susceptibility to substance use and addiction. Researchers have also suggested that rapid population growth and immense social change may be factors that affect the psychological health of the community and, as such, encourage substance abuse (Okasha, 2003).

A focus on trade of import and export businesses encouraged an era of modernization and made the U.A.E. vulnerable to illegal substances (Davidson, 2008). Most of the goods shipped through Dubai originated from the Indian subcontinent and the Far East. The merchandise that passed through was aimed at either being re-exported back into Asia, with the aim of bypassing trade restrictions in Asia, or distributed to the immigrants currently living in Dubai. While the country was building its trade through the free ports and exports, illegal activity was taking place that took advantage of the lax restrictions on trade. During the mid-1950s, accusations against the customs department and Dubai police spread after discovering that a shipment of narcotics had been allowed to pass through Dubai.

In the 1960s the British proposed a dangerous drugs regulation that was rapidly adopted by the country (Davidson, 2008). This in effect made the transport of substances such as opium and hashish illegal. As a result, an underground, criminal trade began that continued transporting these substances in defiance of the regulations. According to law 14 of the Criminal Code formed in 1995 under Federal Law 1, "use, importation, exportation, production, distribution, and trafficking of illegal mind-altering substances, whether natural or manufactured, could result in criminal charges" (Dubai Police, 2005). Any individual caught using drugs could face a minimum sentence of four years in prison (Al Marri & Oei, 2009). Dealing or trafficking drugs has even greater consequences with individuals facing up to life sentences, depending on the amount sold or trafficked.

Alcohol consumption has become common and often unchecked in the U.A.E. (Davidson, 2008). In order to consume or purchase alcohol in the U.A.E., liquor consumption licenses need to be obtained and signed by a priest or vicar. However, these

licenses are often not checked and individuals of legal drinking age, 18 years and above, and of any religion can purchase alcohol. In religious months, such as Ramadan, restriction of alcohol use for the month of Ramadan has also changed over the years to more lax regulations where alcohol is now being served at any time of the day. The accessibility of alcohol seems to have heightened the disparity between the cultural, religious, and legal restrictions and common social practices that are occurring today.

Prevalence and Type of Substance Use in the U.A.E.

Despite a minimal number of prevalence studies, research has shown that drug abuse does occur in the U.A.E. (Abou-Saleh et al., 2001; Amir, 2001; Eapen et al., 2003; Ghubash & El-Rufaie, 1997; Lawton & Shulte, 2012; Younis & Saad, 1995). A survey of case notes of patients admitted in a psychiatric ward in Alain, a neighboring city to Dubai, showed that 9.5% of the patients admitted into the psychiatric unit between January 1990 and December 1991 were admitted due to alcohol and drug abuse problems (Younis & Saad, 1995). Patients were men between the ages of 18 and 35 years. The majority, 42.3%, were poly-substance users, followed by 26.8% of individuals who only abused heroine, 22.5% of individuals who only abused alcohol, 2.8% of individuals who only abused hashish, 2.8% of individuals who only abused pharmaceutical drugs, and 2.8% of individuals who only abused glue. U.A.E. natives represented 76.1% of this sample. All the heroin users were U.A.E. natives whereas the alcohol and poly-substance users were expatriates. Younis and Saad (1995) contended that substance abuse could be due to the sociocultural changes that have occurred in the country. These authors also discussed how trade practices and the diversification of the community could be factors influencing substance abuse. They discussed how a reduction in individuals'

commitment to religious practices may have made them more susceptible to drug and alcohol use. This study, however, did not reflect the true substance abuse rate in the community due to the fact that the study mainly reflected male U.A.E. natives who were admitted into a psychiatric unit.

Amir (2001) conducted a study where he compared the level of substance abuse in the U.A.E. to the level of substance abuse in the Kingdom of Saudi Arabia (K.S.A.). They compared the level of abuse among male inpatients in a hospital in Dammam, which is a city in K.S.A., and male prisoners in Dubai. The information collected, through structured interviews, included type of substance abused, age at onset of abuse, recent onset of abuse, level of education and employment (Amir, 2001). Results portrayed that the participants' ages at the onset of abuse differed in the two countries, despite being in the same age range for current substance abuse, which was around 30 years of age (Amir, 2001; Younis & Saad, 1995). Most of the participants in both countries had 8 years of education. The U.A.E. sample had an earlier age of onset, which was around 18 years of age, compared to the K.S.A. sample, which was around 22 years of age (Amir, 2001; Younis & Saad, 1995). This is understandable, given the access to alcohol in the U.A.E. and the additional stressors that the U.A.E. has experienced as a rapidly growing and expanding society.

The substances abused in the U.A.E. were hashish, alcohol, opium, sedatives, stimulants, and cocaine, compared to the K.S.A. sample that mainly abused heroine (Amir, 2001; Younis & Saad, 1995). The U.A.E. study reflected a larger proportion of poly-substance use: 85.7% in the U.A.E., compared to 35% of the K.S.A. sample (Amir, 2001; Younis & Saad, 1995). A significant factor in Younis and Saad's (1995) study that

was not accounted for was that the U.A.E. sample consisted of male individuals who were incarcerated. Being in a prison setting may add extra stressors to individuals that may encourage them to use multiple substances compared to being in a hospital facility geared to treating drug abuse. The study also showed that single substance abusers in the U.A.E. mainly used hashish or opium. According to Amir (2001), employment rates did not seem to affect or be related to substance abuse. This could be because of how lax most public sector employment facilities are with natives of both countries. In addition, drug use is conducted in extreme secrecy in both countries due to religious, legal and familial reasons.

Comorbid Psychiatric Illness and Substance Abuse in the U.A.E.

Substance abuse research is scant in the U.A.E. Many individuals who are caught using drugs are imprisoned (Al Marri & Oei, 2009). Drinking alcohol is permissible for non-Muslims and is not considered a crime. For Muslims, drinking alcohol is considered a crime and can result in imprisonment. Research that involves disclosure of alcohol and drug use, specifically for Muslims, would be difficult to conduct due to fear of imprisonment. As such, researchers have surveyed the prison population to gain an idea of the prevalence of substance use and abuse, and the co-morbid psychiatric illnesses that were prevalent in those same individuals. Ghubash and El Rufaie (1997) investigated the existence and type of psychiatric disorders in a male prison setting in Dubai. It was conducted in Dubai Central prison with 142 male inmates. A five-sheet questionnaire was used that involved attaining informed consent, information on socio-demographic data and personal history, including psychiatric and forensic history, the Clinical Interview Schedule, the CAGE Alcoholism Questionnaire, previous history of epilepsy,

self-harm, drug abuse and diagnostic criteria based on the ICD 10. A technician completed the first two forms and a psychiatrist completed the last three forms. The age range of the prisoners was 18 to 70 years, with an average of 29 years. The crimes committed by the participants included 50% pertaining to illicit drug use, possession, dealing, or importing, 14% pertaining to financial fraud, 10% involved in rape, 7% representing theft, 6% representing violent acts, and 0.7% related to alcohol. The psychiatric disorders in the sample showed 13% as having a depressive episode, 1.4% having generalized anxiety disorder (GAD), 4% as having mixed anxiety and depression, 0.7% having an organic mental disorder, 3% with mental retardation, 3% with personality disorder, and 0.7% with other psychiatric disorders (Ghubash & El Rufaie, 1997). The rest of the prisoners examined did not qualify for a diagnosis but exhibited symptoms of irritability, disturbed sleep, anxiety, depression, and lack of concentration on the CIS.

Alcohol-related problems were identified by CAGE in 28% of the sample (Ghubash & El-Rufaie, 1997). Self-reports of substance use were taken for the period of 12 months prior to imprisonment, where 37% denied use, 37% reported multiple substance use, 11% used opioids only, 11% used cannabis only, 3% used volatile substance, and 2% used other single substance. As a whole, around 63% of the sample used drugs. Out of 90 members of the sample who used drug and volatile substances, 46% of them had a history of withdrawal. Out of the whole sample, 16% demonstrated alcohol-related problems and history of withdrawal symptoms (Ghubash & El-Rufaie, 1997). A history of seizures represented 13% of the sample and a history of self-harm represented 32% of the sample. Seizures were reported as related to drug and alcohol use. One significant limitation that was shared by the authors was that diagnoses were

based on clinical judgment (Ghubash & El-Rufaie, 1997). In addition, an over-representation of substance use related difficulties may have existed in the prison sample due to the strict rules on substance use in the country and the resultant punishment of incarceration.

Other neighboring cities, such as Alain, have shed some light on the presence of psychiatric illnesses in the U.A.E. and the presence of substance abuse in the region (Abou-Saleh et al., 2001). A study governed and funded by the United Arab Emirates University aimed at surveying the prevalence of psychiatric illnesses in Alain as well as identifying the associated socio-demographic characteristics. It also aimed to validate the screening instruments used, examining differences in rates of depression between genders, identifying the history of psychiatric illnesses in the community and examining the effects of socio-cultural changes on mental health (Abou-Saleh et al., 2001).

In this study, 1,394 U.A.E. natives, through a systematic sampling method, were screened for psychiatric disorders (Abou-Saleh et al., 2001). Participants were between the ages of 18 and 40 years, and 49% were female. Around 50% of the participants had nine years of education and approximately two thirds of them were married. Initially, the survey was administered cross-sectionally between September 1996 and December 2007. Modified versions of the Composite International Diagnostic Interview and the Socio-Cultural Change Questionnaire were used with all the participants. These tools were translated into Arabic. In addition, a socio-demographic questionnaire was employed to identify socio-demographic factors that may contribute to psychiatric illnesses. A subset of the participants also undertook the Self-Reporting Questionnaire and the Arabic General Health Questionnaire for purposes of validating these instruments and to

measure lifetime and one-week prevalence rates of mental distress. Finally, interviews were conducted in participants' homes to assess the mental status of the participants, to collect socio-demographic information and to administer the instruments. The interviewers were psychiatric nurses, who were trained in identifying symptoms of psychiatric illnesses using the ICD-10 and DSM-IV as well as on how to administer the aforementioned instruments.

Results showed that 8.2% of males and 18.5% of females sought previous treatment for mental distress, which is a striking gender difference (Abou-Saleh et al., 2001). The most common symptoms reported were tension, worry, fatigue, insomnia, difficulty concentrating, headaches, and a general sense of unhappiness. In addition, prevalence of psychiatric disorders was 11.4% for women and 5.1% for men, which is another strikingly discrepant gender difference. Most substance use disorders were reported by men, whereas women reported neurotic disorders. The authors attributed this difference to social and cultural obligations that burden women and not men (Abou-Saleh et al., 2001). The authors also attributed hormonal factors in females as a precursor to psychiatric illness (Abou-Saleh et al., 2001). This study categorized phobia, generalized anxiety disorder, panic disorders, somatoform disorders, dissociative disorders, and obsessive compulsive disorder as neurotic disorders. It was possible that men may have self-medicated with substances whereas women utilized mental health services.

In terms of socio-demographic factors, most mental illnesses were associated with violent family dynamics, a family history of mental illness, and exposure to chronic life difficulties (Abou-Saleh et al., 2001). The risk factors determined for this group were disturbed family environment, being young and female, past history of mental illness, and

chronic as well as recent life difficulties. Comorbidity of mental illnesses also played a factor, since 47% of the participants had more than one diagnosis.

The results of this study showed that substance abuse was present in 0.7% of the males interviewed and in 0.1 % of the females interviewed (Abou-Saleh et al., 2001). However, when participants were asked if one or more members of their household had problems with drug or alcohol use, 5.2% of the sample identified that there were such problems in their household compared to 1% when asked directly (Abou-Saleh et al., 2001). The results of this particular study are quite interesting in terms of how participants answered. When participants were asked directly, answers seemed to be more conservative regarding their own level of drug use. However, when the questions were asked regarding someone in their household who may be abusing drugs or alcohol, the answers seemed to be more forthcoming. This seems appropriate given the social and legal ramifications of exposing personal drug use. In addition, despite this study shedding some light about drug and alcohol abuse in the U.A.E. community, it only reflects the prevalence of drug and alcohol abuse by U.A.E. natives. Given that the U.A.E. natives only make up 10% of the population, studies that measure the whole population's drug and alcohol use are in dire need.

Substance abuse and mental illness in families seem to have adverse effects on children. Eapen et al. (2003) conducted a study where they measured the prevalence of childhood psychiatric disorders in a random sample of U.A.E. natives in Alain. The study also aimed to identify whether an association existed between childhood psychiatric disorders and family history of psychiatric illness as well as individual and psychosocial variables.

Participants were chosen using a systematic sampling method in two stages (Eapen et al., 2003). In the first stage, eligible households that contained children between the ages of 6 and 18 years were identified and screened using the Rutter Parent questionnaire. The first stage was carried out on 620 children by trained nurses. In the second stage, 329 children, 165 girls and 164 boys were randomly sampled from the first stage and provided the main results of the study. The Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children were used for the second stage in a semi-structured diagnostic interview format. Interviews were conducted by trainees in psychiatry. Initially the mothers were interviewed in their homes, and then the child. The Children's Global Assessment Scale and the DSM-IV criteria were used to assess and diagnose mental illness. Using a semi-structured questionnaire, socio-demographic information was obtained that contained details about the family structure, presence of parent, income, education of parent, occupation, polygamy, family history of psychiatric illness, and substance use of a family member. In terms of the children, information was gathered regarding birth order, physical health, and academic performance.

Results showed that 22.2% of the children had at least one DSM-IV diagnosis (Eapen et al., 2003). Mood disorders were most prevalent, with anxiety disorders coming next. Alarmingly, 45% of the children who had at least one diagnosis had more than one diagnosis. Adolescent girls seemed to experience the highest prevalence of mood disorders. Results showed that adverse family factors such as large family size, chronic life difficulties, family history of mental illness, and substance abuse in the family were associated with a psychiatric illness in the child (Eapen et al., 2003). This study brings to light the significant risk factors that children face in terms of being vulnerable to mental

illness. According to the authors, the high prevalence of childhood psychiatric disorders could be due to shared genetic and environmental factors with parents who have a psychiatric illness and being surrounded by family members that challenge societal values by drinking alcohol (Eapen et al., 2003). It is clear how substance use in the family is a risk factor and may be used as self-medication, especially by males in the community if adverse events and mental illness are not addressed.

Lawton and Shulte (2012) measured the prevalence of mental health symptoms and level of alcohol use of individuals visiting a community mental health outpatient clinic in Dubai. All individuals recruited were over 18 years of age and completed questionnaires. The questionnaires distributed were in both English and Arabic. The questionnaires consisted of the following: the Hospital Anxiety and Depression Scale, which measures symptoms of anxiety and depression; the Eating Attitude Test, which measures abnormal eating behavior and attitudes; the Alcohol Use Disorders Identification Test, which measures consumption of alcohol and related problems; the Post-Traumatic Stress Civilian Checklist, which identifies DSM-IV Post-Traumatic Stress Disorder (PTSD) criteria; The Rosenberg Self-Esteem scale, which measures self-esteem; the Perceived Stress Scale, which assesses subjective accounts of stress; and the Multidimensional Scale of Perceived Social Support, which evaluates the level of social support received from friends, family, and significant others (Lawton & Shulte, 2012).

The sample consisted of 49 participants, 69% of whom were female with an average age of 36 years. Of the sample, 57% were married, 33% never married, and 8% were divorced or separated (Lawton & Shulte, 2012). Most of the participants, specifically 84%, lived in Dubai with the rest scattered among three other emirates. The

racial demographic of the sample involved 39% European, 14% Middle Eastern, 12% North American, 12% African, 6% South Asian, 4% South American, and 4% of dual nationality. The countries involved in the dual nationalities were not mentioned in the study. The participants portrayed mild anxiety in 35.1% of the sample, moderate anxiety in 59.5% of the sample, and severe anxiety in 5.4% of the sample. The sample showed 67.9% cases of mild depression, one case of severe depression, and 28.6% cases of moderate depression (Lawton & Shulte, 2012). Comorbid mild anxiety and depression were shown in 51% of the sample (Lawton & Shulte, 2012). Alcohol drinking was reported in 77.6% of the sample, with a medium level of alcohol related problems (Lawton & Shulte, 2012). High levels of problematic drinking were reported in 21.1% of the sample (Lawton & Shulte, 2012). When examining the diverse population that lives in the U.A.E., particularly Dubai, it can be seen that a high level of alcohol-related problems is present, in comparison with previous studies that only examined the alcohol and drug use level of U.A.E. natives.

Among the participants, self-esteem levels were low but attitudes toward eating were within the normal range (Lawton & Shulte, 2012). Of the sample, 51% had high levels of stress and met PTSD criteria. Despite the fact that self-esteem was low among the participants, employment seemed to play a factor with individuals who were employed having higher self-esteem. Depression and anxiety were associated with PTSD and low self-esteem. Additionally, low self-esteem was associated with high stress. High PTSD was associated with high stress and low self-esteem. Social support was seen to be associated with lower levels of depression and higher self-esteem. The authors assumed that social support was high because of the country's social practices that

encourage concern of the physical, emotional, and social well-being of individuals in the community (Lawton & Shulte, 2012).

The authors also suggested that PTSD may be linked to living in a country, possibly even a whole lifetime, without having the ability to acquire citizenship, which in this case is the Emirati citizenship (Lawton & Shulte, 2012). This seems to be a bold statement from the authors. PTSD is diagnostically related to life-threatening events, and it may be that the U.A.E. has become a home for many individuals who have escaped from neighboring war-torn countries (Davidson, 2008; Maxmen et al., 2009). Surprisingly, alcohol was not reported or associated with emotional issues, but the authors assumed that alcohol may have been used for coping (Lawton & Shulte, 2012). One limitation for this study that needs to be considered for future studies is the appropriateness of the tools used. This study assessed the diverse demographic living in the U.A.E. However, the authors did not consider the cultural differences that might affect the results of the study. Using tools that have been validated with certain populations could be a better indicator of mental health symptoms.

Demographic and Biological Factors Involved in Substance Abuse

Certain demographic factors, such as age, gender, and education, are associated with substance use (Maxmen et al., 2009). Substance abuse peaks when an individual approaches middle age. Research has shown that substances are often used and abused by men rather than by females (Abou-Saleh et al., 2001; Maxmen et al., 2009). However, certain research studies conducted in the U.A.E. have clarified that non-disclosure of substance abuse is a common practice and may be practiced by both genders. A family history of substance abuse, mood disorder, or antisocial personality disorder may precede

substance abuse. Education may also affect the level of substance abuse (Amir, 2001; Maxmen et al., 2009). Less education seems to be associated with a higher incidence of substance abuse.

Biological mechanisms are involved in substance abuse. Drug use has a reward pathway in the brain (Maxmen et al., 2009). This pathway starts from the ventral tegmental area and the nucleus accumbens and ends at the frontal and prefrontal cortex, where the dopaminergic pathways fulfill the reward process. Cravings are commonly associated with the reward process and often occur after an addiction has been formed (APA, 2013). This occurs through a process of classical conditioning where the use of substances is associated with the activation of specific reward structures in the brain. In addition, impairments in brain inhibitory mechanisms lower levels of self-control, which in turn predisposes individuals to develop substance abuse disorders.

The reward process has also been associated with relieving distress (Maxmen et al., 2009). The self-medication hypothesis assumes that a drug of choice is used to alleviate specific distressing symptoms. Distressing symptoms are present in mental illnesses, such as in anxiety, mood disorders, and antisocial personality disorder. As a result, comorbidity between substance use and mental illness may be high. Another complication may arise where substance abuse may mimic a mental illness, so it is important to get a thorough assessment in order to provide the appropriate treatment.

Social Factors Contributing to Substance Abuse

Globalization and consumerism. Globalization and modernization are two pathways that have paved the way for the U.A.E. to be what it is today (Davidson, 2008). The U.A.E. has become one of the leading financial hubs in the world. After the British

withdrew their influence from the country, modernization was encouraged to help build and expand the economy. Modernization helped increase power and wealth for those who owned profit-making ventures and turned the U.A.E. into a society run by capitalism. However, it also acted to further the class divide between owners and employees and introduced a class system in the country (Davidson, 2008; Nelson & Prilleltensky, 2010).

Globalization is a "way of describing the process that is supposed to bring the benefits of science, democracy, free trade, communications systems, and corporation-controlled capitalism to the entire world" (Nelson & Prilleltensky, 2010, p. 336).

Capitalism "refers to a general economic system and associated way of producing goods" (Nelson & Prilleltensky, 2010, p. 337). Both globalization and capitalism revolve around private ownership that is gained by business owners. Profits increase when material goods are sold for more than what it takes to manufacture them. As profit increases, capital increases, which is then mostly reinvested back into other projects or into banks that have their own use for the capital. Employees in capitalist economies compete with each other in order to gain a wage. However, the amount of money that employees compete for is nowhere close to the profits that are accumulated by the private owners. Wages are kept low because of a surplus of unemployed individuals, who would be willing to compete for a job of a similar or lesser wage. Thus, a class society is encouraged between owners who provide work and the employees who compete for it.

Globalization and the forces around it transcend cultures and countries (Nelson & Prilleltensky, 2010). International organizations, military alliances, political alliances, telecommunication, transportation and trade encourage globalization and also occur as a

result of it. According to Marsella (1998), globalization seems to encourage a form of interdependence between nations, which results in a shift in cultural and personal identities (Nelson & Prilleltensky, 2010).

The changes associated with globalization can create a form of societal stress and confusion as it affects the cultural identity and the individual identity (Grumer & Pinquart, 2011; Okasha, 2003). Identities are affected by career choice, lifestyle, and social events. These aspects of identity have drastically changed for individuals who have lived in the U.A.E. for the past 30 years (Davidson, 2008). Introduction of foreign cultures and religious beliefs creates new challenges and stressors for individuals when forming their identity (Grumer & Pinquart, 2011). Since the U.A.E. houses a diverse group of people, such challenges seem to be an everyday occurrence. New technology implies a need to be competent and thus adds to the stressors. Social resources, in the form of a support system consisting of friends, family, and members of the community have changed because of the economic and social changes. Such social resources can reduce the effects of depression. However, changes in the support system in the U.A.E. because of individuals' preoccupation to attain a higher income may increase the incidence of drug abuse and other unhealthy coping habits.

Maintaining or striving for higher incomes is closely related to the concept of consumerism. According to Nelson and Prilleltensky (2010), consumerism is "the process that orients much of life around earning money in order to purchase unnecessary goods. Consumerism is a core ideological process sustaining globalization" (p. 342). Ideology refers to "a system of ideas and practices that sustain social relations of domination and oppression" (Nelson & Prilleltensky, 2010, p. 341).

Consumerism and ideology are maintained by cognitive, emotional, behavioral, and institutional practices that in turn maintain social injustice (Nelson & Prilleltensky, 2010). At a cognitive level, consumerism encourages economic growth, since money is spent on goods that in turn benefit the manufacturers and the employees. In terms of emotions, advertising and media use methods to increase positive emotions and a sense of belonging through the consumption of these goods. At the behavioral level, goods are consumed while families are enjoying their days off at socially acceptable events that are suitable for family outings, such as zoos and malls. Institutions, specifically banks, make it easy to consume goods through credit cards and loans. As a result, individuals who do engage in this process of consumerism are left working longer hours and trying to attain better salaries in order to pay off the debts accrued. This is done to continue that sense of belonging and material happiness. Importance of family and community are put on the back burner in order to satisfy these processes.

Consumerism plays a large role in the lives of individuals that live in the U.A.E. (Davidson, 2008; Nelson & Prilleltensky, 2010). More attention is paid to increasing amount of income rather than focusing on family or community obligations, which was traditionally a custom for many inhabitants of the U.A.E. Malls are filled with individuals who are buying popular and desirable items, as encouraged by advertisements, to enhance a feeling of belonging. Banks encourage such buying behavior by created schemes. However, despite these schemes, many individuals do accrue debt. In order to decrease debt, those same individuals must increase working hours or invest in methods to increase income. Most malls nowadays are open on special

occasions or stay open for 24 hours on those special occasions to generate more income, which takes employees away from their families.

Globalization, consumerism, and substance abuse. Elder (1974), in his study of the children of the great depression, discussed how social change results in a discrepancy in the demand and supply of resources. This discrepancy can perpetuate a sense of loss of control in acquiring stable access to resources (Grumer & Pinquart, 2001). This sense of loss of control is coupled with uncertainty about the ability to attain resources. To overcome the sense of loss of control, goals are adapted in a way that focuses on acquiring and increasing access to resources. Changes in the economic structure in the U.A.E. have forced individuals to overcome the sense of loss of control and increase access to resources by competing in the work force. However, if the goals do not succeed in providing access to resources, the impact may increase depressive symptoms and anxiety.

Lack of access to resources due to social changes may contribute to the prevalence of depression in the U.A.E. (Ghubash, Hamdi, & Bebbington, 1992; Davidson, 2008). Ghubash et al. (1992) discussed the high prevalence of depression in the U.A.E. in comparison to Northern Europe and Mediterranean countries. They attributed the prevalence of depression to the social changes that were occurring in Dubai. Lawton and Shulte (2012) and Ghubash et al. (1992) discussed how symptoms of depression appeared less in individuals who were employed. Employment was seen to be associated with a higher level of self-esteem (Ghubash et al., 1992; Lawton & Shulte, 2012). Employment acts to decrease uncertainty about social, economic, and individual

development by providing access to resources in a rapidly changing country such as the U.A.E.

Grumer and Pinquart (2011) reported on how the presence or absence of personal resources involved in the areas of work, family, and public life, specifically when social change occurs, may affect the prevalence of depression. The sample in their study consisted of 2,522 German adults and adolescents between the ages of 16 and 42 years. Data were gathered from four German states through face-to-face interviews and through multiple theme surveys. Socio-demographic variables were collected during the interview, which included age, gender, education level, and region of Germany from which the participant originated. Optimism was assessed using the Life Orientation test. The Berlin Social Support Scale was used to assess perceived emotional and instrumental social support. The Brief Symptom Inventory was used to assess depressive symptoms.

Results showed that an accumulation of perceived demands in the fields of work, family, and public life, when social change occurs, increased the prevalence of depressive symptoms (Grumer & Pinquart, 2011). Results also showed that women had a higher level of depression compared to men. The authors attributed the higher prevalence of depression in women to psychological, sociocultural, and biological causes (Grumer & Pinquart, 2011). Unemployment was a factor contributing to depression. The authors discussed how demands at work put pressure on family life. This increased stress in intimate relationships and encouraged dysfunctional familial patterns. In terms of public life, reduced confidence in religious and political authorities while being faced with unfamiliar cultures, religions, and philosophies may have increased stress and encouraged depressive symptoms. However, results also showed that the stress of work, family, and

public life was lessened when optimism and social support were present (Grumer & Pinquart, 2011). High optimism and social support were related to fewer depressive symptoms.

Dislocation and substance abuse. Alexander (2000) discussed how substance abuse is more of a community issue rather than an individual one. He discussed how psychosocial integration and dislocation contribute to the appearance of substance abuse. Psychosocial integration refers to an "experience of engagement with a group and to the groups understanding and acceptance of the individual" (Alexander, 2000, p. 501). When psychosocial integration fails or is not achieved, dislocation occurs. Consumerism encourages dislocation, since it takes individuals away from their families and communities and changes priorities of social cohesion to accumulation of wealth. The economic changes in the U.A.E. have increased consumerism and have changed the tribal way of life that is concerned with social cohesion to a more individualistic way of life that is finance driven (Davidson, 2008). Substance abuse may be a way that individuals in the U.A.E. are coping with the dislocation occurring due to globalization and consumerism.

According to Alexander (2000), individuals who are unable to gain psychosocial integration create substitute lifestyles, one of which is substance abuse. Since globalization and consumerism encourage dislocation, he maintained that dislocation is a precursor to substance abuse (Alexander, 2000). In essence, he perceived substance abuse as a way to cope with dislocation in a free market society. Alexander (2000) referred to a free market society as a "system in which people have the maximum freedom of choice in shopping, hiring, and investing" (p. 502). Of course, the word

freedom is relative, since advertising and media heavily influence what individuals shop for, how they hire, and how they invest (Nelson & Prilleltensky, 2010). Alexander (2000) discussed how free market societies do not consider factors that encourage psychosocial integration, such as family ties and social cohesion. Free market societies function more on a supply and demand scale, encouraging consumerism and capitalism and ignoring traditions that may be aimed at social cohesion. Individuals from all classes are affected by dislocation due to the instability of prices in free market societies.

Alexander (2000) observed that dislocation occurred in England in the early 1900s, enforced by the ruling powers at the time, by uprooting people from their traditional farm work and reassigned them to export-oriented manufacturing jobs. This dislocation was motivated by religious convictions and spread across England and Europe and eventually to its colonies. As Britain was heavily influential in the U.A.E. in the early 1900s, such mechanisms of dislocation would have had an effect. Nowadays, organizations, such as the World Bank and the World Trade Organization encourage free market principles in developing countries, including the U.A.E., under the guise of education and medicinal advancement.

Alexander (2000) viewed substance abuse as a political issue. Encouragement of free markets by political parties only perpetuates the problem because of the concept of dislocation. Alexander (2000) observed that attempts at policing the problem, in addition to treatment and harm reduction, would be an insufficient way of resolving the issue. Applying Alexander's (2000) concepts to the U.A.E. implies that using criminal punishment and drug rehabilitation to treat substance abuse would not be useful.

Alexander (2000) contended that the political agenda needs to revolve around psychosocial integration to eradicate the problem of addiction.

Acculturation. The process of acculturation started in the U.A.E. when Dubai and its neighboring cities started importing teachers from other Arab countries, specifically Egypt, Yemen, Lebanon, Syria, and Iraq, to educate the new generation in the mid-1900s (Davidson, 2008). These individuals came with their own cultural beliefs, lifestyles and habits. Dubai also welcomed merchants that brought in an influx of capital with them. Many of the these merchants found the U.A.E. to be a great opportunity, given the fact that the country provided political stability that was not offered by neighboring Arabic countries or even in the south-east Asian continent. As the years passed, the rise in immigrants occurred due to the attractive commercial and economic sectors that were geared toward attracting foreign investment, and making Dubai more of an international financial hub (Davidson, 2008). Many of the new immigrants in the 1990s were not Muslim and did not share the cultural heritages as the earlier immigrants. Some of the new immigrants moved temporarily to Dubai for work purposes.

According to Nelson and Prilleltensky (2010), acculturation "involves challenges and subsequent changes to one's culture. Acculturation reflects the adaptations that different cultural groups must make due to continuous first hand contact with others" (p. 376). The current demographic of the inhabitants of the U.A.E. is quite diverse and is subject to acculturation. The native population comprises of 10% of the total population in the U.A.E. (United Arab Emirates, 2011). This implies that 90% of the population has migrated from another country and has experienced some level of acculturation.

Research has shown that acculturation is a factor that contributes to the prevalence of substance abuse (Arfken, Kubiak, & Farrag, 2009). Arfken et al. (2009) conducted a study where they measured the prevalence of substance abuse among Arab Americans and its association with acculturating to the U.S. They measured the level of poly-substance use among Arab Americans that attended a clinic in a midwestern city. Data were collected from participants' medical charts, and the level of acculturation was measured in terms of whether the client was born in the U.S., how many years spent in the U.S., or English proficiency. The authors defined high acculturation as having lived in the U.S. for over ten years and fluent in English or born in the U.S. and fluent in English (Arfken et al., 2009). Moderate acculturation was defined as living in the U.S. for over ten years or being born in the U.S. or being fluent in English. Low acculturation was defined as having lived in the U.S. for less than ten years and not fluent in English (Arfken et al., 2009).

Results showed that alcohol was the primary drug of abuse in 76.3% of the sample, followed by marijuana, 20.5%, cocaine, 15.4%, prescription opioids, 4.5%, and heroin, 2.6% (Arfken et al., 2009). Religiosity did not seem to be a factor that affected consumption (Arfken et al., 2009). Exposure to drugs and alcohol seemed to be a stronger predictor of use and experimentation with such substances (Arfken et al., 2009). The majority of clients only abused one drug, which reflected 83.3% of the sample, compared to 16.7% who were identified as poly-substance abusers. The results showed that a higher level of acculturation to the U.S. was associated with poly-substance use (Arfken et al., 2009).

The authors discussed how acculturation of Arab Americans to a U.S. culture that is more tolerant to drug and alcohol use may reduce barriers to experimentation with legal and illicit substances (Arfken et al., 2009). The authors claimed that protective factors, such as previous limited access to alcohol and drug use, peer disapproval and family support, were not in place and may have led to an increase in substance abuse (Arfken et al., 2009). In addition, new stressors may have existed for this population, since Arab immigrants shared high exposure to stereotyping and discrimination in the U.S. that they may not have experienced in their home countries. However, a major limitation in this study was that no formal model for acculturation was used, which put the results into question. However, the study did reflect how substance use was a problem within the Arab American community in the U.S. When applied to the U.A.E., this study may give insight into how increased exposure of Muslim Arab individuals to alcohol and drugs may act as a risk factor to drug and alcohol abuse problems. In addition, acculturation also seems to act as a risk factor for abuse and may be applied to individuals that are attempting to assimilate to the U.A.E.

Another study also showed how substance abuse is related to level of acculturation for students living abroad (Razvodovsky, 2004). Razvodovsky (2004) conducted a study where he examined attitude toward alcohol and drinking behavior of Muslim students in Belarus, which is a country that has a high level of alcohol consumption and a high level of alcohol-related problems. In this study the author referred to Belarus as a "dry country," which is a country that has an ambivalent attitude toward drinking (Razvodovsky, 2004). The author discussed how dry countries tend to have low levels of alcohol consumption per capita but residents may also engage in

episodic binging episodes (Razvodovsky, 2004). Such episodes have been associated with alcohol-related problems.

The Muslim students in the study were from Syria, Kuwait, Lebanon, and Palestine, and were all studying at Grodno State Medical University in Belarus (Razvodovsky, 2004). The sample consisted of 358 male Arab Muslim students who were randomly screened using the Alcohol Disorders Identification Test, Michigan Alcohol Screening Test, and CAGE questionnaires. In addition, attitude was screened using a structured interview, which included questions concerning reasons for alcohol consumption and factors promoting alcohol abuse. Individuals that abstained from alcohol represented 55% of the sample, those with a moderate level of consumption comprised 30% of the sample, and 15% of the sample was comprised of individuals who had alcohol-related problems. The alcohol-related group had social problems and hangovers were common symptoms that signified alcohol dependence (Razvodovsky, 2004).

Results showed that alcohol consumption increased the more years spent at university (Razvodovsky, 2004). Of the first and second year students, 14% consumed alcohol compared to 35% of the third and fourth years and 63% of the fifth and sixth years. The reasons reported for drinking alcohol were to reduce tension in social interactions, to engage in local holiday celebrations, curiosity, pleasure seeking, to isolate self, and availability of alcohol. Many of the students mentioned an intention of quitting alcohol consumption upon returning to their native countries. Razvodovsky (2004) contended that social factors affected and mediated alcohol consumption. He discussed

how students start drinking to cope with adapting to their new environment, despite their commitment to the Muslim faith (Razvodovsky, 2004).

When applied to the U.A.E., it could be that Muslim individuals who live in the U.A.E. and were exposed to alcohol and drugs in other countries may have carried their substance abuse problems back to the U.A.E. after a period of exposure (Razvodovsky, 2004). The U.A.E. is one of those countries that can be considered dry. Social factors such as culture and tradition affect alcohol consumption and the presence of alcohol related problems (Davidson, 2008). The Quran strictly bans alcohol consumption and Sharia law punishes drinking alcohol by imprisonment. Traveling and studying abroad have exposed some individuals to alcohol when living in countries where alcohol is normalized. Razvodovsky (2004) discussed how being a part of a religion that strictly prohibits the use of alcohol disadvantages individuals when they are exposed to experimentation with alcohol. Not having guidelines or models could negatively affect those who consume alcohol and encourage alcohol-related problems. Acculturation to a new culture may encourage a new drinking pattern.

The changes that have been occurring in the U.A.E. have also encouraged a form of acculturation for the inhabitants of the U.A.E. Diamond et al. (2008) conducted a study where they assessed the rate of drug use among the Bedouin in the Negev. The participants involved were young adults and adolescents, who were male and Muslim. The authors compared the level of drug use between participants living in government settlements and those living in unrecognized villages (Diamond et al., 2008). An abbreviated Arabic version of the National Epidemiological Questionnaire (NEQ) was used, which contained questions on the demographics of participants, level of drug use,

and two measures assessing respondents' attitudes in terms of tolerance and perceived dangerousness toward drug use. The NEQ also included the short version of the Family Adaptability and Cohesiveness Environment Scale, which measures two dimensions of family functioning: cohesion and adaptability.

Results showed that 13.9% of the adult Bedouins used alcohol and 11.1% used at least one type of illicit substance in a given year (Diamond et al., 2008). Adults living in government settlements showed a higher percentage of alcohol and illicit drug use compared to those living in traditional unrecognized villages. Diamond et al. (2008) attributed use to stress, family disintegration, social disintegration, and unemployment. They argued that use may be highly associated with moving from a traditional ritualized lifestyle to a more isolated and less structured lifestyle found in government settlements. When measuring religiosity and its association to substance use, the Bedouin adults who considered themselves secular reported the highest rates of alcohol and drug use. This may imply that religiosity may act as a protective factor against using illicit substances. Results also reflected family cohesion as associated with lower rates of alcohol and drug use. Those adults who were living with families that were more flexible and more ready to adapt to new environments showed lower rates of marijuana and alcohol use, compared to those who lived in highly inflexible homes or those who lived in homes that have been too flexible (Diamond et al., 2008).

In terms of the adolescents being studied, results showed that 22% used alcohol and 20.4% reported using at least one illicit substance over the course of a year, which is considerably higher than the adult population measured (Diamond et al., 2008). When measuring the rate of consumption across all types of drugs and alcohol, 14- to 16-year-

olds had higher rates than did 17- to 18-year-olds, which is an alarming discovery.

Results also showed that adolescents who came from secular homes used alcohol and drugs at a higher rate than did adolescents that came from traditional Muslim homes (Diamond et al., 2008). As with the adults measured in this study, cohesion and moderate flexibility in the family environment were related to the lowest rates of alcohol and drug use. Truancy from school was not a factor in drug use and results showed that adolescents who missed school used less drugs than those who attended. The authors attributed this to cultural reasons (Diamond et al., 2008). For Bedouin adolescents, it was culturally normative to stay at home to help with agricultural and family responsibilities, which automatically involved heightened parental involvement and monitoring.

The study did reflect a limitation. Adolescents may have been wary of disclosing their true level of substance use out of fear of repercussions. Despite this limitation, this study was valuable in showing how a change in environment may influence the level of drug use (Diamond et al., 2008). This study was not based in the U.A.E., however the difficulties faced by the Bedouins due to social and culture changes may resemble the difficulties that the natives in the U.A.E. are experiencing. The Bedouins living in the U.A.E. have been faced with a rapid stage of modernization and this study portrayed the intricacies of how shifting from a Bedouin tribal lifestyle could encourage drug abuse, especially since it is associated with family and societal disintegration.

Treatment of Substance Abuse

Treatment modalities for substance abuse. A number of treatment modalities for substance abuse have been found to be successful. Cognitive Behavioral Therapy (CBT), 12 step programs, Minnesota Model, Motivational Enhancement Therapy (MET),

and Matrix model are modalities that are used for clients at various stages of the treatment process (Sung, 2011). The following section provides a description of these treatment methods with an evaluation of effectiveness with individuals living in a Middle Eastern community.

CBT is used to identify, cope, and avoid situations that involve substance abuse (Sung, 2011). Theoretically, CBT contends that learning processes encourage the development of maladaptive behavioral patterns. Therapy involves identifying and changing problem behaviors through gaining and applying new skills to reduce or eliminate substance abuse. Other underlying issues may also be explored during treatment. Interventions in CBT involve identifying techniques geared at increasing self-control, discussing positive and negative consequences of substance abuse, self-monitoring of cravings, identifying triggers of high-risk situations, and developing healthy coping strategies.

According to the National Institute on Drug Abuse, one year follow-up studies showed that CBT was effective in maintaining abstinence from substances that have been abused (United States Department of Health and Human Services, 2009). No studies exist to assess the validity of CBT with a Middle Eastern population, specifically when CBT is used to treat substance abuse. However, Abudabbeh and Hays (2006) discussed the assets and limitations of using such a modality with Middle Eastern clients. Assets include having a structured educational approach in session, reinforcement of strengths of the client, as well as an emphasis on problem solving in the here and now. CBT can also be expanded to work with couples and families, not just individuals, which may fit well with values of individuals from a Middle Eastern heritage. Abudabbeh and Hamid

(2001) discussed how including family and spouses in the treatment process may increase client's motivation to stay abstinent. CBT'S emphasis on social support complements Middle Eastern values that focus on family involvement.

CBT may have certain limitations with individuals living in a Middle Eastern community (Abuddabeh & Hays, 2006). CBT may be perceived as not inclusive of religion, which is an important aspect of Middle Eastern values. CBT is also infused with European American cultural norms, which may conflict with Middle Eastern cultural norms. European American norms place a high value on personal independence and autonomy, behavioral change, and rationality. However, Middle Eastern values emphasize family interdependence, religion, patience, and acceptance. Challenging cognitive distortions through cognitive restructuring may be seen as offensive if it is done in a confrontational manner. CBT therapists must also be careful not to challenge core cultural beliefs.

Twelve step programs are spiritually based programs that encourage abstinence from drugs and alcohol (Sung, 2011). The principles of Alcoholics Anonymous (AA) have been applied to abstinence from drugs, with specialized groups for Narcotics, Narcotics Anonymous (NA), and Crystal Methamphetamine, Crystal Methamphetamine Anonymous (CMA). This modality involves the *Big Book* that includes twelve steps that provide a guideline to achieve and maintain sobriety. The only requirement for entering the program is a desire to stop using the drug of choice.

The first step involves admitting to a sense of powerlessness over alcohol and that life is unmanageable (Sung, 2011). The second step involves accepting that a greater power of your choice can restore an individual's sanity. The third step involves making a

decision to turn life over to a higher power of your choice. The fourth step involves making a moral inventory which is a stage that involves a process of introspection. An evaluation is conducted that assess thought process and the resulting behaviors. The fifth step involves admitting to a higher power, to yourself and to others your wrongful doings. The sixth step involves preparing self, with the help of a higher power of your own understanding, to eliminate character defects. The seventh step involves asking a higher power of your choice to rid self of any shortcomings. The eighth step involves creating a list of individuals that have been harmed. The ninth step involves making amends. There is an exception to this step that stipulates that amends should be made only to individuals who would not be harmed in the process. The tenth step involves making a personal inventory and admitting to mistakes when then they occur. The eleventh step involves increased dedication to prayer and meditation to improve contact with a higher power of your choice. This step also involves praying to a higher power to gain wisdom and strength. The twelfth step involves passing the message to others who suffer from an addiction as well as consistently practicing the principles of the twelve steps.

Abuddabeh et al. (2001) discussed how the religious component in twelve step programs may be useful for the Middle Eastern population, specifically those who place a high value on religion. The spiritual nature of twelve step programs can be appealing to those who rely on God to relieve their distress. The communal nature of such a program may fit an Islamic framework since twelve step groups place an emphasis on the collective consciousness. The collective consciousness, in this context, refers to being aware of others' needs in the group and engaging in behaviors that would benefit everyone in the group. However, it may be difficult for individuals living in a Middle

Eastern community to disclose substance abuse issues. Education about stigma and the nature of AA/NA is needed to aid individuals to confront their substance abuse issues (Arfken, Berry, & Owens, 2009).

The Minnesota model could also be used to treat drug abuse (Sung, 2011). This model is applied in residential drug treatment facilities in the U.S. and is based on a twelve-step program, interactions with other patients, and engaging in chores in inpatient facilities. The model requires abstinence from drugs and alcohol through increasing social interaction and healthy coping mechanisms. Addiction is seen as a disease that affects individuals mentally, physically, and spiritually. A multidisciplinary team involving psychologists, clergy, physicians, and social workers is involved in treatment. This model acknowledges how shame and punishment from peers and family members could negatively affect treatment and aims at eliminating those aspects from a patient's life.

Shame and punishment are tactics that are used in Middle Eastern families (Arfken et al., 2009). Although studies have shown that fear of shame and punishment by family members and community can prevent drug and alcohol use, for those who have used and have an addiction, it may act to reduce access to treatment. Arfken et al. (2009) also discussed that when family members are educated about addiction, tactics such as shame and punishment may decrease. As such, the Minnesota model may be effective in reducing the shame and punishment that is inflicted by family members on the client. Abuddabeh et al. (2001) discussed how residential facilities in the U.S. need to cater to devout Muslim Middle Eastern individuals for their stay to be successful. Dietary

restrictions and daily praying practices may stop patients from participating in residential treatment programs that do not accommodate to such practices.

Motivational enhancement therapy (MET) is a client-centered modality of therapy that aims to increase motivation to change (Sung, 2011). This modality uses motivational interviewing techniques to enhance motivation and planning for change. Sessions include an assessment battery, individual therapy focused on discussions about drug abuse, monitoring change, and cessation strategies. According to the National Institute on Drug Abuse, MET has been found to be successful with alcohol cessation, engagement in treatment and overall outcome of treatment (United States Department of Health and Human Services, 2009). It has also been found to be successful in treating marijuana abuse in combination with CBT. However, there have been mixed results for substances such as heroin, cocaine, nicotine, or poly-substance abuse.

The Matrix model is used to treat substance abuse (Sung, 2011). Abstinence is achieved through education about addiction and relapse, direction and support from the therapist, self-help programs, and monitoring through urinalysis. The relationship between the therapist and client is seen as important in maintaining treatment. The therapist acts as a teacher and a coach and uses encouragement to reinforce positive behavior change. The therapist does not confront the client or act as a parent toward the client. Treatment is used to promote self-esteem, dignity, and self-worth. Treatment materials involve relapse prevention, elements from family and group therapy, psychoeducation about drug abuse, and self-help group participation. Treatment manuals for this modality include work sheets for individual sessions, family education groups, early recovery skills group, relapse prevention groups, and relapse analysis. According

to National Institute on Drug Abuse, this modality has been found to be effective in reducing alcohol and drug abuse, reducing high-risk sexual behaviors and improvements in healthy coping mechanisms (United States Department of Health and Human Services, 2009). A non-confrontational attitude with Middle Eastern individuals, especially when family members are present, would be an effective way to address the client and direct support system. A non-confrontational attitude is seen as keeping in line with the hierarchy of patriarchal families (Abuddabeh, 2006).

A research study assessed the effectiveness of substance abuse treatment modalities at a hospital in Saudi Arabia (Abdel-Mawgoud, Fateem, & Al-Sharif, 1995). The study assessed three phases of treatment. The first phase assessed drug therapy as the main mode of treatment. This phase was conducted between 1986 and 1991. This phase used the medical model to view and treat substance abuse as a disease. The second phase occurred between 1991 and 1993 and used the principles underpinning AA (Abdel-Mawgoud et al., 1995). The program was developed with the aid of an American organization using a bio-psychosocial model while incorporating Saudi culture and the Islamic religion.

The third phase, which occurred between 1993 and 1994, involved a more extensive program with additional training and a multidisciplinary team (Abdel-Mawgoud et al., 1995). This program involved a 30-day inpatient program followed by a gradual exposure to a less structured schedule. Initially patients were placed in the assessment and detoxification unit. This unit assessed patients' strengths and weaknesses, managed withdrawal, and implemented techniques to confront denial. Patients were then placed in a short-term rehabilitation unit. This unit exposed clients to

a structured life in the absence of a substance. The last unit that patients were placed in was the continued care unit. This unit involved less structure and focused on relapse prevention. CBT techniques were used to increase coping skills, to increase self-esteem, and to manage cravings (Abdel-Mawgoud et al., 1995).

The third phase offered comprehensive treatment modalities (Abdel-Mawgoud et al., 1995). Pharmacological treatment was included but was only limited to the detoxification period. Community meetings were offered that were attended by patients and staff to discuss day-to-day issues. Group therapy was offered to encourage attitudinal, emotional, and behavioral changes. Individual therapy was available to patients to discuss current conflict areas. An educational activity was included that aimed at understanding the disease. Recovery groups were offered that focused on relapse prevention. Family therapy was offered to restore healthy and functional family systems. Religious and spiritual groups were included so that clients would be able to renew their religious faith and engage in religious activities. Activity therapy was available to engage clients in drug-free activities. Biofeedback and acupuncture were offered to help manage suffering in early stages and to manage anxiety symptoms. Self-help groups such as AA and NA were also offered on an inpatient and outpatient basis (Abdel-Mawgoud et al., 1995).

Hospital records were checked to evaluate all the phases of the program by measuring average daily census, average length of stay, amount of medication dispensed, and drop outs (Abdel-Mawgoud et al., 1995). Results showed that the first phase had a high count of people because of medication dispensed but further addiction was a problem. The authors reported that patients tended to exaggerate symptoms to gain more

access to medication (Abdel-Mawgoud et al., 1995). Results from the second phase showed fewer patients because medication was restricted and because the staff was not well trained in the new implemented techniques. The authors reported that the lack of success was due to literal translations of the principles of twelve step AA programs without adequately incorporating Saudi culture (Abdel-Mawgoud et al., 1995). Results showed that the third phase was most successful. The authors discussed how this phase introduced more training, which improved staff performance and encouraged a change in patient's attitude (Abdel-Mawgoud et al., 1995). More patients were attending the program voluntarily. There was a significant decline in the medication dispensed with an improvement in participation in group activities, individual therapy, recovery groups, and activity therapy.

The authors concluded that the third phase was more successful in changing patient's attitude (Abdel-Mawgoud et al., 1995). The authors were not clear on how patient's attitude was measured. They based the success on reduced dropouts and less medication dispensed (Abdel-Mawgoud et al., 1995). The authors discussed how the public attitude affected the patient's treatment. The stigma in the community and the strict law of the country toward substance abuse contributed to patients' fear and denial and may have acted as a barrier to entering such programs. The authors recommended that programs use trained native staff, who speak the language and understand the cultural and religious norms (Abdel-Mawgoud et al., 1995).

Therapists must account for their own cultural attitudes, values, and biases that affect the treatment of substance abuse disorders (Sung, 2011). The American Psychological Association (2002) discussed cultural competency as including an

awareness of own cultural identity, values, behaviors, attitude, and bias about other individuals' cultures, knowledge about other cultures, and proficiency in cross cultural communication that is either verbal or non-verbal. Interventions need to be tailored to fit the life experience and cultural values of the client (Sue & Sue, 2008). With Middle Eastern clients, clinicians need to acknowledge the role of extended family and impact of religion (Abuddabeh et al., 2001). The extended family provides emotional, social, and financial support.

Treatment facilities in the U.A.E. Currently, there is a lack of adequate substance abuse rehabilitation centers in the United Arab Emirates. According to Okasha (2003), the U.A.E. had not fulfilled the World Health Organization's (WHO) recommendation of a minimum expenditure of 5% of GDP on health. This is worrisome since there is a need to develop substance abuse programs due to an existing substance abuse problem in the U.A.E. There are a few drug rehabilitation departments and centers in the U.A.E. (Kraya, 2002). However, studies reflecting the success of treatment are lacking. Committees have been formed to deal with health issues in the U.A.E. and to encourage a unified mental health policy. Proposals to the Ministry of Health have been put in place in order to combine Islamic laws with the advances of the country while following the principles of the WHO, which include allocating a budget for mental health services from the health budget. In terms of drug abuse and treatment, these proposals also include a plea to clarify and specify the role of the Ministry of Health and the justice system.

Barriers to Substance Abuse Treatment

Research has shown that there are a number of issues that influence the provision of care for those who do abuse substances. Issues may stem from caregivers' negative beliefs toward those who abuse substances, community values and stereotypes toward substance use, problems with the identification of appropriate health care professionals for this population, and patients' eligibility for care (Bilal, Makhawi, Al-Fayez, & Shaltout, 1990; Hamdan-Mansour, Mahmoud, Asqalan, Alhasanat, & Alshibi, 2012; Natan, Beyil, & Neta, 2009). These issues may be affecting access to drug abuse treatment in the U.A.E.

A study conducted in Kuwait investigated the attitude of the general public toward substance use (Bilal et al., 1990). Kuwait is also a country that has endured many sociocultural changes due to an influx of petroleum wealth in the region. One thousand and one participants selected randomly from the only university in the country, two secondary schools, and five primary care clinics completed a 30-item questionnaire. The participants were Arab Muslims 14 years old and above. The questionnaire explored attitudes toward substance use, characteristics of an individual who abuses substances, as well as policies placed by the community. The authors were careful not to question personal use of drugs or alcohol on the questionnaire to avoid culturally desirable responses (Bilal et al., 1990).

The attitudes endorsed in the questionnaire were divided into six categories (Bilal et al., 1990). An enlightened attitude is where an individual who uses substances is seen as deviant from society but is also aware of the health and social ramifications of use and encourages engaging in psychiatric treatment, legal, moral or religious reformation. A

punishing attitude is when an individual who abuses substances is seen as a wicked disbeliever of God, who needs to be punished by Islamic law and exiled. A religious attitude sees substance use as prohibited by Islam and something that could anger God. A drug use attitude is seen as engaging in undesirable behavior that could lead to dependence on the substance of choice. A permissive attitude sees substance use as a reaction to life stressors and normalizes use. Finally, attitudes toward smoking as socially unacceptable portray smoking as a deviant behavior.

Results showed that participants mainly endorsed items that were of an enlightened attitude and a religious attitude (Bilal et al., 1990). Younger males of a Kuwaiti nationality who had at least 13 years of formal education endorsed the enlightened attitude. The punishing attitude was endorsed by non-Kuwaiti Arabs living in Kuwait and by older adults who had at least 13 years of education. The religious attitude was endorsed by women and by those who did not have a higher education. Younger adults who had a higher education endorsed a permissive attitude. Smoking as socially unacceptable was endorsed by younger adults who had a higher level of education. The authors discussed how the enlightened attitude and the religious attitude reflected the varying perspectives that exist in Kuwait (Bilal et al., 1990). In terms of the enlightened attitude, the younger male Kuwaiti generation, who had studied abroad, were more likely to adopt a Western attitude toward drug and alcohol use and the problems associated with them, whereas the religious attitude reflected the traditional Muslim way of life that punishes alcohol use. Although the study was not based in the U.A.E., the results of this study could be used to reflect the attitudes in the community since the

U.A.E. and Kuwait have a similar sociocultural structure. Such attitudes by the general public and families may inhibit individuals' desire to seek help.

Many professionals in the field have attributed personality characteristics to individuals who abuse substances which may inhibit treatment and prognosis. Amir (1994) conducted a study where he assessed the personality dimensions of substance users in the Arabian Gulf population. The Arabian Gulf consists of six countries: Saudi Arabia, Bahrain, Qatar, Kuwait, Oman, and the U.A.E. He assessed 120 male inpatients in a hospital in the Arabian Gulf by reviewing their medical records and performing a standardized Arabic version of Lanyon's Psychological Screening Inventory. This inventory measured participants' level of alienation, social nonconformity, discomfort, expression, and defensiveness. The inpatients were grouped into categories of their preferred drug use, those who only used heroine, those who only used alcohol, and those who were poly-substance users.

The results showed that the poly-substance users group scored higher on the Alienation scale compared to the other groups. This same group also scored high on the Discomfort scale, which assessed anxiety, perceived maladjustment, and susceptibility to a nervous breakdown, compared to other groups. This study presented with a number of limitations, including a lack of clear definitions of the scales and a portrayal of individuals who abused substances as having a range of symptoms of mental illness rather than a specific personality type. However, high scores on the alienation scale and the discomfort scale may suggest that individuals who have substance abuse issues may be experiencing increased levels of isolation and anxiety.

Research has also shown that health professionals' attitudes toward individuals who abuse substances has an influence on treatment of substance abuse disorders. Natan et al. (2009) measured nurses' attitude toward individuals who abused substances. The authors discussed how attitudes toward individuals who abused substances were commonly negative and influenced by many stigmas (Natan et al., 2009). Nurses' attitudes had an impact on the type and quality of care given. The authors conducted a study in Israel with individuals using psychoactive drugs who were seeking medical care at general hospitals. The authors assessed the attitudes of nurses who worked in the department of internal medicine.

A questionnaire was used to assess the intended and actual provision of care to patients addicted to substances as well as measuring stereotypical attitudes toward drug users (Natan et al., 2009). The characteristics measured that describe those who used substances revolved around violence, low socioeconomic status, unhygienic presentation, having contagious diseases, being bad mannered, scary, dangerous, having a low cognitive level, having family with low cognitive level, and a weak character. The questionnaire also measured nurses' perceived expectations of significant others, including family members, coworkers, and supervisors in terms of whether these groups advocated or objected to provision of quality of care to patients who are addicted to substances.

The results showed that the nursing staff had a moderately negative attitude toward individuals who abused substances (Natan et al., 2009). Nurses with more stereotypical views of patients who were addicted perceived the quality of care that they provided to substance users as lower compared to other clients. They perceived these

clients as especially difficult to deal with. However, the nursing staff also disagreed with statements that suggested that substance users were responsible for their health condition and did not deserve high quality care (Natan et al., 2009). Most of the nurses reported a high level of confidence in their knowledge of individuals that abused substances and epidemiology of substance abuse, despite also being afraid of treating these clients for fear of violence and manipulation (Natan et al., 2009). Another source of discomfort for the nursing staff stemmed from a fear that treating these clients could expose them to contagious diseases such as HIV and hepatitis. They also stated that caring for substance users disrupted department routines. The study also showed that adequate supervision and guidance may play a role in how nurses treat individuals who abused substances.

Nurses tended to attribute more significance to the opinions of their superiors and the medical staff than to the opinions of colleagues, patients' families, and the patients themselves (Natan et al., 2009).

This study showed how positive attitudes toward the treatment of patients addicted to substances, perceived expectations of others, and perceived correctness of behavior had an effect on the intention of nurses to provide high quality care to drug users (Natan et al., 2009). Personal attitudes heavily influenced intention to provide quality care to patients addicted to substances. Individuals who abuse substances frequently encounter discrimination and prejudice on behalf of caregivers. The authors claimed that nurses judged substance abuse clients as too difficult for them to handle (Natan et al., 2009). This study, however, did not list what substances were being used under the heading of psychoactive. In addition, the study reflected a lack of awareness or

training in the substance abuse field, which may have contributed to the ill treatment these clients received.

Another study conducted on nurses in the Arab world also reflected the ill treatment that substance users received when presenting to a medical facility. Hamdan-Mansour et al. (2012) conducted a study measuring the knowledge and practices of emergency department nurses in Jordan assessing clients with drug seeking behaviors. Arabic questionnaires were distributed among the emergency department nurses that assessed the behaviors that were considered to be drug seeking as well as the meaning attached to these behaviors.

Results showed that despite the fact that nurses were able to somewhat recognize drug-seeking behavior, they were not better able to distinguish whether it was truly purely drug seeking behavior or actual complaints of pain (Hamdan-Mansour et al., 2012). Results mainly showed that nurses in the emergency department did not have an adequate level of competency to assess patients with drug-seeking behavior. When these behaviors were identified, nurses did not intervene appropriately and chose to either inform the physician or use some other intervention, rather than attend to the patients' condition directly. Results also showed, however slightly, that training and education helped nurses identify drug-seeking behavior versus simply pain clients especially in terms of exaggeration of pain, manipulation, and addiction to opioids. The emergency nurses also reported that opioids and benzodiazepines were the most requested drugs by drug seeking patients (Hamdan-Mansour et al., 2012). It is clear that health professional's attitudes toward drug abusers influences treatment. When applied to the

U.A.E., institutions that serve clients who abuse substances may be biased, which in turn may prohibit appropriate treatment and training in substance abuse issues.

Summary and Conclusion

The U.A.E. is a relatively new country that gained its independence from Britain and became a united federation in 1971 (Davidson, 2008). The U.A.E. has been vulnerable to drug smuggling due to its geographical location, being adjacent to the Indian Ocean, as well as having a long Arabian coastline (Al Marri et al, 2009; Amir, 2001; United States Department of State, 2013). Iran and Afghanistan are in close proximity to the U.A.E. and have a long history of drug growing and exporting. In addition, a focus on trade and import and export businesses encouraged this era of modernization and made the country vulnerable to illegal substances (Davidson, 2008). While the country was building its trade through the free ports and exports, illegal activity was taking place that took advantage of the lax restrictions on trade.

The earliest attempt at trying to eliminate the presence and use of illegal substances was the 1960s. The British proposed a Dangerous Drugs regulation that was quickly adopted by the country (Davidson, 2008). This in effect made the transport of substances such as opium and hashish illegal. However, as a result, an underground criminal trade began that continued transporting these substances in defiance of the regulations enforced at the time. The current law today contends that use, import, export, production, distribution, and trafficking of illegal mind-altering substances, whether natural or manufactured, could result in criminal charges (Dubai Police, 2005). Any individual caught using drugs could face a minimum sentence of four years in prison (Al Marri et al., 2009). Dealing or trafficking drugs has even larger consequences, with

individuals facing up to life sentences, depending on the amount being sold or trafficked.

Drinking alcohol is permissible for non-Muslims and is not considered a crime. For

Muslims, drinking alcohol is considered a crime and can result in imprisonment.

Despite a minimal amount of prevalence studies, research has shown that drug abuse does occur in the U.A.E. (Abou-Saleh et al., 2001; Amir, 2001; Eapen et al., 2003; Ghubash & El-Rufaie, 1997; Lawton & Shulte 2012; Younis & Saad, 1995). The substances reported to be abused are hashish, pharmaceutical drugs, glue, heroine, alcohol, opium, sedatives, stimulants, and cocaine. Substance abuse disorders have been found to be comorbid with psychiatric illness (Eapen et al., 2003).

Globalization and modernization are two pathways that paved the way for the U.A.E. to be what it is today (Davidson, 2008). However, social changes have occurred in the U.A.E. due to globalization and consumerism that may affect individuals' mental health. Globalization can increase depression, anxiety, uncertainty of the future, and fear (Nelson & Prilleltensky, 2010). Rapid social changes can create a form of societal stress and confusion, as they affect the collective identity and the individual identity (Okasha, 2003). Foreign culture and religious beliefs act as new challenges and stressors when forming individual identities (Grumer & Pinquart, 2001). Since the U.A.E. houses a diverse group of people, such challenges seem to be an everyday occurrence. New technology implies a need to be competent and thus adds to the stressors. Personal and social resources, in the form of a support system consisting of friends, family, and members of the community, act as support and can mediate the effects of depression. However, with changes in this support system in the U.A.E. due to economic disruption, social changes, and the preoccupation of individuals to attain a higher income, an

increase in the incidence of substance abuse and other unhealthy coping habits may occur.

Alexander (2000) discussed how psychosocial integration and dislocation contributed to the appearance of addiction. Psychosocial integration refers to an experience of belonging and being a part of a group. When psychosocial integration fails, dislocation occurs. Consumerism encourages dislocation, since it takes individuals away from their families and communities and changes priorities of social cohesion to accumulation of wealth. The economic changes in the U.A.E. have increased consumerism and have changed the tribal way of life, that is concerned with social cohesion, to a more individualistic way of life that is finance driven (Davidson, 2008). Substance abuse may be a way that individuals in the U.A.E. are coping with the dislocation occurring due to consumerism.

Acculturation in the U.A.E. may be an added stressor that is contributing to the prevalence of substance abuse and mental illness in the U.A.E. (Ghubash et al., 1992). The native population comprises around 10% of the total population in the U.A.E., so many of the individuals living in the U.A.E. may have experienced some level of acculturation (United Arab Emirates, 2011). Much of the expatriate population is comprised of Arab and non-Arab individuals from all around the world with varying religious beliefs and cultural backgrounds. This diversification process has weakened the country's ideological, religious and cultural identity, and thus the overall national identity. Thus, the process of acculturation has weakened the social fabric of the country that has historically acted as support for the natives of the country. This may be contributing to the incidence of substance abuse. Treatment policies need to match the

current times in the U.A.E. with a focus on substance abuse as a disease rather that a criminal offense. Treating substance abuse as a crime has prohibited identification and treatment of the disease.

Studies have shown that individuals living in government settlements had higher rates of alcohol and illicit drug use compared to those living in traditional unrecognized villages (Diamond et al., 2008). This has been shown to be associated with stress, family disintegration, social disintegration, and unemployment. Arguments have been made that substance abuse may be highly associated with moving from a traditional ritualized lifestyle to a more isolated and less structured lifestyle found in government settlements. Studies have shown mixed results when measuring religion and its association to substance abuse. Diamond et al. (2008) found that religiosity may have acted as a protective factor against using illicit substances when significant changes occurred in an individual's environment. Other studies showed that religion did not protect against substance abuse, especially when there was high exposure to drugs and alcohol (Razvodovsky, 2004). Mixed results might exist because religion may act as a protective factor if there is limited exposure to substances that are deemed illegal in the community and by religious standards. However, if there is high exposure, then religion may be less of a protective factor.

A number of treatment modalities exist that aim to treat substance abuse (Sung, 2011): Cognitive Behavioral Therapy, twelve step programs, Motivational Enhancement Therapy, Minnesota Model, and Matrix Model. When treating Middle Eastern clients, therapists must account for their own attitude, set of values and biases that may affect the treatment of substance abuse disorders (Abuddabeh & Hamid, 2001; Abuddabeh & Hays,

2006; Arfken et al., 2009; Sung, 2011). Interventions need to be tailored to fit the life experience and cultural values of the client (Sue & Sue, 2008). With Middle Eastern clients, clinicians need to acknowledge the role of the family, extended family and impact of religion. In addition, the changes in the U.A.E. may also need to be acknowledged in therapy and how they may affect the individual, specifically the changes in the family dynamic. Therapeutic interventions may challenge family values and traditions, which may interfere with the authority of the father, religious norms and cultural norms.

Punishment in the Middle Eastern community has been used as a way of treating substance abuse due to its non-adherence to religious and family values. Education about substance abuse and treatment is crucial with Muslim Arabs because of the use of shaming toward those who have an addiction, which opposes a rehabilitative agenda.

Currently in the U.A.E., adequate substance abuse rehabilitation centers are scant. According to Okasha (2003), the U.A.E. had not fulfilled the World Health Organization (WHO) recommendation of a minimum expenditure of 5% of GDP on health. There are a few drug rehabilitation departments and centers in the U.A.E. (Kraya, 2002). Research has shown that there are a number of issues that influence the provision of care for those who do abuse drugs. Issues may stem from caregivers' negative beliefs toward those who abuse drugs, community values and stereotypes toward drug use, problems with the identification of appropriate health care professionals for this population, and patients' eligibility for care (Bilal et al., 1990; Hamdan-Mansour et al., 2012; Natan et al., 2009). These issues may affect access to substance abuse treatment when applied to the U.A.E. Much of the research used in this project was based in other countries that portrayed similar features to the population measured. Further research needs to be conducted in

the U.A.E. to confirm that these factors affect substance abuse treatment and access to care.

CHAPTER III

Methodology

Product Description

A PowerPoint presentation (Appendix A) was used to portray the information in the doctoral project. The purpose of the presentation was to increase awareness of mental health professionals of the existing research in substance abuse in the U.A.E. The presentation aimed to highlight the factors involved in substance abuse specific to the U.A.E. and the need for research in this area so as to inform future successful treatment. The presentation was conducted while also simultaneously interacting with the audience. The presentation discussed the factors that contribute to the prevalence of substance abuse in the U.A.E., existing treatments for substance abuse, and the barriers to treatment.

After the presentation was completed, I answered additional questions that were posed by the audience. After all the questions were answered, I handed out an evaluation/feedback form (Appendix B) for the audience to complete.

Design Concepts and Objectives

The purpose of this doctoral project was to design and deliver a presentation geared toward educating mental health professionals in the U.A.E. on the needs of the community with regards to substance use. The aim of the presentation was to increase awareness of the severity of substance abuse disorders and generate interest in applying a needs assessment. A needs-assessment will aid in understanding the extent of the gap in the services provided in order to create or tailor treatment modalities and facilities

relevant to this population. A needs assessment will also generate enough information about the current issues with substance abuse so that changes in policies can occur.

The presentation had three main objectives. The first objective was to identify the substances that are currently being used in the U.A.E. The second objective involved examining the factors that are related to abuse. The third objective assessed the barriers to treatment, which included non-disclosure of substance abuse issues due to fear of legal repercussions, stigma around substance abuse issues, limited treatment facilities, and limited training in the substance abuse field. The learning objective for the audience attending the presentation was to increase awareness of the factors that contribute to substance abuse in the U.A.E. and the barriers that individuals who have substance abuse disorders face when seeking treatment. Understanding the unique factors that contribute to substance abuse in the U.A.E. will clarify avenues to begin constructing treatment modalities and facilities tailored to the inhabitants of the U.A.E. An examination of the barriers to treatment will also help clarify the issues that need to be addressed so as to make treatment accessible for those who suffer from a substance abuse disorder.

Procedures

Critical literature review. A literature review was employed in order to investigate and present information on the current level of substance abuse in the U.A.E., the factors involved in use, current treatment, and the barriers to treatment. A number of strategies were used to collect the relevant information for a literature review. PsycINFO and EBSCO were the main databases used to find relevant articles. Additional articles and books were found by consulting with mental health professionals and through secondary sources discussed by researchers in the field. The literature selected was based

on research that is relevant to substance abuse in Middle Eastern communities, with an emphasis on the U.A.E.

Field consultants. Interviews were conducted with field consultants who are experts in the field of substance abuse in the U.A.E. The purpose of the interviews was to attain knowledge from experts working in the field of substance abuse in the U.A.E. and to use that information to fill in the gaps in the research literature. Consultants were recruited from a number of locations in the U.A.E. Consultants were chosen based on their clinical experience with substance abuse, the research that they have published in academic journals on substance abuse, availability, and recommendations from the doctoral project committee. The questions can be found in Appendix C.

I interviewed Dr. Layla Asamarai, who is the Head of the Psychology Department at Rashid Hospital in the U.A.E. Dr. Asamarai provides inpatient and outpatient psychology services to a wide variety of individuals from multiple cultural backgrounds presenting with a wide range of mental health symptoms. Dr. Asamarai also participated in developing the first Code of Ethics and Scope of Service for the practice of psychology in Dubai. I also interviewed Dr. Shamil Wanigaratne, who is a Consultant Clinical Psychologist and Senior Advisor at the National Rehabilitation Center in Abu Dhabi. Dr. Wanigaratne is also an Adjunct Professor of Psychology at the United Arab Emirates University in Alain. Dr. Wanigaratne has extensive experience working and training individuals in the treatment of substance abuse in the United Kingdom. He was the Head of Clinical Psychology and Head of Education and Training at the Addictions Clinical Academic Group, which is a part of the King's Health Partners Academic Health Science Centre, before moving to the U.A.E. in 2011. Dr. Mohammed Hassan Fayek, who is a

psychiatrist currently working at Rashid Hospital, was also interviewed. Dr. Fayek has extensive experience treating mental illness in both the U.S.A. and the U.A.E. He specializes in neuropsychiatry. I interviewed Dr. Tayyiba Al Marri, who is a clinical psychologist and a founding member of Infinity Polyclinic in Dubai, which is a clinic that provides both medical and mental health services to clients. Dr. Al Marri has extensive experience in treating mental illness in children and families in both Australia and the U.A.E. I also interviewed Jane Griffith, who is the Director of Nursing at Rashid Hospital in Dubai. Jane Griffith has extensive experience in nursing and management of nursing services in both the Middle East and Australia. She has also published articles on management of disasters in hospital settings in the U.A.E. and given talks on how to improve training and competency in the nursing staff and on how to optimize healthcare utilization.

The experts were interviewed in order to fill the gaps in the research literature and to provide the latest information on substance abuse issues and treatment currently existing in the U.A.E. The information that was provided by the field consultants is included in Chapters IV and V.

Presentation to Professionals

A presentation was made at the Psychology Department at Rashid Hospital in Dubai. The client population served by the department includes families, individuals and couples struggling with a range of Axis I and Axis II mental disorders. The department is also heavily involved in forensic cases which includes evaluating and treating individuals who have been incarcerated due to substance abuse. Psychologists, psychology

assistants, and a psychiatric resident attended the presentation. The presentation took place on January 30, 2014 at 11:00 a.m.

Evaluation

Evaluation forms were handed out at the end of the presentation in order to assess the quality of the presentation (see Appendix B). The evaluation forms contained 13 questions to be answered on a Likert scale that ranged from 1 to 5. I stepped out of the room while the forms were being completed to ensure confidentiality. The audience placed the completed forms in an envelope that was given back to me. I included the evaluation and feedback responses in the Discussion section of this paper.

CHAPTER IV

Interviews with Field Consultants

Field consultants were interviewed in order to gain current clinical information on how mental health professionals view and treat substance abuse in the U.A.E. The information from the field consultants provided me with firsthand knowledge on the struggles that both health professionals and clients experience when faced with substance abuse issues in the U.A.E. Religious, societal, and legal obstacles exist in the U.A.E. that affect the disclosure of substance abuse. As a result, research in this area has been limited, with research mainly being conducted in prisons after an individual has been caught using an illegal substance. The information provided by the field consultants provided more insight on the level of substance abuse in the general public and not just the prison population, where clients are more comfortable disclosing use to their health provider with an understanding that confidentiality is not to be broken. The U.A.E. does not have an official mental health policy, but a mental health plan does exist within the General Health Policy (WHO, 2011). The Ministry of Health Code of Conduct dictates that health professionals licensed in the U.A.E. are required to keep patients medical records, health problems, and personal information confidential and only disclose such information after consent is granted by the patient (Latham & Watkins, 2011).

The consultants were chosen based on their expertise with substance abuse and/or with substance abuse in the U.A.E. population. The field consultants were required to answer a set of questions that I posed to them. The interviews were completed via email due to the availability of the field consultants. Before the questions were sent to the consultants, they received an informed consent form (see Appendix D)

that requested agreement to participate in the doctoral project, along with a brief description of the project. The questions were sent to the field consultants after the field consultants sent emails to the author agreeing to participate in the project and giving consent. I based the questions that were asked to the field consultants on a review of the existing literature and after consulting with members of the committee that are overseeing this doctoral project. The questions can be found in Appendix C.

Dr. Layla Asamarai

Dr. Layla Asamarai works as the Head of the Psychology Department at Rashid Hospital, which is one of the largest hospitals in the U.A.E. and houses the largest trauma centre in Dubai and the Northern Emirates. Her interests lie in providing psychological services in the hospital and community. Some of her duties at the hospital entail participating in forensic evaluations in partnership with Dubai police. Many of those forensic cases involve substance abuse. Dr. Asamarai has also been interested in policy making, where she has been involved in the development and implementation of the first Code of Ethics and Scope of Service for the practice of Psychology in the U.A.E. Before coming to the U.A.E., Dr. Asamarai worked with African American Family services in Minneapolis, U.S.A., where she provided psychotherapy for substance abuse. She also worked with the Center for Victims of Torture in Minneapolis, where she practiced eye movement desensitization and reprocessing (EMDR) as a treatment modality. Dr. Asamarai's research interests lie in providing individual, couples, and family therapy to Muslim clients (Asamarai, Solberg, & Solon, 2008).

The first question in the interview inquired into how substance abuse disorders are diagnosed in the U.A.E. Dr. Asamarai answered that substance abuse in the U.A.E. is

experienced an overdose (personal communication, December 29, 2013). It is also diagnosed when individuals engage in episodes of demanding psychotropic medications from their doctors. Dr. Asamarai also discussed how there is a lack of training among nurses, doctors, and psychologists who are dealing with individuals who abuse substances. Dr. Asamarai's account of a lack of training among health professionals dealing with substance abuse is also reflected in the literature. Hamdan-Mansour et al. (2012) showed that nurses in an emergency department in Jordan did not have an adequate level of competency to assess patients with drug-seeking behavior and to follow through with treatment. The authors encouraged training and education to help nurses identify drug-seeking behavior and the type of drugs often requested (Hamdan-Mansour et al., 2012). Dr. Asamarai also discussed how a focus on training and education in substance abuse disorders could help nurses, doctors, and psychologists better identify and treat the disorders (personal communication, December 29, 2013).

The second question in the interview inquired into the role of society, the family, and the criminal justice system in the identification and treatment of substance abuse disorders in the U.A.E. Dr. Asamarai discussed how stigma plays a role in substance abuse (personal communication, December 29, 2013). She discussed the no tolerance stance that is held by the criminal justice system in the U.A.E., which encourages a public belief that individuals who abuse substances are unsafe and morally challenged. If substance abuse is discovered by the family, Dr. Asamarai said,

they will exile the family member outside the country, report them to the police, or socially ostracize the family member. Even when family members are

sympathetic and want to help their loved one, they are often at a loss as to where to go and what to do and find themselves confused about what substance abuse is and how it is treated. (Personal communication, December 29, 2013)

Dr. Asamarai also discussed how individuals who abuse substances are viewed as "criminals and lack morality. They are generally feared and considered dangerous (willing to do anything for their substances) and are considered hopeless cases" (L. Asamarai, personal communication, December 29, 2013).

The literature provides a similar account of how substance abuse is viewed in an Arabic country of a similar sociocultural structure. Bilal et al. (1990) showed that a portion of the public attitude toward drug abuse in Kuwait viewed substance use as prohibited by Islam and something that could anger God. Another portion of the public viewed substance abuse as deviant from society, as having health and social ramifications because of use, and encouraged psychiatric treatment, legal, moral, or religious reformation. The level of education played a factor in this study, where a more tolerant attitude toward substance use coincided with a higher level of education (Bilal et al., 1990). It may be that knowledge about substance abuse may affect level of tolerance toward substance abuse.

The third question asked the consultants about their approach to treating substance abuse in the U.A.E. Dr. Asamarai discussed carrying out a collaborative abstinence model that includes individual and group therapy as the treatment of choice for substance abuse (personal communication, December 29, 2013). Abdel-Mawgoud et al. (1995) were successful in using a multidisciplinary team to treat substance abuse with interventions that included individual therapy, group therapy, family therapy, recovery

therapy, and spiritual groups, among other groups in a hospital in K.S.A. Applying such a treatment modality may yield successful results. However, Dr. Asamarai also discussed the lack of organizational support granted in order to carry out such a treatment plan. Individuals working at the organization may have beliefs that individuals who abuse substances cannot be helped and are morally challenged and, as a result, may not want to help an individual that presents with a substance abuse issue (Bilal et al., 1990). Bias from individuals in society and from health professionals prevents individuals who abuse substances from accessing adequate treatment (Hamdan-Mansour et al., 2012; Natan et al., 2009).

The fourth question in the interview asked about effective substance abuse treatment in the U.A.E. Dr. Asamarai responded by saying, "unfortunately, I cannot claim to have found any effective treatment in the U.A.E." (personal communication, December 29, 2013). Dr. Asamarai observed,

there is a rehabilitation center in Abu Dhabi that takes Emirati abusers; but they do not properly educate clients or families on addiction and will release clients after a 2-month stay informing them that they are "clean" and no longer addicted. This often leads to relapses because individuals undermine the power that their addiction has over them. (Personal communication, December 29, 2013).

Dr. Asamarai highlighted the limited number of treatment centers available in the U.A.E., which has been discussed in the published literature, as well as a lack of appropriate treatment outcome measures (Kraya, 2002).

The fifth question in the interview asked the consultants about the barriers to substance abuse treatment in the U.A.E. that clients and mental health professionals face.

Dr. Asamarai discussed how there is a lack of competency and training in the treatment of substance abuse in the U.A.E. (personal communication, December 29, 2013). Dr. Asamarai was concerned about the lack of proficiency in substance abuse treatment by health professionals and psychiatrists, which maintains the discrimination toward substance abuse issues. Training and education in substance abuse issues can improve treatment, individuals' well-being, and lessen the costs of substance abuse on the community (Hamdan-Mansour et al., 2012; Natan et al., 2009; Royse et al., 2009).

The sixth question in the interview inquired about the importance of increasing knowledge, skills, and awareness in substance abuse treatment in the U.A.E. Dr. Asamarai discussed the importance of training in substance abuse treatment (personal communication, December 29, 2013). Dr. Asamarai responded by saying,

the U.A.E. is a young country and needs to work on initiatives that are well thought out formed by committees with key individuals who are aware of the various layers of society and practice and who have the wisdom to know how to go about public awareness and mandatory government sponsored trainings whereby professionals are taught about substance abuse and after which mandates and punishments can be set in place. (Personal communication, December 29, 2013).

The last question in the interview asked for recommendations on how to implement a needs assessment on substance abuse issues in the U.A.E. Dr. Asamarai responded,

I think a proper needs assessment includes a 360 degree evaluation of this problem. There need to be conversations with all stakeholders including addicts,

the criminal justice system, families of addicts, psychiatrists, hospitals, clerics, and government officials. (Personal communication, December 29, 2013).

Royse et al (2009) discussed how including important members or agencies in the community, such as social service agencies, clergy, physicians, judges and university faculty members, is recommended, especially when the needs assessment is likely to expose major problems or is focused on an issue that is sensitive in nature.

Dr. Shamil Wanigaratne

Dr. Shamil Wanigaratne currently works as the Consultant Clinical Psychologist at The National Rehabilitation Centre in Abu Dhabi and is an Adjunct Professor of Psychology at the United Arab Emirates University in Alain. Dr. Wanigaratne is also a visiting senior lecturer in psychology at the Institute of Psychiatry at Kings College, which is a part of the University of London in the U.K. He is currently the director of the King's College London Resource Center for Trauma, Displacement, and Mental Health in Sri Lanka. Dr. Wanigaratne dedicated much of his career in psychology to the substance abuse field.

Before coming to the U.A.E., Dr. Wanigaratne worked at a number of locations that focused on substance abuse, including the Addictions Clinical Academic Group, which is a part of the King's Health Partners Academic Health Science Center, the Addictions Division at South London and the Maudsley NHS trust and the Camden and Islington Community Health Service NHS Trust at the National Temperance Hospital. In addition, Dr. Wanigaratne was involved in the evaluation of Clinical Psychology and needs assessment in Substance Misuse Services in the Eastern Health Board of Dublin, as well as being involved in the development and management of addiction services in the

U.A.E. Dr. Wanigaratne has also published a number of articles and books on substance abuse which focus on assessing the psychological effects of substance abuse, assessing the effectiveness of substance abuse treatment with a diverse population, identifying the experience of clients at a substance abuse facility, and providing substance abuse manuals for psychologists in training (Johnson et al., 2007; Keaney et al., 2003; Mitcheson et al., 2010; Wanigaratne, 2006; Wanigaratne, Dar, Abdulrahim, & Strang, 2003; Wanigaratne, Davis, Pryce, & Brotchie, 2005; Wanigaratne, Pullin, Wallace, Keaney, & Farmer, 1990).

The first question that was asked in the interview assessed how substance abuse disorders are being diagnosed in the U.A.E. Dr. Wanigaratne responded by saying that substance abuse is diagnosed

by usual international diagnostic systems of ICD-10 or DSM-5. Because there are strict laws against the use of substances, any form of illegal substance use including alcohol use will be diagnosed as substance abuse. (Personal communication, January 1, 2014)

Inquiries about the role of society, the family and the criminal justice system in the identification and treatment of substance abuse disorders in the U.A.E. was the focus of the second question in the interview. Dr. Wanigaratne emphasized the role of the family as essential in prevention and post treatment maintenance. Dr. Wanigaratne encouraged interventions that include family members in the treatment process and focused on educating family members about substance abuse (personal communication, January 1, 2014). The research literature supported including family members in the treatment of substance abuse, especially with regards to Middle Eastern families.

Abudabbeh and Hays (2006) discussed how including families in treatment may increase client's motivation to stay abstinent.

In terms of society, Dr. Wanigaratne responded that the society's role is prevention, vigilance and non-condolence at the same time treating those afflicted with compassion and sympathy. Awareness raising and promoting good family values should be the main focus of society. (Personal communication, January 1, 2014)

Dr. Wanigaratne discussed how the role of the criminal justice system should be to refer or provide substance abuse treatment. The criminal justice system in the U.A.E does not currently provide treatment for substance abuse. However, proposals to the Ministry of Health have been put in place in order to clarify and specify the role of the Ministry of Health and the justice system (Kraya, 2002).

Consultants were asked about their approach to treating substance abuse in the U.A.E. in the third question, and the fourth question inquired about the effectiveness of substance abuse treatment in the U.A.E. Dr. Wanigaratne discussed how he has found evidence-based treatment interventions for substance abuse to be effective in the U.A.E. These interventions include

appropriate detoxification and medical treatment of co-morbid conditions, psychological approaches such as motivational interviewing and motivational approaches, CBT, and relapse prevention. Composite treatment packages such as the matrix approach have been shown to be very effective. (S. Wanigaratne, personal communication, January 1, 2014)

Studies reflecting the success of treatment in the U.A.E. are lacking. However, Dr. Wanigaratne was in the process of conducting research at the National Rehabilitation Center in Abu Dhabi that uses a rapid situation assessment to highlight the impact of substance abuse issues in the community and where further in-depth research in substance abuse needs to be conducted (personal communication, January 1, 2014). Dr. Wanigaratne's research will be further discussed under question seven.

The fifth question in the interview assessed the barriers to substance abuse treatment in the U.A.E. that clients and mental health professionals face. Dr. Wanigaratne discussed how stigma is one of the main barriers to treatment. He discussed how the U.A.E. embodies a "culture of denial, intolerance and lack of understanding of the complexities of addiction." (S.Wanigaratne, personal communication, January 1, 2014). Research has shown that caregivers' negative beliefs toward those who abuse substances, as well as the community values and stereotypes that currently exist toward substance abuse affect treatment accessibility and outcome (Bilal et al., 1990; Hamdan-Mansour et al., 2012; Natan et al., 2009).

The sixth question in the interview inquired about the importance of increasing knowledge, skills, and awareness in substance abuse treatment in the U.A.E. Dr. Wanigaratne discussed how addiction and treatment of addiction should be a requirement for a number of health professions. He mentioned that,

Each professional group, doctors, psychiatrists, psychologists, nurses, social workers and therapists should have specialist training in addiction. For example fellowships in addiction psychiatry for psychiatrists, diploma and masters courses in addiction for all professions, courses in addiction nursing as well as ongoing

continuing professional development workshops. (S. Wanigaratne, personal communication, January 1, 2014)

Research has shown that training in substance abuse treatment improved staff performance, encouraged a change in patient's attitude and increased compliance to substance abuse treatment (Abdel-Mawgoud et al., 1995).

The last question in the interview asked for recommendations on how to implement a needs assessment on substance abuse in the U.A.E. Dr. Wanigaratne disclosed that the National Rehabilitation Center in Abu Dhabi "has been carrying out a Rapid Situation Assessment (RSA) with the United Nations Office on Drugs and Crime using internationally used methodology" (personal communication, January 1, 2014). The RSA is a methodology that incorporates qualitative and quantitative data collection techniques from a number of data sources (United Nations Office for Drug Control and Crime Prevention, 1999). The aim is to understand

the nature, extent and trends in respect of certain health and social problems (such as drug abuse) and of structures and services that exist, or do not exist, to address those problems, and then developing ways to respond to and deal with them.

(United Nations Office for Drug Control and Crime Prevention, 1999, p. 111)

Dr. Wanigaratne discussed implementing school based surveys and qualitative studies of particular segments in society to further inform a needs assessment. Such research would "lead to a well-established surveillance system that keeps an ongoing needs analysis that would inform policy" (S. Wanigaratne, personal communication, January 1, 2014).

Dr. Mohammed Hassan Fayek

Dr. Mohammed Hassan Fayek is currently working as a consultant psychiatrist and Head of Psychiatry at Rashid Hospital in Dubai. In this position, Dr. Fayek is frequently exposed to forensic cases that involve substance abuse disorders. He is an American Board Certified physician specializing in Psychiatry and Neurology. He also has a fellowship in Psychopharmacology. Dr. Fayek previously worked as the Assistant Director of Clinical Psychopharmacology and as the Assistant Professor at the University of Southern California. He was also affiliated with the Pacific Coast Addiction Center in Laguna Beach, California, U.S.A.

Dr. Fayek is interested in contributing to the fight against addiction by advocating for policy change in substance use laws. Dr. Fayek is a member of a committee that is focused on eradicating substance abuse in the U.A.E. in collaboration with the Department of Health and Criminal Justice system. This committee was formed by the National Council of Dubai in cooperation with several government agencies to discuss ways to tackle addiction in Dubai and to discuss effective substance abuse treatment/ prevention.

The first question in the interview asked the consultant about how substance abuse disorders are diagnosed in the U.A.E. Dr. Fayek reported that substance abuse in the U.A.E. is diagnosed by mental health professionals "but unfortunately patients and families don't seek help until it is too late" (personal communication, December 26, 2013). Dr. Fayek, as well as the other field consultants, highlighted the lack of awareness and knowledge that the community has with regards to recognizing substance abuse and accessing available treatments. An article by Shulte, Ali, and Khafaji (2009) described a

case study of an Emirati client admitted into the National Rehabilitation Center in Abu

Dhabi. This client's journey described the difficulties that an individual with an

addiction experiences when attempting to access substance abuse treatment in the U.A.E.

After two years of using heroin at the age of 13, this client was sent abroad to receive

treatment due to the lack of substance abuse facilities in the country at the time. The

client also reported avoiding treatment due to fear of being prosecuted if he disclosed

substance abuse to a medical professional.

The second question in the interview inquired about the role of society, the family, and the criminal justice system in the identification and treatment of substance abuse in the U.A.E. Dr. Fayek discussed the importance of the role of the family in the treatment of substance abuse (personal communication, December 26, 2013). He discussed how educating parents with a child in therapy could act to keep the client motivated in treatment. He also discussed that schools are a platform where parents can be educated about drug abuse. Research has shown that support from the family can increase client's motivation to stay abstinent (Abudabbeh & Hays, 2006). Dr. Fayek called addiction a "taboo" for the society of the U.A.E. (personal communication, December 26, 2013). Addiction in Middle Eastern countries, such as the U.A.E., is seen as deviant from society and something that could anger God (Bilal et al., 1990). Dr. Fayek also discussed the new efforts of the criminal justice system in collaboration with mental health services in the Department of Health. These new efforts involved replacing punishment of substance abuse in the form of imprisonment with mandatory substance abuse treatment.

The third question inquired about the consultant's approach to treating substance abuse in the U.A.E., and the fourth question followed up on what the consultant considered to be effective substance abuse treatment for the U.A.E. population. Dr. Fayek discussed his interest in twelve step programs that are being implemented in the U.A.E. (personal communication, December 26, 2013). Dr. Fayek discussed how effective treatments would range from using detox measures in acute settings and drug rehabilitation centers followed by inpatient rehabilitation which should be extended anywhere from 30 to 90 days. Thereafter, patients should be followed in a partial recovery program. (Personal communication, December 26, 2013). Abdel-Mawgoud et al. (1995) showed how an extensive program that included a 30-day inpatient program followed by a gradual exposure to a less structured schedule was effective in treating substance abuse in K.S.A.

The fifth question in the interview asked the about barriers to substance abuse treatment in the U.A.E. that clients and mental health professionals face. Dr. Fayek discussed how lack of knowledge in substance abuse, lack of training in substance abuse treatment and stigma around addiction could act as barriers to treatment (personal communication, December 26, 2013). Dr. Fayek discussed how such barriers were being imposed by all health professionals in the U.A.E. Research has shown that attitudes toward substance abuse affects treatment of substance abuse (Hamdan-Mansour et al., 2012; Natan et al., 2009).

The sixth question in the interview inquired about the consultant's perception of increasing knowledge, skills, and awareness in substance abuse treatment in the U.A.E.

Dr. Fayek discussed the importance of the role of the Department of Health in organizing

trainings and workshops in diagnosis and treatment of substance abuse disorders (personal communication, December 26, 2013). Health professionals are more likely to attend such trainings if they have received encouragement from their superiors (Natan et al., 2009).

The last question in the interview discussed suggestions on how to implement a needs assessment on substance abuse issues in the U.A.E. Dr. Fayek discussed how, in terms of a needs assessment "a combined effort and integrated approach between all different authorities in the U.A.E. would help in understanding the magnitude of the problem" (personal communication, December 26, 2013). In order to resolve the substance abuse issues in the U.A.E., multiple disciplines, such as the health sector and the criminal justice system, need to be involved to decriminalize substance abuse and encourage a higher rate of effective substance abuse treatment (Kraya, 2002).

Dr. Tayyiba Al Marri

Dr. Tayyiba Al Marri is currently working as a Clinical Psychologist at Infinity Polyclinic in Dubai. Previous to her current position, Dr. Al Marri worked at Rashid Hospital in the U.A.E., which involved co-facilitating inpatient psychiatric group therapy sessions and providing CBT for clients in the outpatient clinic. Dr. Al Marri also worked with children and families at the Nundah Child and Youth Mental Health Service and at the Behavior Research and Therapy Center at the University of Queensland in Australia, where the focus was on assessment and treatment of mood disorders, anxiety disorders and learning disabilities. Dr. Al Marri focused on substance abuse treatment at the Alcohol and Drug Dependency Unit, which was a part of the Florence Nightingale Hospital in the United Kingdom and at the Chermside Adult Community Mental Health

Service in Australia. Dr. Al Marri has dedicated much of her published research to highlighting the prevalence of substance abuse disorders in the U.A.E. and standardizing substance abuse assessment tools relevant to the population of the U.A.E. (Al Marri & Oei, 2009; Al Marri, Oei, & Al-Adawi, 2009; Al Marri, Oei, & Amir, 2009; Al Marri, Oei, & AbRahman, 2009).

Consultants discussed how they diagnosed substance abuse disorders in the U.A.E. in response to the first question. Dr. Al Marri discussed using DSM-5 criteria to diagnose substance abuse disorders through face-to-face interviews. Dr. Al Marri also mentioned that "some difficulties are faced with self-report questionnaires as many have not been standardized with this population; for example questions relating to shame may not be reliable with this population" (personal communication, January 7, 2014). Al Marri, Oei, and Al Adawi (2009) discussed how many of the substance abuse screening instruments available do not account for religiosity and the sociocultural makeup of a country such as the U.A.E. However, researchers have begun to account for the cultural and religious differences in Middle Eastern populations and have tailored substance abuse screening instruments accordingly (Al Marri, Oei, & AbRahman, 2009; Al Marri, Oei, & Al Adawi, 2009).

The second question in the interview asked about how society, the family, and the criminal justice system were related to the identification and treatment of substance abuse in the U.A.E. Dr. Al Marri stated that "society, family and definitely the criminal justice system condemn substance use among Emirati nationals in the U.A.E." (personal communication, January 7, 2014). Dr. Al Marri discussed how substance use is against religious, cultural, and legal systems of the country. Dr. Al Marri discussed how

awareness of substance abuse has increased over the past few years. The media has been reporting substance use in society by encouraging announcements that highlight a need to treat substance abuse and by broadcasting talks with high ranked police officers appealing to parents to supervise their teenagers better. In addition, government departments have engaged in more antidrug campaigns at shopping malls and schools (T. Al Marri, personal communication, January 7, 2014).

Research has yielded mixed results for the effectiveness of anti-drug media campaigns (Carpenter & Pechmann, 2011). One study measured the outcome of the Above the Influence anti-drug campaign, which has targeted marijuana use in adolescents in the U.S. Carpenter and Pechmann (2011) administered surveys to adolescents at schools across the U.S. inquiring about marijuana use after exposure to the antidrug campaign. Results showed delayed initiation and lower rates of marijuana use among eighth grade girls but not eighth grade boys or older adolescents. Although the authors did not measure gender as a factor, they discussed how eighth grade girls were especially susceptible to these antidrug advertisements because of the heightened negative emotions that accompany puberty and the messages from the advertisements that encouraged overcoming negative influences (Carpenter & Pechmann, 2011).

Another study that measured the response to the Australian National Drugs

Campaign yielded more positive results (Morton & Duck, 2006). This campaign targeted adolescents through the use of television, radio, print and sending brochures to individual's homes portraying vivid imagery that showed the negative effects of drug use, as well as encouraging parents to take an active role in discussing substance abuse with their children. Questionnaires were given to first year psychology students at the

University of Queensland who were still living with their parent/s and required that both the student and the parent/s complete the questionnaire. The questionnaire assessed knowledge of drug use, campaign messages, interpersonal communication skills, and perceptions of risk of harm. Results showed that including parents in the discussion about drugs increased adolescents' awareness of their own risk of exposure to drug related harm (Morton & Duck, 2006).

Studies reflecting the success of antidrug campaigns in the U.A.E. are lacking. Dubai police have been involved in a series of anti-drug campaigns in cooperation with both private and government agencies (DP World, 2013). These anti-drug campaigns involved individuals from the community, heads of reputable organizations, and high-ranking officials from the police educating the public on the harmful effects of drugs and the signs and symptoms of drug use. These campaigns also informed the attendees of a toll number they could call when signs of drug use are spotted in individuals. The toll number was meant to alert the police to the illegal activity that was taking place, which in this case was illegal drug use (Dubai Police, 2005). This would result in the individual using drugs being arrested and taken to jail. This seems to be a way to take these individuals out of the community and into jail but not a way to treat the disease of substance abuse.

Dr. Al Marri (personal communication, January 7, 2014) discussed how families with a member suffering from a substance abuse disorder are at a loss when it comes to the treatment of substance abuse. She discussed how shame is associated with such a diagnosis and as a result the individual suffering ends up being ostracized. Dr. Al Marri also discussed how this feeling of being at a loss is associated with stigma and religion

(personal communication, January 7, 2014). In addition, the legal punishment associated with substance abuse prevents families from coming forward and asking for help out of fear of incarceration for the member who is suffering. As a result, families resort to the use of religious healers to provide treatment for substance abuse.

The Minnesota model could be an effective treatment for substance abuse in the U.A.E. due to its focus on shame and punishment (Sung, 2011). This model acknowledges how shame and punishment from peers and family members could negatively affect treatment and aims at eliminating those aspects from a patient's life. Arfken et al. (2009) discussed how fear of shame and punishment by family members and the community can prevent drug and alcohol use. However, for those who have used and have an addiction, it may act to reduce access to treatment. Arfken et al. (2009) also noted that when family members and members of the community are educated about addiction, tactics such as shame and punishment may decrease.

The third question asked the consultants about their approach to treating substance abuse in the U.A.E. and the fourth question inquired about the effectiveness of substance abuse treatment in the U.A.E. Dr. Al Marri commented on a study that she conducted that examined the role of alcohol expectancies and drinking refusal self-efficacy in predicting drinking behaviors in Muslim samples from Arab and Asian nations (personal communication, January 7, 2014; 2009). Drinking refusal self-efficacy is "the belief in one's ability to refrain from consuming alcohol in context specific situations" (Al Marri, Oei, & AbRahman, 2009, p. 776). According to this concept, if cognitions directly affect drinking behavior, then it may be useful to tailor cognitions in substance abuse treatment.

The aim of the study was to explore the concept and appropriateness of the

Drinking Refusal Self-Efficacy Questionnaire revised (DRSEQ-R) with a Muslim population (Al Marri, Oei, & AbRahman, 2009). Other measures, such as the Khavari Alcohol test, which measures level of alcohol consumption and the Short Alcohol Dependence Data questionnaire, which measures level of alcohol dependence, were also used. Six hundred and twelve participants with an average age of 26 participated in the study. Participants were Emirati nationals and other Arab nationals living in the U.A.E., Omani nationals living in Oman, Indonesian nationals living in Jakarta and Malaysian nationals living in Kuala Lumpur.

Results showed that the DRSEQ-R showed good reliability and validity with the Muslim population (Al Marri, Oei, & AbRahman, 2009). Results showed that higher consistent levels of alcohol consumption were associated with reduced drinking refusal self-efficacy (Al Marri, Oei, & AbRahman, 2009). In other words, individuals who consistently drank high levels of alcohol felt less confidence in their ability to refrain from drinking alcohol. Alcohol-related cognitions were related to frequency of drinking and dependence severity, suggesting that Cognitive Behavioral Therapy may be an effective therapy to target and change the cognitions that are associated with substance abuse. In addition, Dr. Al Marri discussed the importance of having a non-judgmental and supportive attitude when treating clients with substance abuse disorders (personal communication, January 7, 2014).

The fifth question in the interview asked the consultant about the barriers to substance abuse treatment in the U.A.E. that clients and mental health professionals faced. Dr. Al Marri spoke about how substance use laws in the country act as a major barrier to treatment of substance abuse disorders in the U.A.E. (personal communication,

January 7, 2014). Punishment is the preferred treatment for substance abuse in the U.A.E.

The sixth question in the interview inquired about the importance of increasing knowledge, skills, and awareness in substance abuse treatment in the U.A.E. Dr. Al Marri discussed how substance abuse has high comorbidity with other mental health problems and can complicate treatment (personal communication, January 7, 2014). Addressing the substance abuse problem can provide a better prognosis for a comorbid mental disorder. Dr. Al Marri stated that she discovered through her own research that the level of alcohol consumption of individuals in the U.A.E. was dangerously high and needs to be further assessed (Al Marri, Oei, & AbRahman, 2009). Skills need to be increased by being aware of the latest research in the Middle East, by attending training sessions on how to conduct research and how to implement the latest treatment modalities, by peer supervision and support from colleagues, and by conducting regional-based research.

The last question in the interview asked for recommendations on how to implement a needs assessment on substance abuse issues in the U.A.E. Dr. Al Marri highlighted the importance of research in substance abuse in the U.A.E. (personal communication, January 7, 2014). She disclosed that through her own experience, individuals in the U.A.E. were more accepting and tolerant to helping addicts when they know it is for the benefit of society. Substance abuse disorders increase costs for society and focusing on treatment of substance abuse reduces those costs (Royse et al., 2009). Dr. Al Marri suggested that research recommendations involve mapping the existing services available and client profiles, looking at the frequency of arrests for substance

abuse, screening of substance abuse at medical facilities, comparative research of needs and difficulties of addicts in treatment and not in treatment, and collecting surveys on amount and pattern of substance use in prisons and school settings.

Jane Griffith

Jane Griffith is a certified nurse with a master's degree in health planning and is currently the Director of Nursing at Rashid Hospital in Dubai. Griffith has extensive experience in the management of nursing services and strategic, corporate, and facilities planning in hospitals in both the Middle East and Australia. She was the Nursing Director in a number of locations, including Sydney West Area Health Service, Al Ahli Hospital Qatar, Wentworth Area Health Service, and Fairfield Hospital. She has also published a number of articles on management of disasters in hospital settings in the U.A.E., on how to improve training and competency in the nursing staff, and on how to optimize healthcare utilization (Griffiths, 2013; Griffiths, Waterson, & Estipona, 2009; Griffiths, Waterson, & Estipona, 2011; Griffiths, Waterson, Othman, Macato, & Estipona, 2011).

The first question inquired into the consultant's knowledge on how substance abuse disorders are diagnosed in the U.A.E., and the second question asked about the role of society, the family, and the criminal justice system in the identification and treatment of substance abuse in the U.A.E. Griffith stated that substance abuse disorders are usually diagnosed in the public health system on admission to the hospital (personal communication, January 5, 2014). According to Griffith,

substance abuse is a criminal offence in the U.A.E. so many drug addicted patients end up in jail. The last four years has seen substance abuse increase

significantly and because of the lack of treatment services/facilities we often have families who are very distressed as they cannot help their children. (Personal communication, January 5, 2014).

Griffith discussed how the U.A.E. is more aware of substance abuse problems as the hospital encounters many patients that are admitted due to alcohol or drug withdrawal symptoms. Despite the increase in substance abuse cases, individuals in society still do not realize the magnitude of substance abuse issues in the country.

The third and fourth questions discussed the existence of substance abuse treatment in the U.A.E. and the effectiveness of the available treatment modalities. Griffith stated that

there is no definitive treatment for drug abuse. Methadone, the therapy used in most Western countries, is not available in the U.A.E. We use an "alcohol withdrawal protocol" for patients suspected to be suffering from alcohol abuse in the hospital. (Personal communication, January 5, 2014)

Griffith mentioned that the hospital does have a number of staff members who have worked at rehabilitation centers in other countries and have not received organizational support to apply and tailor the skills they have learnt abroad to the patients of the U.A.E. (personal communication, January 5, 2014).

The fifth question in the interview asked the consultant about the barriers that mental health professionals and clients face when attempting to access substance abuse treatment. Griffith discussed how substance abuse is a problem for all health professionals and not just mental health professionals (personal communication, January 5, 2014). Delegating only mental health professionals to deal with substance abuse

problems keeps other healthcare professionals at the hospital unaware of the magnitude of substance abuse issues and maintains the problem of how to manage such cases in the hospital when they arise. Religion and culture also act as barriers to treatment since they make it more difficult for clinical staff to inquire about substance abuse. Inquiring about substance use may drive a patient away rather than help in directing the patient to treatment. Research and training are needed to identify culturally appropriate ways of inquiring about substance abuse (Hamdan-Mansour et al., 2012; Natan et al., 2009).

The sixth question in the interview discussed the importance of increasing knowledge, skills, and awareness in substance abuse treatment in the U.A.E. Griffith observed.

there needs to be a U.A.E.-wide think tank to identify the issues and to examine the gold standard for evidence-based practice for substance abuse problems. This U.A.E.-wide think tank needs to include healthcare professionals, other government departments (police, prisons etc.), as well as community representatives. (Personal communication, January 5, 2014).

The last question in the interview asked the consultant for recommendations on how to implement a needs assessment on substance abuse issues in the U.A.E. Griffith discussed the difficulties in implementing a needs assessment in the U.A.E. due to cultural barriers (personal communication, January 5, 2014). Griffith opined that society avoids substance abuse issues and deems them to be non-existent. She discussed the possibilities of administering a general questionnaire to the police, prisons, and health care facilities but that such a questionnaire would only reveal current and superficial issues with substance abuse and would not reveal the root cause. Griffith advised being

persistent, flexible, and creative when approaching research in substance abuse in the U.A.E. (personal communication, January 5, 2014).

Summary

Five field consultants who are health professionals based in the U.A.E were interviewed in order to gain current clinical information on how substance abuse is viewed and treated in the U.A.E. Since the literature on this topic is quite limited, the information provided by the field consultants acted to fill the gaps in the literature. The consultants were chosen based on their expertise with substance abuse and/or with substance abuse with the U.A.E. population. The field consultants were required to answer a set of questions that I posed.

In terms of how substance abuse is diagnosed in the U.A.E., two reported that most cases present to the emergency room after having experienced an overdose or after episodes of demanding psychotropic medications from their doctors (L. Asamarai, personal communication, December 29, 2013; J. Griffith, personal communication, January 5, 2014). Some of the consultants also reported that despite using internationally based criteria for substance abuse disorders using the DSM-5 and ICD-10, many of the self-report questionnaires are not standardized and cannot accurately detect the true level of substance abuse (T. Al Marri, personal communication, January 7, 2014; S. Wanigaratne, personal communication, January 1, 2014). There exists a lack of training among the professionals who are dealing with individuals who abuse substances and a lack of awareness and knowledge in the community with regards to recognizing substance abuse and accessing available treatments (M. H. Fayek, personal communication, December 26, 2013).

The field consultants discussed the role of society, the family and the criminal justice system in the identification and treatment of substance abuse disorders in the U.A.E. Dr. Asamarai commented about how stigma prohibits access to and development of substance abuse treatment which is highlighted in the published literature with regards to Middle Eastern populations (personal communication, December 29, 2014; Bilal et al., 1990). A number of consultants remarked on the importance of educating family members about substance abuse and including them in the treatment process (T. Al Marri, personal communication, January 7, 2014; M.H. Fayek, personal communication, December 26, 2013; S. Wanigaratne, personal communication, January 1, 2014). This is reflected in the literature with regards to the Middle Eastern population where including families in treatment may increase a client's motivation to remain abstinent (Abudabbeh & Hays, 2006).

All the consultants discussed the no tolerance stance that is taken by the criminal justice system, where use of an illegal substance results in imprisonment (T. Al Marri, personal communication, January 7, 2014; L. Asamarai, personal communication, December 29, 2013; M.H. Fayek, personal communication, December 26, 2013; J. Griffith, personal communication, January 5, 2014; S. Wanigaratne, personal communication, January 1, 2014). However, Dr. Fayek observed that the new efforts of the criminal justice system in collaboration with mental health services in the Department of Health, where mandatory substance abuse treatment is being proposed as a replacement to imprisonment (personal communication, December 26, 2014). Dr. Al Marri also noted how awareness of substance abuse has increased over the past few years where the media has been reporting substance use in society by encouraging

announcements that highlight a need to treat substance abuse and by displaying talks with high ranked police officers appealing to parents to supervise their teenagers better (personal communication, January 7, 2014).

The consultants discussed their approach to treating substance abuse. Two of the consultants remarked how a collaborative abstinence model that includes multiple disciplines would be an effective treatment modality (L. Asamarai, personal communication, December 29, 2013; M.H. Fayek, personal communication, December 26, 2013). Evidence of the success of such an approach is reflected in the literature for a Middle Eastern population of a similar sociocultural background (Abdel-Mawgoud et al., 1995). Using a multidisciplinary team to treat substance abuse with interventions that include individual therapy, group therapy, family therapy, recovery therapy, and spiritual groups among other groups may yield positive results. However, some of the consultants discussed the lack of organizational support granted in order to carry out such a treatment plan due to the stigma attached to substance abuse (J. Griffith, personal communication, January 5, 2014; L. Asamarai, personal communication, December 29, 2013).

Dr. Asamarai discussed how she had not witnessed any effective treatments for substance abuse disorders in the U.A.E. and highlighted the limited number of treatment centers available in the U.A.E. as well as a lack of appropriate treatment outcome measures (personal communication, December 29, 2013). Dr. Wanigaratne, who is a consultant psychologist at a substance abuse treatment facility, discussed how he has found evidence-base treatment interventions for substance abuse to be effective in the U.A.E. with interventions such as motivational interviewing, CBT, relapse prevention,

and the matrix approach (personal communication, January 1, 2014). However, studies reflecting the success of treatment are still being conducted.

Two of the consultants that were interviewed discussed the research that they have conducted on substance abuse (T. Al Marri, personal communication, January 7, 2014; S. Wanigaratne, personal communication, January 1, 2014). Dr. Wanigaratne discussed the Rapid Situation Assessment (RSA) that he has been carrying out with the help of the United Nations Office on Drugs and Crime (personal communication, January 1, 2014). This methodology aims at incorporating qualitative and quantitative data collection techniques from a number of data sources in order to identify the prevalence and extent of the substance abuse problems in the country and the existing treatments (United Nations Office for Drug Control and Crime Prevention, 1999). If no treatments are available, then it aims to develop appropriate modalities of treatment for the existing population. Dr. Al Marri also discussed her own study that suggested that alcohol-related cognitions were related to frequency of drinking and dependence severity in Muslim populations in both Asia and the Middle East, suggesting that cognitive behavioral therapy may be an effective therapy to target and change the cognitions that are associated with substance abuse (personal communication, January 7, 2014; Al Marri, Oei, & AbRahman, 2009). Results showed that higher consistent levels of alcohol consumption were associated with reduced drinking refusal self-efficacy. In other words, individuals who consistently drank high levels of alcohol had less confidence in their ability to refrain from drinking alcohol.

A number of the consultants reported on how stigma and lack of training in substance abuse act as barriers to substance abuse treatment in the U.A.E. for both clients

and mental health professionals (L. Asamarai, personal communication, December 29, 2013; M.H. Fayek, personal communication, December 26, 2013; S. Wanigaratne, personal communication, January 1, 2014). This is consistent with the research that has shown that caregivers' negative beliefs toward those who abuse substances affected substance abuse treatment (Bilal et al., 1990; Hamdan-Mansour et al., 2012; Natan et al., 2009). Research has also shown that training and education lessens the stigma toward substance abuse. Dr. Al Marri discussed how substance use laws in the country act as a major barrier to treatment of substance abuse disorders in the U.A.E. (personal communication, January 7, 2014). Punishment is the preferred treatment for substance abuse in the U.A.E. In addition to the laws, religion and culture also act as barriers to treatment since they make it more difficult for clinical staff to inquire about substance abuse (J. Griffith, personal communication, January 5, 2014). Inquiring about substance use may drive a patient away rather help direct the patient to treatment.

All the field consultants discussed the importance of increasing knowledge, skills, and awareness of substance abuse treatment in the U.A.E. (T. Al Marri, personal communication, January 7, 2014; M.H. Fayek, personal communication, December 26, 2013; J. Griffith, personal communication, January 5, 2014; S. Wanigaratne, personal communication, January 1, 2014). Three of the consultants observed how government organizations need to make it mandatory for health professionals to receive training on substance abuse issues with encouragement from superiors at these organizations (T. Al Marri, personal communication, January 7, 2014; L. Asamarai, personal communication, December 29, 2013; M.H. Fayek, personal communication, December 26, 2013). Two of the consultants commented on how important it is to extend these trainings to all health

professionals (J. Griffith, personal communication, January 5, 2014; S. Wanigaratne, personal communication, January 1, 2014).

In terms of recommendations on how to implement a needs assessment on substance abuse issues in the U.A.E., two of the consultants noted how multiple disciplines need to be involved in resolving the substance abuse issues that exist (L. Asamarai, personal communication, December 29, 2013; M. H. Fayek, personal communication, December 26, 2013). Dr. Asamarai discussed how addicts, the criminal justice system, families of addicts, psychiatrists, hospitals, clerics, and government officials need to be involved in this process (personal communication, December 29, 2013). Dr. Fayek mentioned how it is important to include the criminal justice system to decriminalize substance abuse and encourage a higher rate of effective substance abuse treatment (personal communication, December 26, 2013). Two of the consultants highlighted the importance of research in substance abuse in the U.A.E. (T. Al Marri, personal communication, January 7, 2014; S. Wanigaratne, personal communication, January 1, 2014). Both consultants suggested conducting research that involves mapping the existing services available and client profiles, looking at the frequency of arrests for substance abuse, screening of substance abuse at medical facilities, comparative research of needs and difficulties of addicts in treatment and not in treatment, and collecting surveys on amount and pattern of substance use in prisons and school settings. However, Associate Professor Griffith spoke to the difficulties in implementing a needs assessment in the U.A.E. due to cultural barriers (personal communication, January 5, 2014). Society avoids substance abuse issues and denies their existence. She discussed the possibilities of administering a general questionnaire to police, prisons and healthcare

facilities, but that such a questionnaire would only reveal current and superficial issues with substance abuse and would not reveal the root cause (J. Griffith, personal communication, January 5, 2014).

CHAPTER V

Discussion

Implications of the Project

This doctoral project addresses the substance abuse problems that currently exist in the U.A.E. by including the relevant literature that is either based on the U.A.E. or based in country of similar sociocultural background. The interviews performed with field consultants who are based in the U.A.E. filled a portion of the gap in the research literature by providing a real life account of the difficulties that health professionals face with clients who suffer from a substance abuse disorder in the U.A.E. The project highlights the need for research in that region in order to introduce and tailor appropriate substance abuse treatment, as current research of successful treatment is lacking.

Presentation and Evaluation Feedback

The PowerPoint presentation relayed information on the current substance abuse problems in the U.A.E., including the prevalence of substance abuse disorders, the factors that impact substance abuse disorders in the U.A.E., and the current treatments for substance abuse disorders available in the U.A.E. The information portrayed in the presentation was obtained from the literature review and from the interviews with the field consultants. I chose to stage the presentation at Rashid Hospital in Dubai since it is the only public hospital in Dubai that receives acute inpatient psychiatric admissions in which many of the cases involve substance abuse. This hospital also holds the largest trauma center in Dubai. The presentation was conducted in the psychology department at Rashid Hospital in Dubai. The Head of the Psychology Department agreed to host the event and announced the day and time it would be held to the psychology and psychiatry

departments at a multidisciplinary mental health team meeting. The presentation aimed to provide information to psychologists, psychiatrists, and psychiatric nurses who deal with substance abuse issues.

The client population that the psychology department serves includes families, individuals, and couples struggling with a range of Axis I and Axis II mental disorders. The department is also heavily involved in forensic cases, which includes the evaluation and treatment individuals who have been incarcerated due to substance abuse. The presentation took place January 30, 2014 at 11:00 a.m. (see Appendix A). The presentation lasted for 45 minutes, followed by a discussion that lasted another 45 minutes. The audience consisted of one doctoral level psychologist, six masters level psychology assistants, two bachelor level psychology interns, and one psychiatric resident. Evaluation forms were handed out at the end of the presentation in order to evaluate the quality of the presentation (see Appendix B). I stepped out of the room while the forms were completed to ensure confidentiality. The audience placed the completed forms in an unmarked envelope which was returned to me.

The evaluation forms consisted of 13 questions to be answered on a Likert scale that ranged from 1 to 5 indicating the level of familiarity with and usefulness of the information presented. A score of 5 indicated being "completely familiar" with the topic of substance abuse/treatment whereas a score of 1 indicated being "completely unfamiliar" on questions 1 and 2. A score of 5 indicated "very much" in terms of level of knowledge/awareness/performance of the presenter whereas a score of 1 indicated "not at all." The questions on the evaluation form addressed whether the objectives of the doctoral project were met through the presentation. These objectives are to increase

awareness of mental health professionals on the existing research on substance abuse disorders in the U.A.E., to increase awareness of the factors that contribute to the prevalence of substance abuse in the U.A.E., to increase awareness of the existing treatments for substance abuse and the associated barriers for treatment, and to highlight the need for research in this area to inform future successful treatment.

The first question asked on the evaluation form was "how familiar were you with the topic of substance abuse disorders in the U.A.E. before the presentation?" The average rating for the first question was 3.6 and the standard deviation was 1.17. This reflects a mixed level of familiarity with the topic of substance abuse in the U.A.E. This score highlighted the need for more awareness of substance abuse, which was the aim of the presentation. The second question asked on the evaluation form was "how familiar were you with the topic of substance abuse treatment in the U.A.E. before the presentation?" The average rating for the second question was 3.2 and the standard deviation was 1.39. These scores also reflected a mixed level of familiarity. As with question one, the score on question two also highlights the need for more awareness of substance abuse treatment.

The third question asked on the evaluation form was "did the presentation increase your knowledge of the substances abused in the U.A.E.?" The average rating for the third question was 4.7 and the standard deviation was 0.48. This score reflects how the presentation did increase the audience members' knowledge of substances abused in the U.A.E. However, it also reveals that there may be more substances being used that neither I nor the field consultants are aware of and that may not be reflected in the

literature. More research needs to be conducted to know the full range of substances that are being used in the U.A.E.

The fourth question asked on the evaluation form was "did the presentation increase your knowledge of the factors that contribute to substance abuse in the U.A.E?" The average rating for the fourth question was 4.6 and the standard deviation was 0.51. This score indicates that the presentation did increase knowledge of the factors that contribute to substance abuse but also highlights that there may be other factors worth exploring. This doctoral project focused on the community perspective and how the social changes that occurred in Dubai affected the prevalence of substance abuse. Biological factors and psychological factors relevant to the population of the U.A.E. could be further explored.

The fifth question asked on the evaluation form was "did the presentation increase your knowledge of existing substance abuse treatments in the U.A.E.?" The average rating for the fifth question was 4.4 and the standard deviation was 0.51. This score is one of the lowest scores on the evaluation form, reflecting an increase in knowledge of substance abuse treatment in the U.A.E., but also highlighting the need for more information on the existing and available substance abuse treatments in the U.A.E. Many of the facilities that are available limit admissions to Emirati nationals. In addition, lack of research exists reflecting the success of any treatment modality.

The sixth question asked on the evaluation form was "did the presentation increase awareness of the barriers that health professionals and patients face in substance abuse treatment in the U.A.E.?" The average rating for the sixth question was 4.8 and the standard deviation was 0.42. The score reflects an increased awareness of the barriers

present in the U.A.E. and highlights that there may be other barriers that I may not be aware of and are worth investigating.

The seventh question asked on the evaluation form was "did the presentation highlight the importance of conducting research in the substance abuse field in the U.A.E.?" The average rating for the seventh question was 4.9 and the standard deviation was 0.31. This score shows a high level of understanding of the importance of conducting research in the U.A.E. It is also reflective of an attitude of greater readiness and acceptance toward research on the topic of substance abuse in the U.A.E.

The eighth question asked on the evaluation form was "did the presentation increase interest in conducting a needs assessment in the substance abuse field in the U.A.E.?" The average rating for the eighth question was 5 and the standard deviation was 0. This score shows that the main objective of the presentation was accomplished since it reflects the maximum amount of interest represented by a full score of 5 in conducting a needs assessment of substance abuse in the U.A.E.

The ninth question asked on the evaluation form was "how clear was the presenter in examining this topic?" The average rating for the ninth question was 4.9 and the standard deviation was 0.31. This score reflects that I was clear in relating the topic of substance abuse most of the time but not all of the time.

The tenth question asked on the evaluation form was "were the PowerPoint slides helpful?" The average rating for the 10th question was 4.4 and the standard deviation was 0.84. The low score on this question suggests that the PowerPoint element was not the strongest element of the presentation.

The 11th question on the evaluation form asked "was the presenter attentive to questions?" The average rating for the 11th question was 5 and the standard deviation was 0. I attended to all the questions posed by the audience throughout the presentation and after the presentation was completed.

"Was the presentation informative overall?" was the 12th question on the evaluation form. The average rating for the 12th question was 5 and the standard deviation was 0. This score shows that the audience found the presentation to be informative, especially since there is limited research with substance abuse in the U.A.E.

The audience's responses to the first two questions indicated a less than moderate level of familiarity with the topic of substance abuse and substance abuse treatment, which provides a baseline to the level of knowledge on substance abuse issues in the U.A.E. and reinforces the need to increase knowledge on these topics. The scores on questions three to twelve indicated my ability to fulfill the objectives of the presentation, which were mainly to increase knowledge and awareness of substance abuse issues in the U.A.E. and the need for research.

The last question asked on the evaluation form was "what suggestions do you have to help improve this presentation?" Six members of the audience responded to this open-ended question. Three of the members shared how such a presentation is needed due to the lack of research on the topic in the U.A.E. The responses were: "great to experience a talk targeted at the unique clinical population we work with; hard to find relatable studies in research; very helpful, relatable, and informative" and "there isn't very much information available so this was very helpful." Another response was, "more; good presentation in time available." Three members of the audience shared an

interest in more information on the topic of substance abuse. The responses were: "to discuss different age range/sex as a variable in the U.A.E," and "a resource list would be helpful." Another response was, "case studies in the U.A.E. if possible." These responses highlight the need for further research and treatment facilities in the U.A.E.

The discussion that arose after the presentation ended revolved around the audience members' experience with clients who have a substance abuse disorder or their experiences with facilities that treat substance abuse disorders. The discussion lasted 45 minutes and addressed some of the issues associated with seeing substance abuse disorder patients at Rashid Hospital in Dubai. Mental health professionals are in a bind as to how to effectively treat such a disorder in the U.A.E. or where to refer to if needed. The presentation provided a space where individuals could freely talk about their struggles with substance abuse issues in the U.A.E.

One member of the audience discussed working at a public hospital in Abu Dhabi that offers voluntary and involuntary substance abuse treatment facilities. She shared how most of the involuntary services were provided to prison inmates and voluntary services were not utilized. This corresponds to the existing research and the country's laws (Al Marri et al., 2009; Ghubash & El-Rufaie, 1997). Due to the country's no tolerance stance, most individuals who abuse substances would not seek help due to the consequence of disclosing, which is incarceration. It is only after incarceration that help is sought through the prison system. Another audience member observed that existing available services only apply to Emirati nationals, although there are plans to extend substance abuse treatment to all residents of the U.A.E.

Limitations and Suggestions for Future Research

The information from the literature review and from the field consultants highlighted the need for future research. There are a number of limitations associated with this doctoral project. The method in which the field consultants were interviewed, through emails, limited the amount of information that could be transmitted. Another limitation revolves around the demographics of the participants in the research included in the literature review. Much of the research that was included in this project was either focused only on the Emirati population or adapted from other Arab countries from similar sociocultural backgrounds (Abdel-Mawgoud et al., 1995; Abou-Saleh et al., 2001; Arfken et al., 2009; Bilal et al., 1990; Diamond et al., 2008; Eapen et al., 2003; Ghubash & El-Rufaie, 1997; Ghubash et al., 1992; Grumer et al., 2011; Hamdan-Mansour et al., 2012; Natan et al., 2009; Razvodovsky, 2004). Limited research exists that has measured the various demographics of the U.A.E. and their level of alcohol consumption (Al Marri, Oei, & AbRahman, 2009; Lawton et al., 2012). More research is needed to get an accurate account of the prevalence of substance abuse for all the inhabitants in the U.A.E., both Arab and non-Arab.

Another limitation revolved around the fact that a large section of this doctoral project examines the social factors that affect the prevalence of substance abuse in the U.A.E. This may have limited me from exploring other biological or psychological factors that could be influencing the rise of substance abuse in the U.A.E. More research is needed to examine the biological/psychological factors that give rise to substance abuse disorders in the U.A.E., as well as research measuring the effects of the rapid social changes that occurred in the U.A.E.

Conclusion

Substance abuse research is rare in the U.A.E., despite the existence of use (Abou-Saleh et al., 2001; Eapen et al., 2003). Research in substance use is especially difficult to conduct in the U.A.E. due to legal, religious and cultural ramifications (Al Marri & Oei, 2009). The purpose of this doctoral project was to design and deliver a presentation that aims at increasing awareness and knowledge of substance abuse issues in the U.A.E. and at encouraging the audience members to conduct a needs assessment in substance abuse for the U.A.E. population. Needs assessments focus on awareness of services, availability of services, accessibility of services, and acceptability of services (Royse et al., 2009).

The field consultants, the presentation audience, and the literature review emphasized the importance of conducting a needs assessment in the U.A.E. The field consultants explained how research needs to be conducted by multiple disciplines and organizations in the U.A.E., such as with the criminal justice system and clerics (T. Al Marri, personal communication, January 7, 2014; L. Asamarai, personal communication, December 29, 2013; M. H. Fayek, personal communication, December 26, 2013; J. Griffith, personal communication, January 5, 2014; S. Wanigaratne, personal communication, January 1, 2014). Royse et al. (2009) observed that including important members or agencies in the community, such as social service agencies, clergy, physicians, judges, and university faculty, is recommended, especially when the needs assessment is likely to expose major problems or is focused on an issue that is sensitive in nature. The feedback from the audience attending the presentation indicated a less than moderate level of familiarity with the topic of substance abuse and substance abuse

treatment, which reinforced the need to increase knowledge and awareness on these topics. Much of the feedback that was provided by the audience reflected the gaps in the literature and reinforced the need for more research in the substance abuse field to inform the development of treatment modalities and facilities suitable for the population of the U.A.E.

Summary

In Chapter I, as the author of this doctoral project, I discussed the definition of substance abuse disorder and its existence in the U.A.E. This chapter also introduced the reasons why research in the field of substance abuse is crucial for the U.A.E. Chapter II provided a review of the literature and explained how substance abuse was introduced in the U.A.E. It reported on the history of the country with the accompanying rapid social changes that made it vulnerable to heightened levels of stress where substance abuse is used as an unhealthy coping method to remedy the stress. This chapter also revealed how globalization and acculturation contribute to the prevalence of substance abuse. Treatment modalities were also examined with an overview of the existing treatment centers in the country. Chapter III offered a discussion of the methods that were used in this doctoral project. This chapter explained how the objectives were implemented, which included developing a PowerPoint presentation. It introduced the field consultants who were interviewed and the questions that I asked. It described the target audience for attendance at the presentation and the evaluation form that was completed following the presentation. Chapter IV presented the information provided by the field consultants and how it related to the literature. Chapter V included a discussion on the implications of

this doctoral project, the results from the evaluation forms that were given to the audience, the limitations of this doctoral project, and suggestions for future research.

Personal Reflections

Developing this doctoral project allowed me to increase my knowledge and awareness of substance abuse issues in the U.A.E. My motivation to research this topic came from working at Rashid hospital in Dubai, where I encountered a number of individuals who suffer from a substance abuse disorder. Many of these individuals were turned away and treated poorly by physicians, psychiatrists, and even some psychologists after admitting to have used and abused both legal and illegal substances. Interviewing field consultants proved to be a valuable experience for me especially because research is limited in that part of the world. I also had the opportunity to build new contacts in the U.A.E., where I will be working after completion of my doctoral degree.

Presenting the PowerPoint slides also added to the value of this doctoral project, given the reaction of the audience to the information relayed. The audience communicated the appreciation they felt for my focus on a topic that was lacking in research and considered a societal taboo. The audience, who are on staff at the hospital, expressed a desire to conduct a needs assessment at the hospital, with my help.

Discovering that there is room for change in attitude, treatment, and even policies only inspires me to continue my journey in the substance abuse field.

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APPENDIX A

Presentation

Substance Abuse in the United Arab Emirates: Why a Needs Assessment is needed.

Shaima H. Al Fardan

Committee Chair: Dr. John Bakaly Academic Consultant: Dr. Joan Murray California School of Professional Psychology at Alliant International University

Objectives

- O Increase knowledge and awareness of substance abuse in the U.A.E..
- O Increase knowledge and awareness of the factors that contribute to substance abuse in the U.A.E..
- O Increase interest in developing a needs assessment/research on substance abuse in the U.A.E..

Interviews with Field Consultants

- Five Field Consultants were interviewed based on their knowledge and clinical experience with substance abuse in the U.A.E..
 - O Dr. Layla Asamarai
 - O Dr. Mohammed Fayek
 - Assoc. Prof. Jane Griffiths
 - O Dr. Shamil Wanigaratne
 - O Dr. Tayyiba Al Marri

Interview Questions

- O How are substance abuse disorders diagnosed in the UAE?
- O What is the role of society, the family, and the criminal justice system in the identification and treatment of substance abuse disorders in the UAE?
- What is your approach to treating substance abuse disorders in the UAE?
- What treatments have you found to be effective with substance abuse disorders in the UAE?

Interview Questions

- O What barriers do mental health professionals and clients face with the treatment of substance abuse disorders in the UAE?
- O How and in what ways is it important for mental health professionals to increase their knowledge, skills, and awareness about substance abuse treatment in the UAE?
- What are your recommendations on how to implement a needs assessment on substance abuse issues in the UAE?



Needs Assessment: Why is it needed?

- Focus on awareness of services, availability of services, accessibility of services, and acceptability of services (Royse, Staton-Tindall, Badger & Webster, 2009).
- Aid in understanding the extent of the gap in services in order to create/tailor treatment modalities and facilities.
- Generate information about the current issues so that changes in policies can occur.

Substance Abuse Disorder: DSM-5

- Classes of drugs: alcohol, caffeine, cannabis, hallucinogens, phencyclidine, arylcyclohexylamines, inhalants, opioids, sedatives, hypnotics, anxiolytics, stimulants, and tobacco (APA, 2013).
- O Pathological pattern of behavior related to use of substance characterized by impaired control, social impairment, risky use, and pharmacological criteria(APA, 2013).

Dr. Taayiba Al Marri

(personal communication, 7th January, 2014)

O Difficulties faced with self-report questionnaires due to not having been standardized with this population.

Prevalence of Substance Abuse

- 9.5 % patients admitted in a psychiatric facility in Alain between 1990 and 1991 due to alcohol and drug abuse problems (Younis & Saad, 1995); 42.3% poly-substance users.
- 85.7 % poly-substance use in prison population in Dubai compared to 35% in inpatient facility Dammam, KSA (Amir, 2001); earlier age of onset in Dubai (18 years) compared to Dammam (22 years).

Prevalence of Substance Abuse

- Alcohol related problems in 28 % of the prison sample (Ghubash & El Rufaie, 1997); 16% had a history of alcohol withdrawal; 63% used drugs; 46 % had a history of drug withdrawal; History of seizures represented 13% and related to drug and alcohol use.
- O Substance abuse present in 0.7 % of males and 0.1 % of females interviewed in Alain community (Abou-Saleh, Ghubash & Daradkeh, 2001).

Prevalence of Substance Abuse

Sample is from a community mental health center in Dubai (Lawton & Shulte, 2012); Alcohol drinking in 77.6 % with a medium level of alcohol related problem; High levels of problematic drinking in 21.1%.

Type of Substances used in U.A.E.

- O Heroine
- Alcohol
- O Hashish
- Pharmaceutical drugs: Sedatives, stimulants, opioids
- O Glue
- Cocaine

Social factors contributing to Substance Abuse

- Community Mental Health perspective
- O Globalization, Capitalism, and Consumerism
- Theory of Dislocation and Substance Abuse
- Acculturation



Globalization and Identity

- O Globalization encourages a form of interdependence between nations; results in a shift in cultural and personal identities (Nelson & Prilleltensky, 2010).
- O Introduction of foreign cultures and various religious beliefs creates new challenges and stressors for individuals when forming their identity (Grumer & Pinquart, 2011; Okasha, 2003).
- O Identities are affected by career choice, lifestyle, and social events (Grumer & Pinquart, 2011).

Consumerism

Consumerism is "the process that orients much of life around earning money in order to purchase unnecessary goods. Consumerism is a core ideological process sustaining globalization" (Nelson & Prilleltensky, 2010, p. 342).

Consumerism

- Cognitive
- C Emotional
- Behavioral
- Institutional practices

Dislocation and Substance Abuse

O Psychosocial integration: an "experience of engagement with a group and to the groups understanding and acceptance of the individual" (Alexander, 2000, p. 501).

When psychosocial integration fails dislocation occurs.

Globalization, Consumerism & Mental Illness

- O Grumer and Pinquart (2011): Accumulation of demands in work, family, and public life when social change occurs increases prevalence of depressive symptoms.
- Reduced confidence in religious and political authorities while being faced with unfamiliar cultures and religions increase stress and depression (Grumer & Pinquart, 2011).
- High optimism and social support related to less depression (Grumer & Pinquart, 2011).

Globalization, Consumerism & Substance Abuse

- O Ghubash, Hamdi, and Bebbington (1992): high prevalence of depression U.A.E. compared to Northern Europe and Mediterranean countries due to social changes occurring in Dubai.
- O Employment decreases uncertainty about social, economic, and individual development by providing access to resources whereas unemployment is associated with depression (Grumer & Pinquart, 2011; Lawton & Shulte, 2012; Ghubash et al., 1992); Self medicate with substances when unemployed.

Acculturation

- Rise in immigrants due to attractive commercial and economic sectors (Davidson, 2008).
- O According to Nelson and Prilleltensky (2010) acculturation "involves challenges and subsequent changes to one's culture. Acculturation reflects the adaptations that different cultural groups must make due to continuous first hand contact with others" (p. 376).

Acculturation

- Acculturation contributes to substance abuse (Arfken Kubiak & Farrag, 2009; Diamond, Farhat, Al-Amor, Elbedour, Shelef & Bar-Hamburger, 2008).
- Mixed results about religion as a protective factor.

Treatment modalities for Substance Abuse

- Cognitive Behavioral Therapy (CBT)
- O 12 step programs
- Minnesota Model

CBT and Middle Eastern Population

- O No studies exist to assess the validity of CBT with Middle Eastern population, specifically with substance abuse.
- Advantages: Structured educational approach, reinforcement of strengths, emphasis on problem solving in the here and now, couples and families (Abudabbeh & Hays, 2006).
- O Limitations: Not inclusive of religion, high value on personal independence, behavioral change, and rationality, confrontational manner (Abudabbeh & Hays, 2006).

Twelve step and Middle Eastern Population

- Religious component is culturally appropriate (Abuddabeh & Hamid, 2001).
- O Communal nature fits the culture (Abuddabeh & Hamid, 2001).
- O Disclosure of substance abuse issues a problem (Abuddabeh & Hamid, 2001).
- O Education about stigma and the nature of AA/ NA is needed to aid individuals to confront their substance abuse issues (Abuddabeh & Hamid, 2001).

Minnesota Model and Middle Eastern Population

- O Shame and punishment are tactics that are used in Middle Eastern families (Arfken et al., 2009). Shame is particularly intense in women (Taayiba Al Marri, personal communication, 7th January, 2014).
- O Shame and punishment by family members and community prevent drug and alcohol use; However, for those who have an addiction, it may act to reduce access to treatment (Arfken et al., 2009).
- O Education reduces shame and punishment (Arfken et al., 2009).

Abdel-Mawgoud, Fateem & Al-Sharif (1995)

- Assessed 3 phases of treatment (KSA): 1st drug therapy; 2nd 12 step; 3rd extensive program(30 day inpatient program, short term rehabilitation unit, relapse prevention).
- O Results: 1st phase had a high count of people because of medication dispensed but further addiction was a problem; 2nd phase showed less patients because medication was restricted and less training and cultural awareness when applying 12 step principles.

Abdel-Mawgoud, Fateem & Al-Sharif (1995)

- Third phase most successful (pharmacological treatment, community meetings, group therapy, individual therapy, educational activity, recovery groups, family therapy, religious and spiritual groups, activity therapy, biofeedback, acupuncture, and 12 step).
- O Improved staff performance and encouraged change in patient's attitude; more patients attended program; decline in medication dispensed; improvement in participation in group activities, individual therapy, recovery groups, and activity therapy.

Treatment Facilities in U.A.E.

- O Limited number of adequate substance abuse rehabilitation centers and studies reflecting success of treatment.
- O Committees formed to encourage a unified mental health policy (Kraya, 2002).
- O Proposals to Ministry of Health have been put in place in order to combine Islamic laws with the advances of the country while following the principles of the WHO (Kraya, 2002).
- O Clarify and specify the role of the Ministry of Health and the justice system (Kraya, 2002).

Dr. Mohammed Fayek

(personal communication, 26th December, 2013)

"Serious efforts to integrate the mental health services and the drug rehabilitation treatment in the form of the none voluntary treatment for addiction as replacement for imprisonment."

Substance Abuse Treatment in U.A.E.

- O "Alcohol withdrawal protocol" (Jane Griffith, personal communication, 5th January, 2014).
- O Evidence based treatment found to be effective in U.A.E. (detoxification, medical treatment of co-morbid conditions, Motivational Interviewing, Matrix Approach, CBT and Relapse Prevention) (Shamil Wanigaratne, personal communication, 1st January, 2014); not research to support above claims.

Barriers to Treatment: Stigma

O Study in Kuwait about attitude of the general public towards substance use (Bilal, Makhawi, Al-Fayez & Shaltout 1990).

O Results:

Younger males of a Kuwaiti nationality with 13 years of education, viewed substance use as deviant from society but also aware of health and social ramifications of use and encourage engaging in psychiatric treatment, legal, moral or religious reformation.

Barriers to Treatment: Stigma

O Results continued:

- Non-Kuwaiti Arabs living in Kuwait and older adults with 13 years of education view addicts as wicked disbelievers of god, who need to be punished by Islamic law and exiled.
- O Women and those who do not have a higher education viewed substance use as prohibited by Islam and something that could anger god.
- O Younger adults who had a higher level of education viewed smoking as socially unacceptable and as a deviant behavior.

Dr. Layla Asamarai

(personal communication, 29th December, 2013)

- "Societally substance abusers are seen as criminals and lack morality; feared and considered dangerous (willing to do anything for their substances) and are considered "hopeless cases"."
- O Families may hide any abuse, exile the family member outside the country, report them to police, or socially ostracize the family member.

Dr. Taayiba Al Marri

(personal communication, 7th January, 2014)

- Family members feel helpless, hopeless, and judged by society and religion.
- O Seek help from religious healers as an alternative treatment.

Barriers to Treatment: Stigma

Natan, Beyil & Neta (2009) explored how nurses' attitude towards addicts and how it impacts the quality of care given.

O Results:

- Nursing staff viewed addicts as violent, with low socioeconomic status, with an unhygienic presentation, having contagious diseases, bad mannered, scary, dangerous, having a low cognitive level, having family with a low cognitive level, and a weak character.
- Perceive the quality of care provided to addicts as lower compared to other clients.

Barriers to Treatment: Stigma

- O Results continued:
 - Fear of exposure to contagious diseases such as HIV and Hepatitis.
 - O Do not view addicts as responsible for their health condition and view addicts as deserving of high quality care.
 - Caring for addicts disrupts department routines.
 - Adequate supervision and guidance improves treatment; Nurses attribute more significance to the opinions of superiors and the medical.

Barriers to Treatment: Stigma

- C Lack of awareness/training in substance abuse field contributes to ill treatment of addicts (Natan et al., 2009; Mohammed Fayek ,personal communication,26th December, 2013).
- O Training and education helps nurses distinguish between drug-seeking behavior and true complaints of pain (Hamdan-Mansour, Mahmoud, Asqalan, Alhasanat & Alshibi, 2012).

Barriers to Treatment

- O Clinical staff in hospital settings may be culturally reluctant to ask questions about alcohol and drug usage (Jane Griffiths, personal communication, 5th January, 2014).
- C Lack of organizational support (Jane Griffiths, personal communication, 5th January, 2014; Layla Asamarai, personal communication, 29th December, 2013).

Substance Abuse Treatment Recommendations in U.A.E.

- O Detox measures, inpatient rehabilitation, partial recovery program(Mohammed Fayek, personal communication, 26th December, 2013). Promising due to similar format implemented in KSA (Abdel-Mawgoud, Fateem & Al-Sharif, 1995).
- Collaborative abstinence model (individual and group) (Layla Asamarai, personal communication, 29th December, 2013).

Substance Abuse Treatment Recommendations in U.A.E.

- Organizational support to set up workshops and trainings for mental health professionals to increase awareness and knowledge about diagnosing and treating substance abuse disorders (Mohammed Fayek, personal communication, 26th December, 2013).
- O "UAE wide Think Tank" to identify issues and to examine the "gold standard" for evidence based practice (Jane Griffith, personal communication, 5th January, 2014).

Dr. Shamil Wanigaratne

(personal communication, 1st January, 2014)

- O The National Rehabilitation Center (NRC) has been carrying out a Rapid Situation Assessment (RSA) in the U.A.E. with the United Nations Office on Drugs and Crime (UNODC).
- O The RSA will expose areas where more indepth assessment and analysis needs to be carried out.

Research recommendations

- O "An integrated approach among all different authorities needed to apply a needs assessment and understand the magnitude of the problem" (Mohammed Fayek, personal communication, 26th December, 2013).
- All the Field Consultants were consistent about collaborations with clients and different disciplines.

Research recommendations

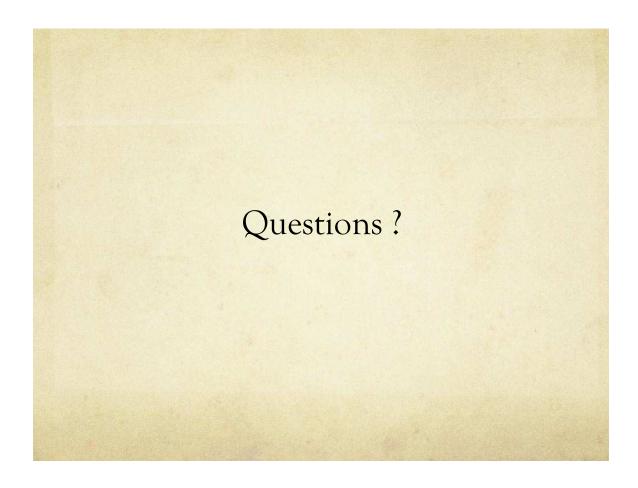
- A general questionnaire to Police, Prisons & Health care facilities (Jane Griffith, personal communication, 5th January, 2014).
- Targeted population survey, general population survey, frequency of arrests for substance use, substance abuse screening at medical settings, assess needs and difficulties of addicts in/not in treatment (Taayiba Al Marri, personal communication, 7th January, 2014).

Conclusion

- Training and education is greatly needed for professionals and the general public.
- O Social and community support is important and encouraged.
- Team of health professionals, police, government officials, media etc... to tackle substance abuse issues.

Special Thanks

- O Dr. Layla Asamarai
- O Doctoral Project Chair
 - O Dr. John Bakaly
- Academic Consultant
 - O Dr. Joan Murray
- Field Consultants
- The audience!



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APPENDIX B

Presentation Evaluation Form

Please provide feedback on today's presentation. Your feedback is essential in helping							
me determine the effectiveness of this presentation and the usefulness of the information							
provided. Than	k you for atter	nding this prese	ntation.				
1. How fa	miliar were yo	ou with the topic	c of substance a	buse disorders in the U.A.E.			
before t	he presentatio	n?					
1	2	3 4	5				
Completely	Somewhat	Neither famil	iar Somewhat	Completely			
Unfamiliar	unfamiliar	nor unfamilia	r familiar	familiar			
Comments:							
2. How fa	miliar were yo	ou with the topic	c of substance a	buse treatment in the U.A.E.			
before t	he presentatio	n?					
1	2	3 4	5				
Completely	Somewhat	Neither famil	iar Somewhat	Completely			
Unfamiliar	unfamiliar	nor unfamilia	r familiar	familiar			
Comments:							
3. Did the	presentation i	ncrease your kr	nowledge of the	substances abused in the			
United	Arab Emirates	s (U.A.E.)?					
1	2	3 4	5				
Not at All	Not Really	Undecided	Somewhat	Very much			

Comments:

4. Did the	presentation	increase	your k	nowledge of the	he factors that contributed to the
develop	ment of subst	ance abu	se?		
1	2	3	4	5	
Not at All	Not Really	Undec	ided	Somewhat	Very much
Comments:					
5. Did the treatme	_	increase	your k	nowledge of e	xisting substance abuse
1	2	3	4	5	
Not at All	Not Really	Undec	ided	Somewhat	Very much
Comments:					
6. Did the treatme	•	increase a	awarer	ness of the bar	riers to substance abuse
1	2	3	4	5	
Not at All	Not Really	Undec	ided	Somewhat	Very much
Comments:					

7. Did the	presentation 1	highlight the in	mportance of co	onducting research in the
substan	ce abuse field	in the U.A.E.?)	
1	2	3 4	5	
Not at All	Not Really	Undecided	Somewhat	Very much
Comments:				
substan	ce abuse field	?		g a needs assessment in the
1	2	3 4		
	Not Really	Undecided	Somewhat	Very much
Comments:				
1	2	resenter in exar 3 4 Undecided	5	
1	2	slides helpful ⁴ 3 4 Undecided	5	Very much

11. Was the	e presenter att	entive to	questi	ons?	
1	2	3	4	5	
Not at All	Not Really	Undec	ided	Somewhat	Very much
Comments:					
12. Was the	e presentation	informat	ive ov	erall?	
1	2	3	4	5	
Not at All	Not Really	Undec	ided	Somewhat	Very much
Comments:					
13. What so	uggestions do	you have	e to he	lp improve thi	s presentation?

APPENDIX C

Interview Questions for Field Consultants

- 1. How are substance abuse disorders diagnosed in the U.A.E.?
- 2. What is the role of society, the family, and the criminal justice system in the identification and treatment of substance abuse disorders in the U.A.E.?
- 3. What treatments have you found to be effective with substance abuse disorders in the U.A.E.?
- 4. What is your approach to treating substance abuse disorders in the U.A.E.?
- 5. What barriers do mental health professionals and clients face with the treatment of substance abuse disorders in the U.A.E.?
- 6. How and in what ways is it important for mental health professionals to increase their knowledge, skills, and awareness about substance abuse treatment in the U.A.E.?
- 7. What are your recommendations on how to implement a needs assessment on substance abuse issues in the U.A.E.?

APPENDIX D

Informed Consent for Field Consultants

This study examines substance abuse disorders and substance abuse treatment in the United Arab Emirates (U.A.E.). It is being conducted by Shaima Al Fardan, M.A. a psychology graduate student at the California School of Professional Psychology at Alliant International University, Los Angeles

I understand that I have been contacted by the above student to offer input as a Field Consultant because I have some expertise and/or clinical/professional knowledge about the stated project topic. The purpose of the interview is to fill the gaps that are in the research literature about this topic and to gain knowledge of what is being observed/practiced by the field professionals in the community.

I am aware that my participation as a Field Consultant will involve answering some questions via phone or email correspondence and that my feedback given during the interview may be utilized. The interview process may take 30 to 60 minutes of my time to complete. I am aware that I am permitting the researcher to cite my name within this current study. I am aware that I may request that my name not be included in this study and to remain as an anonymous contributor.

I understand that participation as a Field Consultant in this study is completely voluntary and that I may decline or withdraw at any time. I am aware that I may not directly benefit from this study; however, I understand that one of the benefits of participating in this study is that I will be providing helpful information to further enhance the understanding of substance abuse disorders and substance abuse treatment in the U.A.E..

I understand that if I have any concerns or questions regarding this study, I may contact the project supervisor, John Bakaly, Psy.D. at 1000 S. Fremont Ave., Unit #5,

Alhambra, CA 91803, or + 1(626) 270-3295. I understand that at the end of the study, I may request a summary of the results or additional information about the study from Shaima Al Fardan, who can be reached at salfardan@alliant.edu. I am aware that I will be signing two copies of this form. I will keep one copy and Shaima Al Fardan will keep another copy for her records. I have read this consent and fully understand it. My signature below confirms that I voluntarily agree to participate in the current study as a field consultant and agree to the conditions described above.

* NOTE: If you are receiving this document via email please reply: I agree to the above stated conditions.

Field Consultant Signature	Date Signed	
Current Researcher Signature	——————————————————————————————————————	

APPENDIX E

Curriculam Vitae

Shaima Al-Fardan

+ 971 (50) 6339018 • drshay82@gmail.com 278 E Colorado Blvd, Pasadena, CA 91101

EDUCATION

California School of Professional Psychology at Alliant International University, Los Angeles.

Date Entered: August 2010

Date of Expected Graduation: June 2014

Program: Doctorate in Clinical Psychology (PsyD) in Clinical Psychology, Multi-

Interest Emphasis

California School of Professional Psychology at Alliant International University, Los Angeles.

Date Entered: August 2010
Date of Graduation: June 2012

Program: Master of Arts (MA) in Clinical Psychology, Multi-Interest Emphasis

Institute of Psychiatry, King's College London, United Kingdom

Date Entered: September 2005

Date of Graduation: September 2006

Program: Masters of Science (MSc) in Mental Health Studies

The University of Kent, Canterbury, United Kingdom

Date Entered: September 2000 Date of Graduation: June 2004

Program: Bachelors of Science (BSc) in Psychology and Clinical Psychology

CLINICAL EXPERIENCE

Family Medicine Centre, Glendale Adventist Hospital Glendale, California, U.S.A.

Doctoral Internship (09/2013-09/2014)

- Offering individual therapy and developing treatment plans.
- Offering crisis management for walk in clients.
- Attended trainings on psychopharmacology.
- Facilitating referrals from the medical team to the psychology team and vice versa.
- Attending weekly individual and group supervision sessions.

Los Angeles Gay and Lesbian Center

Los Angeles, California, U.S.A.

Practicum Student (09/2012-08/2013)

- Conducted intake evaluations.
- Offered individual therapy and developing treatment plans.
- Offered crisis management for walk in clients.
- Attended trainings on LGBT Affirmative Counseling, Sexual Identity
 Development for Therapists, LGBT Identity development, Crisis Intervention,
 HIV/AIDS, Substance abuse and Crystal Meth, and LGBT Domestic
 Violence.
- Attended weekly individual and group supervision sessions.

Santa Anita Family Service

Covina, California, U.S.A.

Practicum Student (09/2011-07/2012)

- Conducted intake evaluations.
- Offered individual therapy and developing treatment plans.
- Co-facilitated parenting and chemical dependency groups.
- Attended weekly training seminars.
- Attended weekly individual and group supervision sessions.

Ramona Elementary School

Alhambra, California, U.S.A.

Practicum Student (10/2010-06/2011)

- Offered individual therapy for students with academic and/or behavioral issues.
- Conducted intake evaluations.
- Facilitated Second Step groups on emotional development and social skills.
- Attended weekly training seminars.

Rashid Hospital

Dubai, United Arab Emirates

Psychologist, (5/2007-5/2010)

- Assessments, formulations and interventions with clients (inpatient/outpatient).
- Administered, scored and interpreted psychometric tests.
- Tutored medical/psychology interns and psychiatry residents on basic principles of psychology/psychotherapy.
- Provided lectures/workshops to different departments in the hospital.