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Health Care Under the Influence: Substance Use Disorders in the Health Professions

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1. Introduction

Substance use disorders are expressed within most age, economic, cultural, gender, and occupational groupings. They come to expression in individuals who may be considered vulnerable on biological, psychological, social, family, or spiritual levels. As with other mental disorders, vulnerability differs between individuals with both nature and nurture influencing their risk. Some health care professionals will also develop these chronic disorders regardless of any special knowledge or experience they may have. When substance use disorders are expressed within the health care professions, the delivery of safe, competent, compassionate, and ethical care is threatened. The health of the health care professional is also at risk as the substance use disorders typically progress in severity and may result in premature death.

This is often a sensitive issue to address yet its importance demands the concerted attention of the health care professions. The following chapter begins with background on the issue of substance use disorders within the health care professions, followed by a discussion of mitigating associated risks, and an exploration of disciplinary and alternative to discipline policies. This chapter is focused primarily on literature on physicians and nurses because of the predominance of research in these disciplines. The argument will be made that creating conditions that encourage early identification, reduce barriers to treatment, and that include long-term monitoring programs provide the best conditions for ameliorating the risks resulting from substance use disorders amongst the health care professions to patient safety and health care professional health.

2. Background

It has been argued that the substance use disorders are the most important illnesses of our time because they are the most prevalent mental disorder, the leading preventable cause of death and disease, and the single greatest contributor to excess health care spending (Els, 2007). Their scope is widespread as they affect the health and wellbeing of individuals, families, and society at large. The substance use disorders are a leading occupation health issue, ranking second as the cause of disability, and affect individuals predominantly in their prime working years.

The substance use disorders are chronic, progressive, and potentially fatal illnesses that are recognized by both the major disease classification systems as bona fide, chronic and relapsing medical conditions (American Psychiatric Association [APA], 2000; World Health Organization [WHO], 2007). Research has demonstrated that repeated exposure to substances over time might alter brain structure, chemistry, and function in susceptible individuals. The American Psychiatric Association's [APA](2000) *Diagnostic and Statistical Manual of Mental Disorders,* 4th edition, text revision (*DSM-IV-TR*) classification of Substance Use Disorders includes the disorders of Substance Dependence and Substance Abuse.

Substance Dependence is described as the continued use of a substance despite significant substance-related problems and a pattern of repeated self-administration that can result in tolerance, withdrawal, and compulsive drug-taking behaviour. Craving, defined as a strong desire to use the substance, is experienced by most individuals. Substance dependence as characterized by a maladaptive pattern of substance use, leading to clinically significant impairment or distress, and manifested by three (or more) of the following occurring at any time in the same 12-month period:

- Tolerance as defined by either of the a need for markedly increased amounts of the substance to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount of the substance,
- Withdrawal as manifested by the characteristic withdrawal syndrome for the substance, or by the ingestion of the same (or a closely related) to relieve or avoid withdrawal symptoms,
- Taking of the substance in larger amounts, or over a longer period, than was intended,
- Persistent desire or unsuccessful efforts to cut down or control substance use,
- Spending a great deal of time in activities to obtain the substance, use the substance, or recover from its effects,
- Reduction or abstinence of important social, occupational, or recreational activities because of substance use,
- Continued substance use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (APA, 2000).

Substance Abuse is described as a maladaptive use of chemical substance(s) leading to clinically significant outcomes or distress (i.e.. recurrent legal problems, failure to perform at work/home/school, and physically hazardous behaviour). The criteria do *not* include tolerance, withdrawal, or a pattern of compulsive use. Instead it includes the harmful consequences of repeated use. It is pre-empted by the diagnosis of Substance Dependence at any point in the individual's life, and for that specific class (or classes) of substances. Substance Abuse is manifested by one (or more) of the following occurring within a 12-month period:

- Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; suspensions from school; neglect of children),
- Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile impaired by substance use),
- Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct),

- Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication) (APA, 2000).

It has been proposed that the substance use disorders will have different criteria in the upcoming American Psychiatric Association DSM-5. Under the new classification of Substance Use and Addictive Disorders, the proposed revision collapses the existing division between dependence and abuse, and lists the existing indicators together (for a total of 11 indicators). Severity of the disorder will be described as moderate with the presence of 2-3 positive criteria and severe for 4 or more positive criteria. The term 'Physiological Dependence' will refer to evidence of tolerance and/or withdrawal (American Psychiatric Association [APA], 2011).

Individuals in the '*pedestal professions*' are also potentially vulnerable to developing substance dependence or substance abuse, and some health care professionals will be affected regardless of any special knowledge, skills, or insights they may have due to their education and professional experience. The health care professional might have entered their career with a family history of members with these disorders or other vulnerabilities that place them at risk (Kenna & Wood, 2005). There is evidence suggesting health care professionals may be placed at increased risk for developing these disorders because of work related factors such as high job strain, disruption and fatigue related to shift work and long hours, ease of access to medications in the workplace, self-treatment of pain and emotional problems, working in certain specialties, and knowledge of the benefits of medications (Lillibridge et al., 2002; McAuliffe et al., 1987; Trinkoff & Storr, 1998; Trinkoff et al., 2000; Wright, 1990).

Since the late 1970's, numerous studies have examined the use of substances among health care professionals. Methodological inconsistencies between these studies do not allow for direct comparisons or conclusions. In general, however, it appears that health care professionals are affected at rates similar to the general population with possibly higher patterns of use for substances they may have access to within the workplace (Brewster, 1986; Collins, 1999; Hughes et al., 1992; Kenna & Wood, 2004; Kunyk, 2011; Storr et al., 2000; Trinkoff & Storr, 1998; Tyssen, 2007). If this conclusion is accurate, then approximately 8.5% of health care professionals will have an alcohol use disorder (Hasin et al., 2007), and a further 2% (Compton et al., 2007) will experience a drug use disorder within the next 12 months.

3. Mitigation of risk

Substance use disorders within the health care professions is a serious and complex issue for the individual with the disease as well as their families, patients, colleagues, professional body, employer, and society at large. The health of the health care professional is threatened as these disorders typically progress in severity and may result in premature death (Kleber et al., 2006). Health care professionals are in a safety-sensitive positions; their occupational functioning impacts public safety. Patient safety may be placed at risk when health providers practice with active, untreated substance use disorders as alertness, attention, concentration, reaction time, coordination, memory, multi-tasking abilities, perception, thought processing, and judgment can be compromised (Graham et al., 2003).

When substance use disorders are expressed in health care professionals, the goal is for early identification, treatment, documentation, and monitoring of ongoing recovery prior to the illness impacting the care of patients or the health of the health care provider with the disorder. Achieving this goal also reduces the risks of these disorders to the health of the health care professional. The global and chronic shortage of health care professionals (World Health Organization [WHO], 2006) confirms that early identification, recovery, and return to work are critical goals for society. As a group, however, health care professionals often ignore our collective responsibility for identifying, treating, and supporting our colleagues when a substance use disorder comes to expression (Talbot & Wilson, 2005).

3.1 Early Identification

Early identification of health care professionals affected by substance use is necessary to protect the safety of patients and to achieve the best possible outcomes for the health of the health provider. This is a challenging goal as early evidence of the disease may be difficult to identify. Research suggests that the order in which the effects of substance use disorders in physicians are first observed starts with the family, then the community, next is financial, spiritual, emotional and physical health, after which job performance is finally impacted (Talbott & Wilson, 2003).

As the work area is the last place where substance use by the health care professional is apparent, identification may occur late in the progression of the Substance Use Disorder. Identification of concerns about the use of substances by a health care professional on their practice, or on their health, may be self-identified, identified by their colleagues or through a formal complaint to the employer or regulatory body. These will now be discussed.

3.1.1 Self-identification

Health care professionals are ethically required to ensure their fitness to practice by withdrawing, restricting, or accommodating their practice if unable to safely perform essential functions of their role. This responsibility can be interpreted to necessitate self-removal from the work setting if the health care professional questions his/her use of alcohol and/or drugs. For the purposes of ongoing registration, health care professionals may be required to self-identify whether the use of alcohol and/or other drugs may impair their ability to practice upon their initial registration as well as on their annual practice permit application.

There is some evidence to suggest that nurses may be more cognizant of the need to access treatment for their substance use, and more engaged in treatment, when compared with the general population. Within a sample of 129 registered nurses self-identified with substance dependence in the last 12 months, 27 (22.3%) had sought help for their use of alcohol and/or drugs within the last 12 months. Slightly more (28; 23.2%) thought they should seek help but had not done so. Most of this subset (23; 82.0%) indicated they did not get help because they were too embarrassed to discuss it with anyone. The next most cited reason (18; 53.2%) was they did not think anyone could help (Kunyk, 2011). That almost one quarter of nurses with substance dependence were receiving some help is a positive finding. As almost one quarter aware of their need for assistance with their alcohol and/or drug use but had not done so suggests there is a tremendous opportunity to mitigate the risks associated with substance use.

Reducing the barriers to self-identification and treatment seeking is one measure to mitigate risks associated with substance use disorders in the health care professions. Stigma is a key

barrier for anyone impacted by the substance use disorders. Stigma is not confined to the general public; it also occurs among health professionals (Standing Senate Committee on Social Affairs, 2006). Some nurses have acknowledged delaying treatment seeking because of stigma felt within the workplace, and this procrastination prolonged their recovery (Lillibridge et al., 2002). Darbro (2005, p.179) noted that a 'culture of mistreatment of addicts in the workplace by health care professionals' was listed as a reason for concealing their illness from colleagues, and that this procrastination prolonged their recovery. In this sense, the environment in which the health care professional works can be a part of the problem.

Confidentiality provides a level of protection from stigma and, for this reason, is considered an essential precondition to successful treatment for individuals with substance use disorders (Roberts & Dyer, 2004). Confidentiality may be placed at risk when health care professionals with substance use disorders seek treatment when their employer is also their health care professional. Confidentiality is also not afforded when health care professionals are subject to formal investigations, open hearing tribunals, and publication of discipline decisions.

"Wearing Two Hats": When the Employer is the Treatment Provider

In some situations, health care professionals may be placed in the position of receiving treatment from their employer for their substance use disorder. As the substance use disorders are highly stigmatizing illnesses, confidentiality by the treatment provider is a critical necessity for the individual seeking treatment. However, the employer is also responsible for assuring the provision of safe care by their employees. What are the responsibilities when a treatment provider learns that their health care professional-employee has a substance use disorder?

The Alberta Office of the Information and Privacy Commissioner (Order H2011-001) made a ruling on this question when a complaint was lodged against Alberta Health Services' (AHS) collection, use, and disclosure of the health information of an employee with a substance use disorder. In this case, the health care professional (an employee of AHS) attended addiction counseling through AHS Mental Health and Addiction Services. The counselor provided the information obtained to the AHS human resources department. This information was then used to conduct an investigation that resulted in suspension from employment. The health information was also disclosed to the regulator/professional body.

In examining the case, the Adjudicator raised a number of important questions and conclusions:

- Why would subjecting an individual to a human resource investigation be necessary for promoting and protecting the public health (Section 52),
- Why would an employee receiving treatment for a relapse pose a threat to public health (Section 530),
- Disciplining health professionals rather than treating them is not in the best interests of either health care professionals or their patients given the risk that health care professionals will not seek treatment to avoid professional repercussions. To better protect patients, the privacy of health care professionals should be protected. Patient confidentiality is key to providing reasonable healthcare. Employees/health care

professionals are entitled to the same level of reasonable health care (and confidentiality) as other Albertans (Section 59),

- There is nothing in the Health Information Act that suggests that patients who are also health care professionals should have less protection in relation to their health information than anyone else seeking health services has (Section 71), and
- The AHS interpretation would have '*the extremely deleterious chilling effect of discouraging health care professionals with health problems which could be seen as adversely affecting their ability to perform their employment duty from seeking treatment in order to avoid these problems from coming to light. This approach would have the effect of exacerbating the problems to patient care that the provision is seeking to avoid* (Section 72).'

The Arbitrator concluded that when individually identifying health information was transferred between the addictions counselor and the acting manager and employees of human resources for the purpose of conducting a human resources investigation, this was an internal use of health information, and that the disclosure of health information and also that the professional body contravened the Health Information Act. The employer was ordered to cease collecting, using and disclosing health information in contravention of the Health Information Act.

This decision provides clarification regarding the protection of confidentiality for the health care professional who is receiving treatment, and the boundaries between the role of treatment provider and employer. It is consistent with the American Medical Association (2008) statement that *'as patients, physicians are entitled to the same right to privacy and confidentiality of personal medical information as any other patient'*.

Source: Alberta, Office of the Information and Privacy Commissioner, Order H2011-001, July 29, 2011, Alberta Health Services, Case File Number H3350 (www.oipc.ab.ca)

3.1.2 Peer identification

Perhaps one of the more difficult challenges health care professionals may have to confront in their careers is to determine their obligations when they suspect substance use is affecting the performance of a colleague. Taking action may feel overwhelming when faced with uncertainty about how to proceed, the knowledge that raising concerns in such situations is often difficult at best, and the awareness that any action may permanently risk the reputation of the colleague under concern. There is also the reality that the health care professionals involved in this situation may continue to work together and that action (or inaction) will impact on their ongoing relationship.

Health care professionals are morally, and often legally, compelled to address threats to the delivery of safe, competent, compassionate, and ethical care, as may be the case when the practice of their colleagues may be impaired by the use of substances. Moral obligations are also raised when health care professionals develop substance use disorders, as they would be for any other health care professional with an illness, but particularly when the high stress of caring work and access to substances has placed them at risk (Kunyk & Austin, 2011). For any health care professional having concerns about a colleague, their professional and ethical requirement is to report these.

The urgency of patient safety in the immediate situation is clearly of utmost priority and health care professionals are obliged to intervene when they perceive patient risk. If harm is

not imminent, health care professionals are obligated to address their concerns as directly as possible in ways that are consistent with the good of all parties. When appropriate and feasible, actions may include:

- Directly seek input from the colleague whose behaviour or practice has raised concern,
- Maintaining a high level of confidentiality about the situation and actions,
- Seek information from relevant authorities (e.g. supervisor or manager) on expected roles and responsibilities for all of the parties, and
- Consult the relevant professional association and/or regulatory body for guidance and/or to assist in addressing and resolving the problem.

With these initial steps, the colleague may be approached, and advice and direction sought, without revealing the identity of the colleague with the suspected problem (Canadian Nurses Association [CNA], 2008, p. 41).

There are members of the health care community who do not believe they have the able to recognize or to assist when the practice of a colleague may be impaired by the presence of an active and untreated substance use disorder. In an Internet survey of 4064 registered nurses, 98% nurses understood the importance of identifying impaired practice. But only 53% were confident in their abilities to recognize or intervene when it occurs (Kunyk, 2011). Health care professionals must learn about, and become sensitive to, signs of substance use affecting the professional performance of their colleagues. As the substance use disorders are potentially fatal, and impaired practice places patient care at risk, early detection may save their colleagues' or a patients' life.

The manifestations of impaired practice tend to be varied and non-specific. Early on, patterns of high alcohol intake at social events or generalized irritability might be observed. Later they may be as overt as intoxication, with symptoms of ataxia and dysarthia, while at work (Berge et al., 2009). Behaviours associated with physicians might include late rounds, unavailability or inappropriate responses to calls, and prolonged or failure to respond to paging (Talbott & Wilson, 2003). It has been noted that nurses may volunteer to give pain relief to their colleagues patients, wait until alone in the medication room before opening the narcotics cabinet, and consistently sign out more narcotics that their peers (Quinlan, 2003). When the substance of choice is diverted from the workplace, the health provider may show up at work when not scheduled or work longer hours. For health care professionals, alcohol is the most common drug of choice followed by opioids, and multiple drug use is not uncommon (Glasser et al., 1986. Gossop et al., 2001; Reading, 1992). Berge, Seppela and Schipper (2009) have identified specific behaviours suggestive of alcohol dependence and opiate dependence in health care professionals (Table 1).

When concerns about substance use on their professional practice are addressed, the health care professional may reject the possibility. Others may be relieved that they were approached. The identification of the problem by a nurse colleague can be the turning point for recovery (Lillibridge et al., 2002). Recovered nurses have reported that they felt let down when other nurses failed to recognize or confront their substance problem, and some recovered colleagues feel that the intervention probably saved their lives (Lillibridge et al., 2002). In fact, having the support of colleagues is perceived as one of the most important factors in a successful recovery (Hughes, 1998).

When addressing concerns, the objectives are for the health care professional to immediately discontinue work and directly proceed to have a comprehensive assessment to determine

the presence of a substance use disorder. With a compassionate, non-confrontational approach, an assessment and discontinuation of work is strongly advised because concerns have arisen without pressing the issue of whether or not there is a bona fide problem. If this is refused, then the individual is advised that the alternative is to refer the matter to the regulatory board (Skipper, 2009). Referral options and an action plan should be in place so that the health care professional-patient will be enabled to follow the recommended assessment and/or treatment. Arguments have been made for a chain-of-custody transfer of the health care professional-patient to the area where the assessment will occur to decrease the risk of a tragic outcome (Berge et al., 2009).

Signs Suggestive of Alcohol Dependence

- Alcohol on breath
- Slurred speech
- Ataxia
- Erratic performance or decrement in performance
- Tremulousness
- 'Out of control' behavior at social events
- Problems with law enforcement
- Hidden bottles
- Poor personal hygiene
- Failure to remember events, conversations or commitments
- Tardiness
- Frequent hangovers
- Poor early morning performance
- Unexplained absences
- Unusual traumatic injuries
- Mood swings
- Irritability
- Sweating
- Domestic/marital problems
- Isolation
- Leaving the workplace early on a regular basis

Signs Suggestive of Opioid Dependence

- Periods of agitation (withdrawal) alternating with calm (drug was just taken)
- Dilated pupils (withdrawal) or pinpoint pupils (side effect of opiate)
- Excessive sweating
- Wearing long sleeves
- Frequent bathroom breaks
- Unexplained absences during the workday
- Spending more hours at work than necessary
- Volunteering for extra call / work
- Volunteering to provide extra breaks or refusing breaks
- Volunteering to clean operating rooms
- Volunteering to return waste drugs to pharmacy

- Rummaging in sharps container
- Slopping record keeping or discrepancies between charted dose and actual dose delivered
- Excessive narcotic use charted for patients
- Assay of waste drug returned showing evidence of dilution
- Never returning any waster at the end of a case
- Patients reporting pain out of proportion to charted narcotic dose

Source: Berge, K.H., Seppela, M.D., Schipper, A.M. (2009). Chemical dependency and the physician. *Mayo Clinical Proceedings 84*(7): 625-631.

Table 1. Possible Signs Suggestive of Substance Dependence in a Health Care Professional

3.1.3 Formal complaint

Both health organizations and regulatory bodies have responsibilities to ensure their patients are receiving safe and ethical care. For regulatory bodies, their mandate is to assure their members are practicing according to their professional standards. But there are also organizational responsibilities to health care professionals with substance use disorders. Human rights legislation in Canada recognizes addiction as a disability. As a result, there exists a duty to accommodate for both the employer and the regulator. Health care professionals with substance use disorders may come to the attention of their regulator and/or employer through formal complaints filed by colleagues, public members, or other individuals. When this occurs, these organizations are required to respond according to their policy directions.

Their options for action will be discussed in section 4.0 on policy alternatives.

3.2 Comprehensive assessment

When concerns about the effects of substance use are identified, the objectives are for immediate withdrawal from practice until a comprehensive assessment may take place. The purpose of this assessment is to establish whether or not the individual has a substance use disorder. One or more medical professionals experienced in the evaluation of substance use disorders and its concomitant problems in health care professionals may perform the assessment (Talbott & Earley, 2003). Certified addiction medicine specialists (American Board of Addiction Medicine [ABAM], 2011) are trained to identify and treat the medical consequences of alcohol and / or substance abuse. These specialists perform a detailed history and examination, and order the appropriate diagnostic and confirmatory testing, to determine the medical diagnosis and recommendations for a range of addiction medicine treatments.

An assessment can determine, with a reasonable degree of medical certainty, if the health professional in question is impaired[1] or potentially impaired because of their use of alcohol and/or other substances. A comprehensive assessment should also determine any coexisting physical or mental problems, and make recommendations for the individual's treatment needs. The assessment team must also determine whether issues involving public

[1] The American Medical Association [AMA] Guides to the evaluation of Permanent Impairment, Sixth Ediction (2011) refers to impairment as *'a significant deviation, loss, or loss of use of any body structure or body function in an individual with a health condition, disorder, or disease'*.

health and safety, or violations of ethical standards, require that the health care professional be reported to their regulatory body, if not already aware (Talbott & Earley, 2003).
With a positive diagnosis for a substance use disorder, the first ethical obligation of the health care professional is to remove himself/herself from practice and engage in treatment. Many regulators have a requirement that the member self-report when they have an illness that may possibly impair their ability to practice.

3.3 Detoxification, medical stabilization and treatment

The Substance Use Disorders are widely considered to be amenable to treatment. The outcomes to evidence-based interventions are similar to other chronic disease conditions including hypertension, asthma, and Type 2 diabetes (McLellan et al., 2000). Most persons with a substance use disorder will have one or more relapses (the return to substance use after a drug-free period) during their ongoing process of recovery.
Early intervention with tailored, multi-modal and long-term treatment is generally acknowledged as providing the most beneficial treatment outcomes. These outcomes may include abstinence from, or reduction in, the use of substances, reduction in the frequency and severity of relapse to substance use, improvement in psychological and social functioning, and increased life expectancy (Kleber et al., 2006). For health care professionals, the primary goal is to achieve abstinence and maintain long-term remission of his or her substance use disorder (Talbot & Wilson, 2003).
Comprehensive treatment is aimed at reducing denial, increasing self-care, treating the coexisting family, medical, and psychiatric problems, and helping the health care professional learn to protect himself/herself from the substance use disorder. Safe and effective evidence-based treatments for individuals with substance use disorders requires matching treatment to include the modalities available for the particular disorder and comorbidities, as well as follow-up on a longitudinal basis. Evidence-based treatments for these disorders recognize their chronic and relapsing nature, and this frames recovery as a process as opposed to an event. With this approach, stand-alone interventions such as detoxification and residential treatment are considered as only one component to comprehensive treatment. The National Institute on Drug Abuse [NIDA] has identified thirteen principles for addiction treatment (Table 2).
Comprehensive treatment often includes detoxification, medical stabilization, individual and group therapy, Twelve Step programs, medication as required, written assignments, psychoeducation, family education and therapy, and workplace/lifestyle restructuring. A longitudinal approach to management of this chronic disease is ideal and, in general, the iterative goals of treatment are first to engage, assess, motivate, and help to retain the health care professional-patient in a safe and effective evidence-based treatment setting. Treatment retention and adherence to mutually agreed-upon goals generally maximize potential benefits of treatment and improve outcomes (Kunyk, Els & Robinson Hughes, 2010).

1. **Addiction is a complex but treatable disease that affects brain function and behavior.** Drugs of abuse alter the brain's structure and function, resulting in changes that persist long after drug use has ceased. This may explain why drug abusers are at risk for relapse even after long periods of abstinence and despite the potentially devastating consequences.
2. **No single treatment is appropriate for everyone.** Matching treatment settings,

interventions, and services to an individual's particular problems and needs is critical to his or her ultimate success in returning to productive functioning in the family, workplace, and society.

3. **Treatment needs to be readily available.** Because drug-addicted individuals may be uncertain about entering treatment, taking advantage of available services the moment people are ready for treatment is critical. Potential patients can be lost if treatment is not immediately available or readily accessible. As with other chronic diseases, the earlier treatment is offered in the disease process, the greater the likelihood of positive outcomes.
4. **Effective treatment attends to multiple needs of the individual, not just his or her drug abuse.** To be effective, treatment must address the individual's drug abuse and any associated medical, psychological, social, vocational, and legal problems. It is also important that treatment be appropriate to the individual's age, gender, ethnicity, and culture.
5. **Remaining in treatment for an adequate period of time is critical.** The appropriate duration for an individual depends on the type and degree of his or her problems and needs. Research indicates that most addicted individuals need at least 3 months in treatment to significantly reduce or stop their drug use and that the best outcomes occur with longer durations of treatment. Recovery from drug addiction is a longterm process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug abuse can occur and should signal a need for treatment to be reinstated or adjusted. Because individuals often leave treatment prematurely, programs should include strategies to engage and keep patients in treatment.
6. **Counseling—individual and/or group—and other behavioral therapies are the most commonly used forms of drug abuse treatment.** Behavioral therapies vary in their focus and may involve addressing a patient's motivation to change, providing incentives for abstinence, building skills to resist drug use, replacing drug-using activities with constructive and rewarding activities, improving problemsolving skills, and facilitating better interpersonal relationships. Also, participation in group therapy and other peer support programs during and following treatment can help maintain abstinence.
7. **Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.** For example, methadone and buprenorphine are effective in helping individuals addicted to heroin or other opioids stabilize their lives and reduce their illicit drug use. Naltrexone is also an effective medication for some opioid-addicted individuals and some patients with alcohol dependence. Other medications for alcohol dependence include acamprosate, disulfiram, and topiramate. For persons addicted to nicotine, a nicotine replacement product (such as patches, gum, or lozenges) or an oral medication (such as bupropion or varenicline) can be an effective component of treatment when part of a comprehensive behavioral treatment program.
8. **An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs.** A patient may require varying combinations of services and treatment components during the course of treatment and recovery. In addition to counseling or psychotherapy, a

patient may require medication, medical services, family therapy, parenting instruction, vocational rehabilitation, and/or social and legal services. For many patients, a continuing care approach provides the best results, with the treatment intensity varying according to a person's changing needs

9. **Many drug-addicted individuals also have other mental disorders.** Because drug abuse and addiction—both of which are mental disorders—often co-occur with other mental illnesses, patients presenting with one condition should be assessed for the other(s). And when these problems co-occur, treatment should address both (or all), including the use of medications as appropriate.
10. **Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse.** Although medically assisted detoxification can safely manage the acute physical symptoms of withdrawal and, for some, can pave the way for effective long-term addiction treatment, detoxification alone is rarely sufficient to help addicted individuals achieve long-term abstinence. Thus, patients should be encouraged to continue drug treatment following detoxification. Motivational enhancement and incentive strategies, begun at initial patient intake, can improve treatment engagement.
11. **Treatment does not need to be voluntary to be effective.** Sanctions or enticements from family, employment settings, and/or the criminal justice system can significantly increase treatment entry, retention rates, and the ultimate success of drug treatment interventions
12. **Drug use during treatment must be monitored continuously, as lapses during treatment do occur.** Knowing their drug use is being monitored can be a powerful incentive for patients and can help them withstand urges to use drugs. Monitoring also provides an early indication of a return to drug use, signaling a possible need to adjust an individual's treatment plan to better meet his or her needs
13. **Treatment programs should assess patients for the presence of HIV/ AIDS, hepatitis B and C, tuberculosis, and other infectious diseases as well as provide targeted risk-reduction counseling to help patients modify or change behaviors that place them at risk of contracting or spreading infectious diseases.** Typically, drug abuse treatment addresses some of the drug-related behaviors that put people at risk of infectious diseases. Targeted counseling specifically focused on reducing infectious disease risk can help patients further reduce or avoid substance-related and other high-risk behaviors. Counseling can also help those who are already infected to manage their illness. Moreover, engaging in substance abuse treatment can facilitate adherence to other medical treatments. Patients may be reluctant to accept screening for HIV (and other infectious diseases); therefore, it is incumbent upon treatment providers to encourage and support HIV screening and inform patients that highly active antiretroviral therapy (HAART) has proven effective in combating HIV, including among drug-abusing populations.

From National Institute on Drug Abuse [NIDA]. (revised April 2009). Available at: http://www.drugabuse.gov/PODAT/PODATIndex.html

Table 2. Principles of Addiction Treatment

3.4 Continuing care

As the substance use disorders are conceptualized as chronic diseases, detoxification, medical stabilization, and addiction treatments are only the beginning disease management. Upon successful completion of residential care, if necessary, and primary treatment, the health care professional is challenged with sustaining their recovery while returning to work.

After completion of primary treatment, a comprehensive medical assessment by one or more professionals experienced in the evaluation of addiction and its concomitant problems in health care professionals can provide an independent opinion regarding the scope of continuing care required by the recovering health care professional. Total abstinence is the treatment goal and adherence to this goal is assessed repeatedly throughout the ensuring prolonged monitoring programs (Section 3.5). Continuing care plans are individualized but may include specifics regarding:

- Abstinence from all drugs of abuse,
- Frequency of reassessment,
- Addiction medicine physician,
- Required therapy,
- Attendance at mutual help group meetings e.g. *Caduceus*,
- Random urine screening with observed micturition,
- Modifications in practice,
- Workplace surveillance,
- Additional continuing care assignments,
- Protocols to be followed should mood-altering drugs be required for a medical reason,
- Primary care physician,
- Family therapy,
- Contingencies should a relapse to substance use occur, and
- Names of individuals who will support the health care professional in his or her ongoing recovery.

Not all health care professionals receive similar or optimal treatment programs and return-to-work options. An exploratory study compared initial clinical presentations, service utilization patterns, and post-treatment functioning of physicians and nurses with substance use disorders who received services in an addiction treatment program (Shaw et al, 2004). Members of both professions showed comparable results. Prior to participating in the program, nurses showed less personality disturbance than physicians but did tend to work and live in environments with more triggers to relapse. Following their initial hospitalization, nurses received less primary treatment, worked longer hours, and were more symptomatic than physicians. Furthermore, nurses in this study reported more frequent and severe work-related sanctions. The authors conclude that, although in most areas of study, nurses and physicians demonstrated comparable results but that these significant differences suggest these groups may have different clinical needs.

3.5 Monitoring programs

The purpose of monitoring programs are to support the health care professional, monitor their success and intervene with difficulties during the recovery period and, in so doing, protect the public (FSPHP, 2000). Monitoring programs provide the active case management

and supervision system for health care professionals who have signed formal, binding contracts for their participation. Health care professionals who refuse to enter into a contract agreement are usually reported to their regulator, if not previously aware.

Monitoring of recovering health care professionals provides a sensitive and specific mechanism for ensuring treatment occurs and for early detection of relapse, and may be a licensing requirement. Much of the work in the area of monitoring programs has been with physicians. There are several designations for these programs such as physician health programs, physician aftercare, physician recovery networks, diversion, alternative to discipline, impaired physician, and physician health effectiveness programs.

The Federation of State Physician Health Programs guidelines require long-term monitoring of physicians after successful completion of treatment with reporting to the appropriate regulatory body any instance of a physician who is not able to cooperate with indicated treatment and monitoring or who becomes impaired (FSPHP, 2008). Through their experience and research, they have concluded that long-term recovery from the substance use disorders are routinely achieved after five years of successful monitored recovery. They further recognize that, after 5 years of monitored recovery, physicians usually are successful in managing further problems in their recovery through the use of their extensive support network while recognizing that some may benefit from shorter or lengthier periods (FSPHP, 2000).

Monitoring includes substance use detection and compliance with specifics of the monitoring contract plan. With random alcohol and drug testing, participating health care professionals call a telephone number daily during the working week to see if they are to be tested that day. A computer is used to randomly assign the decision as to who gets tested that day. The frequency of testing is more often earlier in the beginning of the contract period and less frequent towards the end of the five years.

When contracted, supervised care and monitoring of the health care professional occurs, regulators often defer disciplinary action with the stipulation that evidence of failure to adhere or relapse under patient care conditions will lead to referral of the health care professional back to the regulator (Dupont et al., 2009). A relapse includes the use of alcohol or other drugs non-medically, and also includes failure to adhere to treatment session or other signs of noncompliance.

Monitored care may start with residential or intensive outpatient care in a specially treatment program. Health care professionals commonly withdraw from practice at this time. The choice of treatment provider may be limited to specific programs with which the monitoring program has had extensive, successful experiences, and is known to provide excellent care. Monitoring is initiated or continues when the recovering healthcare professional moves into continuing care.

The evidence suggests that physicians have high rates of recovery when involved in long-term continuing care and monitoring programs. In a five-year, longitudinal cohort study, 904 physicians in 16 state physician health programs in the United States were followed (McLellan, Skipper, Campbell & Dupont, 2007). The outcome measures were program completion, alcohol and drug use, and occupational status at five years. Of the 80.7% of physicians who had completed treatment and resumed practice under supervision and monitoring, alcohol or drug misuse was detected by urine testing in 1.9% over the five years. At the five-year follow-up, 78.7% were licensed and working. The authors concluded that programs with an appropriate combination of treatment, support, and sanctions to manage addiction among physicians are effective.

There is evidence to support this model for a range of populations but its implementation is not consistent across the health care professions. Talbot (2005), in reiterating his earlier work, postulates that the factors that appear to have predictive value in assessing successful recovery include:

- The number of 12-step (or reasonable alternatives) meetings attended per week.
- A working relationship with a sponsor and frequent sponsor contact.
- Random drug screening.
- Monitoring milestones in each stage of recovery.
- Monitoring for the effects of the emergence of compulsive behaviours.
- Evaluation of the status of current therapies, treatments, and medications.
- Assessment of family relationships.
- Physical health status.
- Number of leisure activities per week.
- Compliance with monitoring activities, timely attendance at recommended therapies, and 12-step (or reasonable alternatives) meetings.
- Amount of time spent exercising per week.
- Evaluation of work-related stressors.
- Monitoring of changes in financial status.
- Additional training and/or continuing medical education.
- Self-rated quality of recovery programs.
- The identification of the soft parts of the physician-patient recovery program.

Physicians in continuing care and monitoring programs receive an optimal treatment model that assumes primary medical responsibility for the disease. These programs combines empathic support with the highest level of structure of close monitoring, and sanctions matched according to need. Physicians with substance use disorders treated within this framework have the highest long-term recovery rates recorded in the treatment outcome literature: between 70% and 96% (Brewster et al., 2008; Domino et al, 2005; Gastfriend, 2005; Gold & Aronson, 2005; McLennan et al., 2007; Smith & Smith, 1991, Talbott et al., 1987).

4. Policy alternatives

Organizations including employers, regulators, professional associations, and unions are obliged to respond when they become aware of their health care professionals whose practice may be impaired by use of substances. The purpose of intervening is to protect the public from harm and not to punish the health care professional (CNA, 2009). Responsibilities for ensuring the provision of safe, ethical care meeting the standards of practice for the profession requires the enactment of comprehensive policies. There are two dominant organizational policy responses to substance use disorders among the health professions: discipline and alternative to discipline. Considerable variation exists within each of these groupings due to legislation, structuring of responsibilities, and professional standards.

In general, disciplinary (punitive) policies are designed to penalize health care professionals and prevent them from practicing for the purpose of protecting the public (Monroe, Pearson, & Kenaga, 2008). Disciplinary measures include actions such as termination, probation, practice restrictions, and suspension or revocation of practice licenses (Corsino, Morrow, & Wallace, 1996). Some disciplinary programs may include aftercare, case management, and assistance for re-entering the workforce (Quinlan, 1994).

In the disciplinary model, upon the receipt of a formal complaint (e.g. pharmaceutical theft from the employer, failure to provide analgesics to patients, or falsification of records), a formal investigation may be launched. This may incorporate, among other powers, access to the health care professionals' workplace including interviewing colleagues, managers, and other individuals connected to the nurse under investigation (*Health Professions Act*, 2000, section 63). If supported by sufficient evidence, the complaint proceeds to an open hearing tribunal that may include a lawyer representing the regulator, another for the health care professional in question, and an independent counsel to advise the tribunal panel members of peers. When the health care professional in question is found guilty of unprofessional conduct, sanctions vary but may include:

- A reprimand that the behavior falls below the expected standards for practice,
- Loss of licensure,
- Suspension,
- Restrictions on the practice permit,
- Requirement of supervised practice,
- Ongoing documentation of specified treatment modalities,
- Random drug screening, and
- Publication of the discipline decision with identification of the health care professional by name or license number.

It has been estimated that the process of investigation followed by a formal hearing to determine disciplinary action may take from eight months to three years for resolution and, as the focus is on discipline, there is little attempt to advocate for the individual, provide treatment or rehabilitation services, or follow outcomes (Sullivan, Bissell, & Leffler, 1990).

With alternative to discipline responses, when there is reason to believe that the use of substances are affecting professional performance, the authority (e.g. employer or regulator) requires the health care professional to submit to specified physical and/or mental examinations and withdrawal from providing professional services pending the report. If the presence of an illness is determined (e.g. a substance use disorder), the authority would direct the health care professional to engage in treatment until their addiction treatment team determines readiness to return to work. If the examination does not detect the presence of an illness, the authority may choose to instigate a formal investigation and, when warranted, an open hearing before a tribunal of peers to determine a decision (*Health Professions Act*, 2000).

Alternative to discipline policies focus on early detection of illness, provisions for adequate treatment, and re-entry to practice without prejudice along with measures to protect the public (Monroe et al., 2008). These objective are achieved through:

- A focus on rehabilitation,
- Protection from public disclosure,
- Disclosure to the employer, and
- Long-term monitoring (aftercare) programs upon return to work.

Alternative to discipline policies provide a mechanism for impaired health care professionals to be moved into treatment within hours or days of detection (Monroe et al., 2008). Long-term monitoring reduces risk to patient safety through early detection of relapse while provide support and affording confidentiality and dignity for the health care professional in recovery.

Regardless of the policy approach taken, both the regulator and the employer have the duty to accommodate the individual with a diagnosed substance use disorder.

Comparisons between discipline and alternative policies are complicated by the degree of variation in the approach, time required for treatment and aftercare, and definitions of success. In a review of comparisons of discipline and alternative to discipline approaches among nurses, it was concluded that alternative to discipline seems to be more compassionate and caring about the welfare, treatment, and recovery of nurses as well as being more effective at retaining nurses in the profession (Monroe et al., 2008). Furthermore, the typical cost savings for aftercare programs are considered substantial compared with the costs of investigation and disciplinary action (Darbro, 2003). Some contend that a non-disciplinary atmosphere of support might be a life-saving first step for nurses with substance use disorders as well as for those in their care (Monroe & Kenaga, 2011).

The policy approach has been noted to impact other nurses in their responsibilities regarding their nurse-colleagues with substance use disorders. Hood and Duphorne (1995) examined the reporting strategies used by nurses confronted with making the decision to report substance abuse among their peers. Nurses who believed that reporting would result in punitive consequences were deterred from making formal reports when they suspected nurse-colleagues of impaired practice, while nurses who believed that rehabilitative consequences would result were more likely to report them. As nurses are the primary source of identification of the problem of substance abuse by their colleagues (Monohan, 2003), the policy approach to nurses with substance use disorders has salience for early detection.

When substance use disorders occur amongst health care professionals, the goals are to protect the public from possible harm and to engage the individual health care professional into treatment. Fear of disciplinary action is an obstacle for the ill health care professional seeking care and a disincentive for reporting by their concerned peers. This raises questions about the effectiveness of disciplinary environments in identifying and monitoring their health care professionals with substance use disorders. When early referrals are not made, health care professionals with substance use disorders often remain without treatment until overt impairment is manifest in the workplace (FSPHP, 2008). After noting their members with addiction were not receiving the same opportunities for treatment as the general public because they were held to a different, disciplinary standard, the American Medical Association and the American Nursing Association advocated for non-public, alternative to discipline responses (Quinlan, 2003).

There are counterarguments to the alternative to discipline focus on rehabilitation, monitoring and confidentiality. Some jurisdictions with disciplinary responses have identified their reluctance to incur expenses involved with monitoring programs (Monroe et al., 2008). There are disciplinary jurisdictions that spend substantive resources on formal investigations and public hearings. A direct comparison of costs between the disciplinary and alternative responses does not appear to be available. A review of disciplinary action on 52,297 registered and licensed practical nurses between 1996 and 2006 in the U.S. determined that 24% were for drug-related violations (Kenward, 2008). A ruling in Alberta determined the costs of one Hearing to be $70,000 without including staff time or salaries (Appendix A). If this contribution is indicative, regulators following disciplinary approaches incur substantive financial burdens.

This conundrum cannot be settled by legislation alone. In Alberta, with health care professionals regulated under the same Health Professions Act (Province of Alberta, 2010), there are different approaches. In this setting, complaints dispositions for physicians feature

a confidential, rehabilitative approach and registered nurses with an open, disciplinary one (Els & Kunyk, 2011).

Regulators and employers are, most likely, not addiction treatment specialists. When they impose conditions for treatment and monitoring, these may not be the most appropriate ones for unique needs of the health care professional in question. Nor are the addiction treatment providers for the health care professional because they are required to advocate on behalf of their health care professional patient (Please see the chapter in this textbook, 'Workplace Functional Impairment due to Mental Disorders' by Els, Kunyk, Hoffman & Wargon). In neither of these conditions, is there an external body to evaluate the quality of care delivery.

Concerns about the quality of treatment, and the neutrality of return to work decisions, can be addressed by the introduction of a neutral and independent intermediary. A neutral body with experts in addiction medicine can provide independent medical assessments, and determine the necessary treatments, continuing care, and conditions for return to work. This neutral body can also monitor that these conditions are met, and notify regulators and/or employers when they are not. An 'arms length' relationship between the treatment providers and the monitoring program appears to be important. If there is slippage in the performance of a particular treatment program or other service provider, it can be removed from the list of approved providers (Dupont et al., 2009).

Case Scenario: Lost Opportunities for Monitoring in a Disciplinary Environment

Outcome studies on physicians engaged in long-term monitoring programs demonstrate the effectiveness of this approach in maintaining recovery, supporting return to work, ensuring ongoing treatment, and providing for early detection of relapse. Due to the success of this model, the goal must be to ensure that recovering health care professionals with substance use disorders are directed into similar programs. When an employer or regulator becomes aware of their employees/members with addiction, they have the authority to ensure that compliance with continuing care and monitoring programs occurs.

Fear of disciplinary action is an obstacle for the ill health care professional seeking care and a disincentive for reporting by their concerned peers. This raises questions about the effectiveness of disciplinary environments in identifying when their health care professionals practice while impaired by the use of substances.

The province of Alberta, Canada provides a unique opportunity for study as the registered nurses belong to one provincial regulator, and one health authority provides most of their employment. Complaints received by the regulator regarding behaviours related to substance use are handled through formal investigations (CARNA, 2008a) and, if supported by sufficient evidence, the complaint proceeds to an open hearing tribunal. When the nurse in question is found guilty of unprofessional conduct, sanctions may include a reprimand advising that their behaviour falls below the expected standards for nursing practice, suspension and/or restrictions on their practice permit, requirement of supervised practice, ongoing documentation of specified treatment modalities, random drug testing paid for by the nurse in question, conditions required for return to practice, and publication of the discipline decision in its newsletter *Alberta RN* (CARNA, 2008a, p. 10). The nurse may also be directed to pay a contribution toward the costs of the investigation).

In a study in Alberta, 100 registered nurses who had self-identified with substance dependence in the last 12 months who were currently working in nursing. Within this sample, there were 2 nurses who had been reported to their regulator and 3 that were known by their employer. This left 95 registered nurses unknown to an authority that could have required ongoing monitoring (Kunyk, 2011).

Jurisdictions with disciplinary policies often claim that they are mandated to protect the public (Quinlan, 1994) and do not advocate for the health of the health care professional (Monroe et al., 2008). This approach may be counterproductive. The findings from this study suggest that with a disciplinary approach, the public is minimally protected from the risks associated with substance use. A recommendation for future research is to ask a similar question in a jurisdiction that follows an alternative to discipline approach.

5. Conclusions

Substance use disorders among the health care professions is a complex professional and occupational health issue. It is one that will likely affect every one of us, either directly or indirectly, at some point in our careers. The serious nature of its threats to patient care, health care professional health, and our professional image demands that we deal well with the issue.

For the purposes of mitigating such risks, fitting organizational policies need to take into consideration the implications of the broader environment in contributing to the situation. Effective treatments for health care professionals with substance use disorders include provisions for early detection, tailored, multi-modal, effective, affordable and affordable interventions. Aftercare programs are considered an essential component as they enhance the recovery of affected health professionals while also reducing the risk to the public through the early detection of relapse.

How can we best deal with substance use disorders amongst health care professionals? The heterogeneity between jurisdictions, individual situations, social environments, and responsibilities suggests that there is not one solution that is appropriate for all and under every circumstances. However, the evidence presented in this chapter, particularly the mature models employed with physicians in their interventions and aftercare, suggest there are some guiding principles for reducing the risks to patient care and to health care professional health. These include:

1. **Policy**. The substance use disorders will affect some members within the health care professions. This inevitability demands that the health professions, and their employers, prepare for dealing well with the situation through the development of evidence-based policies.
2. **Health values.** Following the principle of think globally, act locally, the manner in which this issue is understood and dealt with has global implications not only for health care professionals but also for the individuals in their care in similar situations. Consistency with health values and beliefs will enhance our professions and health care organizations in our respective missions. Health values include respect for health care professional - patient confidentiality, the recognition of disease conditions, and the need for evidence based care.

3. **Confidentiality.** The substance use disorders are highly stigmatizing illnesses. Health care professionals should be afforded the same confidentiality that is required for other patients.
4. **Chronic disease model.** The substance use disorders are chronic, relapsing conditions. Their treatment involves a continuum of care and a long-term perspective based on the chronic disease model that includes provision for relapse prevention and early detection of relapse. Provision for detoxification, medical stabilization and treatment is only the beginning of the intervention this chronic, relapsing disease. Continuing care with monitoring for five years is advisable.
5. **Evidence-based care.** The substance use disorders are highly responsive to multi-modal, evidence-based treatment based on the needs of the individual. Policy development must take into consideration access to comprehensive and high quality addiction treatments that incorporate the NIDA Principles of Addiction. Policy development must also outline provisions for coverage of care in the same manner as it would for other medical conditions.
6. **Comprehensive intervention.** The objective for intervention when impaired practice occurs is to minimize the risks to patient care and practitioner health through early identification, comprehensive assessment, detoxification, medical stabilization and treatment, and continuing care with long-term monitoring.
7. **Monitoring programs.** Long-term monitoring of recovering health care professionals is effective for supporting recovery and protection of the public when relapses happen. Monitoring requires a contractual agreement signed by the recovering health care professional with provisions for referral to the regulator should a risk of impaired practice occur. These monitoring programs are best performed by a party considered 'arms length' and neutral rather than the treatment provider or regulator.
8. **Decision-making.** Assessment, treatment and continuing care decisions are best made by a health care team specialized in addiction management, and not the regulator or employer.
9. **Minimize discipline.** Health care professionals who voluntarily seek recommended treatments, successfully complete their treatment, and contract to participate in a monitoring program should not receive punitive sanctions. This would encourage both self and peer identification.
10. **Early identification.** Employers and regulators need to create conditions that require fitness for duty, and encourage self and peer identification. This would include minimizing the use of discipline and ensuring the right of confidentiality.
11. **Environmental change.** As the conditions of being a health care professional may have contributed to the development of substance use disorders, the environment is also a part of the solution. The empirical findings that errors made by health professionals reflect system and organizational issues (Baker et al., 2004) may have some transferable learning to this situation. A body of research is required to determine aspects of psycho-dynamically healthy workplaces for the purposes of preventing the expression of substance use disorders amongst health care professionals, their early detection, as well as for their return to work upon recovery.
12. **Consistent between disciplines.** As the standards developed with physicians' health programs have produced the highest documented long-term recovery rates recorded in

the treatment outcome literature, these should be the standards for the other health professions.

13. **Return to work.** Confidentiality is the privilege of the individual with the disease, and disclosure must ultimately be a decision they make. The need to know is restricted to those necessary to meet the conditions for return to work.
14. **Human rights.** The health care professional with a substance use disorders should be afforded the same rights and privileges, including the duty to accommodate, as other individuals in society.

In conclusion, when substance use disorders are expressed amongst some members of the health care professions, there are serious implications for risk to the public and to the health of the health care professional with the disease. There are many unanswered questions regarding management of the substance use disorders amongst health care professionals. Research is required on transferability of knowledge between the health care professions, outcomes of the effectiveness of specific approaches, unique needs of the professions and their specialties, and creating conditions to optimize early identification and ongoing recovery. The existing evidence supports creating conditions that encourage early identification, reduce barriers to treatment, and that include long-term monitoring programs provide the best conditions for mitigating the risks resulting from substance use disorders amongst the health care professions to patient safety and health care professional health.

6. Appendix A: CARNA Decision on Registration #62,312

During the hearing the Tribunal was presented with an exibit (41) detailing the cost in total of this hearing up to February 10, 2010 of $63,174.96 with an additional estimate of costs for February 26 of $7,275.

This totalled approximately $70,000. The costs did nit include costs such as staff time or salaries. These were out of pocket expenses as detailed in Exhibit 41. These were expenses that CARNA had to pay from its resources, which are in effect the resources of the membership.

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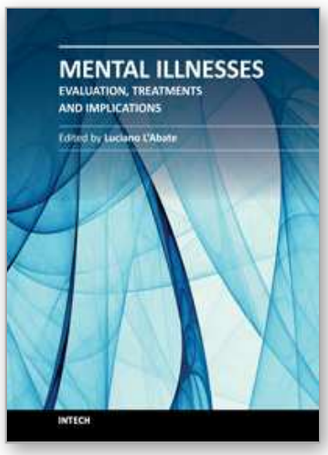

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In the book "Mental Illnesses - Evaluation, Treatments and Implications" attention is focused on background factors underlying mental illness. It is crucial that mental illness be evaluated thoroughly if we want to understand its nature, predict its long-term outcome, and treat it with specific rather than generic treatment, such as pharmacotherapy for instance. Additionally, community-wide and cognitive-behavioral approaches need to be combined to decrease the severity of symptoms of mental illness. Unfortunately, those who should profit the most by combination of treatments, often times refuse treatment or show poor adherence to treatment maintenance. Most importantly, what are the implications of the above for the mental health community? Mental illness cannot be treated with one single form of treatment. Combined individual, community, and socially-oriented treatments, including recent distance-writing technologies will hopefully allow a more integrated approach to decrease mental illness world-wide.

How to reference

In order to correctly reference this scholarly work, feel free to copy and paste the following:

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