

Recovery Oriented Systems of Care: How Research is Changing the Addiction Profession

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Recovery oriented systems of care for alcohol and substance use disorders are of paramount importance in the search for treatment protocols that will abate these disorders. It is primarily through the conduct and presentation of research that those in the field have the opportunity to learn about and employ these new systems on a daily basis. One example of such a growth and transition is in the ways in which medical and mental health professionals address the ongoing problems surrounding Alcohol Withdrawal Syndrome (AWS). AWS often is a life-threatening condition, which generally occurs when a person has been drinking alcohol to excess for an extended period and abruptly stops the intake (Donnelly, Kent-Wilkinson & Rush, 2012). This paper opens with a brief history of AWS. Thereafter, the author will discuss the current trends in the treatment protocol of the illness. Additionally, this paper discusses issues addressed by various researchers regarding the treatment protocols in current use as well as certain societal concerns regarding both the illness and the currently accepted protocols. Finally, the author addresses the importance of counseling in the treatment protocol of AWS and future implications of not only the current treatment protocols, but also some suggested alternatives thereto which have been brought to the forefront by the ongoing research in this area.

Brief History

AWS is characterized by a number of symptoms which normally begin approximately 6-12 hours after having last consumed alcoholic drinks and will continue for several days, unless medical intervention occurs (Donnelly, Kent-Wilkinson & Rush, 2012). Initial symptoms include headaches, anxiety, shaking, insomnia, heart palpitations and vomiting. Patients can suffer more severe problems, including hallucinations and seizures. The most traumatic complications of AWS can include delirium tremens (DTs) and respiratory and cardiovascular collapse (Cooper & Vernon, 2013; Donnelly, Kent-Wilkinson & Rush, 2012). Repeated periods

of excessive drinking followed by withdrawal are known to cause exponential increases in consequences known as kindling. Kindling describes the progressively more intense symptoms of AWS. These complications related to AWS are attributable to increased numbers of deaths as well (McPeake, Bateson, O'Neill & Kinsella, 2013).

The goal of treatment for AWS is to not only reduce the severity of the symptoms and ameliorate the potential long-term manifestations of the illness, but also to permit the patient to pursue one of many alternative treatment programs to find support for long term abstinence (Cooper & Vernon, 2013; Donnelly, Kent-Wilkinson & Rush, 2012).

Current Trends or Issues

Initial encounters between those suffering from AWS and the hospital staff can make preliminary assessment difficult, as many in the throes of the syndrome will feel the need to deny their problems. They may also be too intoxicated to carry on rational conversations or may be significantly disoriented, making it almost impossible to obtain a clear history (Donnelly, Kent-Wilkinson & Rush, 2012; McPeake, Bateson, O'Neill & Kinsella, 2013).

Traditional treatment of AWS has utilized benzodiazepines (BZDs) (Perry, 2014). In recent years, as the result of ongoing research in the treatment of AWS, there have been attempts to use other alternative medications that have fewer side effects. There is little evidence that other pharmacological agents are superior to the use of BZDs, yet some appear to be equally effective and others might act in concert with BZDs and thereby reduce the potential problems associated with BZDs, including tolerance and addiction (Cooper & Vernon, 2013). Of the BZDs used in the treatment of AWS, diazepam and chlorodiazepoxide are most often employed as they have a long half-life, which reduces the chances of seizures (Cooper & Vernon, 2013). One of

the treatment protocols discussed in the professional research is the differentiation between the use of BZD loading and symptom-triggered treatment. The loading method uses a long-acting medication, such as diazepam or chlorodiazepoxide, delivered at a predetermined dosage until there has been a substantial improvement in the AWS symptoms. On the other hand, the symptom-triggered method uses short-acting medications such as lorazepam and provides multiple doses depending upon the need of the patient, which need is assessed clinically (Maldonado, Nguyen, Schader & Brooks, 2012). Both types of treatment are used effectively in the United States and while loading appears to bring about reduction of symptoms slightly faster, the difference is statistically insignificant (Murdoch & Marsden, 2014). At least one study combined the two, finding that the use of diazepam in the symptom-triggered method achieved excellent results (Muzyk, Leung, Nelson, Embury & Jones, 2013).

As a result of additional research regarding AWS, other medications have been used with various degrees of success including barbiturates, baclofen, Gamma-hydroxybutyrate (GHB), psychotropic analgesic nitrous oxide (PAN), and anticonvulsants (Cooper & Vernon, 2013). Barbiturates are more commonly used in the UK, as many American programs are concerned about their safety. Of those used in the U.S., Phenobarbital is the most common, although only used in hospital detoxification, due to its safety issues if not dosed in a controlled environment. In hospital environments, it has been found to be safe and effective and does not have the added problem of street value that BZDs have, so theft is unlikely (Cooper & Vernon, 2013; Mirijello, D'Angelo, Ferrulli, Vassallo, Antonelli, Caputo, Leggio, Gasbarrini & Addolorato, 2015). PAN and Baclofen, while of limited benefit independently, have been shown to be useful therapeutics in conjunction with BZDs, substantially reducing the need and lessening the potential for development of a secondary addiction. The use of anticonvulsants, such as carbamazepine,

sodium valproate and gabapentin has been studied in the U.S. and these drugs have been used in Europe as well (Perry, 2014). They have been found effective for several reasons. The most obvious is that there is a reduced likelihood of seizures. These medications also have little or no potential for abuse, do not appear to cause any mental impairment and have the potential to block kindling (Cooper & Vernon, 2013; Eyer, Schreckenber, Hecht, Adorjan, Schuster, Felgenhauer, Pfab, Strubel & Zilker, 2011). In addition, gabapentin has the potential for usefulness in ongoing treatment of patients post-hospitalization in the pursuit of maintaining abstinence (Hammond, Niciu, Drew & Arias, 2015). GHB is used for detoxification in some European countries, but is not favored in the American market due to its questionable recreational use (Cooper & Vernon, 2013). This is somewhat troubling, in that sodium oxybate, the sodium salt of GHB has been accepted in many European countries to treat both AWS and AUD. The lack of such a transitional medication is one of the downfalls of the other current treatment options (Keating, 2014). Perhaps ongoing research in the use of this medication will allow for its employ in AWS treatment.

Societal Concerns

Those suffering from AWS without hospitalization, suffer numerous unpleasant effects which have been previously enumerated. For an alcoholic in the throes of AWS who does not have access to hospital care, his or her only method of dealing with the withdrawal is to begin drinking again. So, withdrawal triggers relapse and causes the person to be caught in a cycle of alcohol dependence (Heinz, Wilwer & Mann, 2003). Therefore, alcohol dependence must be properly treated at the outset.

It is important to consider how survivors of AWS treated in hospital facilities determine to change their drinking patterns. Some hospitals provide a team of professionals who have been trained to work with those suffering from AWS and as a result of their practices and the publication of those processes, the techniques are made available to others in the field (Donnelly, Kent-Wilkinson & Rush, 2012). A number of obstacles and supports have been associated with this process which is crucial to the future drinking behaviors of this population. Surviving after a critical illness brought about by alcohol consumption may be just the type of experience needed to have the person develop a willingness to stop drinking (Clark, Jones, Cook, Tian & Moss, 2013). This likely will require the support of family, friends, and institutions outside the hospital environment (McCollum & Trepper, 2013). Additionally, there is often a break in the connection between the detoxification process, which is medically focused and the primary treatment for relapse prevention, which is behavioral and therapeutic intervention, such as residential and outpatient treatment centers. Certain medications, such as disulfiram, acamprosate and naltrexone have been approved by the Food and Drug Administration (FDA) to treat ongoing alcohol dependence. However none of those medications has proven useful for AWS and in most cases requires the patient to be completely detoxified before the treatment protocol can be initiated. It is not unusual for patients to fall through the cracks between detoxification and relapse-prevention treatment. Some research studies have found that the use of anticonvulsants in both AWS treatment and post-hospital treatment of AUD can provide some of the necessary continuum to achieve abstinence and avoid relapse (Hammond, Niciu, Drew & Arias, 2015). Unfortunately, in the UK, there is less involvement by medical personnel in the intensive care unit to focus on alcohol related problems. There are many reasons suggested for this, from patients not being able to communicate sufficiently to a discomfort on the part of doctors and

nurses to discuss the issue of AWS with those patients (McPeake, Bateson, O'Neill & Kinsella, 2013). It is hoped that with further research bringing this issue to the forefront, greater strides can be made.

Significance to the counseling profession

There is evidence published that the use of motivational interviewing (MI), while the detoxifying patient is still hospitalized is effective (Donnelly, Kent-Wilkinson & Rush, 2012). Brief interventions by members of the health care staff, discussing the benefits and detriments of ongoing alcohol consumption can help patients to address key themes in their lives. Nurses can encourage their patients to plan for appropriate post-treatment options and can advocate with them and their families during hospitalization. It has been shown that empathetic counseling is much more effective than a confrontational approach (Heinz, Wilwer & Mann, 2003). Of critical importance to the empathetic methodology of MI is the need to employ the same process with the alcoholic's family and friends to avoid ongoing conflicts after the patient leaves the hospital and returns to his or her life (Clark, Jones, Cook, Tian & Moss, 2013). The more that friends and family members are involved, along with the alcoholic in the creation of the therapeutic treatment protocol, the greater will be their feeling of ownership of the process and the more likely it will be for all involved to stay with the process during those inevitable times when continuing treatment are difficult (McCollum & Trepper, 2013; Treadway, 1989).

One of the benefits of using other medications in conjunction with BZDs during the detoxification process, is that the patient's level of consciousness is increased, which can allow him or her to begin the rehabilitative treatment program immediately upon completion of the detoxification (Cooper & Vernon, 2013).

Future Implications

Research has shown that one of the main opportunities for greater impact in the future includes making better use of the nursing staff to assist with both recognition and appropriate treatment of AWS. Nurses take initial histories and have the most consistent contact with the patients while detoxifying. This gives them a great opportunity to plant the seed for ongoing treatment post-hospitalization (Donnelly, Kent-Wilkinson & Rush, 2012). Another important possibility for future management of the transition from AWS detoxification to post-hospitalization treatment, brought forward by the publication of current research, is the implementation of anticonvulsant medication as a bridge between the two segments of treatment (Hammond, Niciu, Drew & Arias, 2015). Another method of creating a treatment continuum would be to include medication, MI, residential and outpatient programs, and self-help groups, like Alcoholics Anonymous and SMART Recovery in a network of available options for the patient (Heinz, Wilwer & Mann, 2003). Clearly, determining the best treatment protocol is more of a process than a specific event (McCollum & Trepper, 2013).

One meta-analysis research article examined research conducted during the 1960's and 1970's that included treating patients in alcohol treatment centers with single doses of the psychedelic drug Lysergic Acid Diethylamide (LSD) (Krebs & Johansen, 2012). The studies found that single dose treatment showed beneficial effects on continued alcohol misuse for both short term (1-3 month) and medium term (6 month) periods but did not show longer term success (1 year). The authors of the studies acknowledged that limited continued research was impacted by a number of issues, most importantly a lack of willingness by others to fund additional research using psychedelic drugs. However, these same authors have suggested that a single dose of LSD provided similar benefits to daily doses of naltrexone, disulfiram and acamprosate

and have advocated for additional testing as being merited in the future (Krebs & Johansen, 2012). Since many cultures still rely on psychedelic substances for their benefits in reducing alcohol misuse, it is an option that should not be automatically dismissed and as a result of this ongoing research and publication of results, may in fact allow for this treatment protocol to be considered more fulsomely.

Conclusion

Numerous complications resulting from AWS account for increased demand on health care resources (McPeake, Bateson, O'Neill & Kinsella, 2013). Almost 20% of adult patients who present for treatment in emergency rooms are diagnosed with AUD and the prevalence of AWS in those directed to ICUs varies from 8 to 40%. AWS causes patients severe discomfort. The symptoms are incapacitating and once someone has undergone AWS, he or she is likely to be fearful that to stop drinking will cause the symptoms to recur. The primary aims of treatment are to diminish the symptoms associated with AWS and to assist the patient in pursuing post-hospitalization treatment for relapse prevention. This paper has shown that these goals are best achieved through a medically-assisted detoxification process, along with MI and nursing support during the hospitalization period. Most importantly, it is essential that attention be paid to the current methods and medications used, allowing for further research into alternative medications that may achieve the same results with fewer potential side effects. Through this ongoing research and publication of same, it will be possible for those caring for the severely affected alcoholics to learn and implement new techniques to arrest this societal problem. More research is necessary to verify that appropriate tools for assessment and treatment protocols are being utilized for those suffering from AWS.

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