Trends in Medicine

Treating Addiction as a Syndrome: Bridging Research and Clinical Practice

Submitted by:
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Addictive behaviors often coexist with each other and with other common mental health problems (Regier et al., 1990; Kessler et al., 2008), but traditional treatment models view different expressions of addiction as unique disorders (e.g., substance use disorder, alcohol use disorder, gambling disorder, etc.). When patients seek treatment for a particular expression of addiction, clinicians usually refer them to services that "specialize" in the presenting problem. Consequently, because of the extent of co-occurring disorders among people with addiction, treatment-seekers might experience confusion and treatment fragmentation, leading to a decrease in clinical compliance.

The Syndrome Model

One alternative, contemporary view conceptualizes addiction—expressed as behavioral (e.g., gambling) and substance (e.g., alcohol) involved—as a syndrome that shares common etiological vulnerabilities. Viewing addiction as a syndrome suggests that not all signs or symptoms are present all of the time. The hypothesis that there is a singular addiction with multiple expressions forms the basis of the Syndrome Model of Addiction (Shaffer et al., 2004). The Syndrome Model suggests that people inherit, encounter, and accumulate different life influences and experiences, which can interact or accumulate to form factors, ranging from neurobiological to psychosocial. Some factors or combinations of factors can increase the likelihood of addiction. If people then gain access to an object of addiction, they might develop increased motivation to seek and use that object (e.g., alcohol, drugs, gambling). Within the Syndrome Model, the emphasis is on the relationship between a person and their object of addiction. Addiction resides in the relationship and not in the object.

To test the Syndrome Model, a group of investigators from the Division on Addiction at the Cambridge Health Alliance, and the Integrated Centre of Addiction Prevention and Treatment (ICAPT), Tung Wah Group of Hospitals in Hong Kong developed a systematic research protocol that is incorporated into the day-to-day clinical operation of the Centre. This study is the first to examine whether, and to what extent, people affected by different expressions of addiction share common vulnerabilities from the domains of mental health, personality, social and family functioning, and neurocognitive functioning. This study aims to compare the characteristics of individuals with a behavioral (e.g., sex, shopping, gambling, etc.), versus chemical (e.g., alcohol, cigarette smoking, drug) expression of addiction and tracks treatment seekers at six-month intervals starting from the point of intake.

Between October 2015 and April 2016, 83 consecutive treatment seekers and 11 healthy controls were recruited in Hong Kong and completed a comprehensive set of measures. Among the treatment seekers, the mean age was 38.5 (SD = 10.8), the majority were male (84.3%), 30.1% qualified for a mental health diagnosis, 73.5% sought treatment for a behavioral expression of addiction, and 26.5% for a chemical expression of addiction.

The Results

Preliminary results at baseline show that participants in the chemical and behavioral addiction groups scored higher on depression and trait anxiety measures than healthy controls. The two addiction treatment-seeking groups did not differ on emotional dimensions (see Table 1). This suggests that depression and trait anxiety2 are common experiences shared by addiction treatment seekers regardless of their expression of addiction. However, the behavioral addiction group scored higher on state anxiety[2] than the chemical group, indicating that state anxiety might be more associated with behavioral expressions of addiction. This study also observed that individuals who seek treatment for multiple addiction expressions (mean = 66.2, SD = 14.3) suffered greater psychosocial impairment than those who seek treatment for a single expression of addiction, as evidenced by scores on the Personal and Social Performance Scale (mean = 72.2, SD = 10.9, $p < 0.05$).

Table 1. Comparison of depression and anxiety among behavioral group, chemical group and control

	Behavioral group Mean (SD)	Chemical group Mean (SD)	Control Mean (SD)	ANCOVA[+]	Post-hoc comparison (Behavioral vs Chemical) *p*-value
Depression (BDI-II)	22.9 (13.2)	20.1 (11.6)	6.9 (5.9)	$F(2,88) = 6.0^{**}$	n.s.
Anxiety – Trait (STAI-Trait)	56.0 (10.4)	50.2 (10.8)	37.6 (6.7)	$F(2,87) = 11.8^{***}$	n.s.
Anxiety – State (STAI-State)	55.6 (13.1)	45.3 (13.4)	40.6 (8.8)	$F(2,88) = 7.9^{***}$	0.004

[+] age as covariate
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$
n.s. = not significant

What Are The Implications?

The initial findings have three primary clinical implications. First, accurate conceptualization of addiction is central to effective treatment. Treatment providers should equip themselves to be well-versed in the addiction syndrome as different expressions can share more etiological commonalities than differences. Second, using the Syndrome Model, addiction treatment centers can design integrated treatment programs and offer comprehensive care that covers both behavioral and chemical expressions of addiction, as well as any comorbid conditions. Third, and finally, addiction treatment must attend to other and often underlying co-occurring mental disorders (e.g., trait anxiety).

References:

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Footnotes:

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[2] Trait anxiety refers to a person's baseline level of anxiety; trait anxiety is the relatively enduring feature or quality of their experience. State anxiety refers to a person's temporary level of anxiety, for example, when facing a challenging or unpleasant event or occurrence.

To learn more about the Cambridge Health Alliance Division on Addiction, click on the links below:
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