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Addiction Risk Factors and Recovery Story Construction

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Those of us with a personal or professional stake in the alcohol and other drug problems arena find ourselves questioning the differences between:

- 1) people who use alcohol and other drugs (AOD) without developing a substance use disorder (SUD) versus those who develop such a disorder of great severity, complexity, and chronicity;
- 2) people who resolve AOD/SUD problem without formal participation in recovery mutual aid groups and/or addiction treatment versus those who benefit from significant involvement with such resources;
- 3) people who resolve alcohol or opioid use disorders without medication support or only a brief course of such support versus those who require prolonged medication for successful recovery stabilization and maintenance; and
- 4) people who resolve AOD/SUD-related problems by decelerating AOD use versus those who are able to achieve successful recovery only through sustained AOD abstinence.

At a personal level, understanding these distinctions is critical to assessing one's own substance use disorder (SUD) risk and for identity/story construction within the recovery process. For those seeking recovery, such understandings provide answers to such questions as:

"Why me?"

"How did this happen?"

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"What must I do to escape this situation?"

"How do I prevent getting in this situation again?"

At professional, peer, and family support levels, understanding the nuanced answers to such questions enhances our effectiveness as helpers.

I have returned to these questions on numerous occasions in my books, monographs, and articles. Newly published reviews of the scientific literature, one led by Kelly Green and another by Angelica Morales, summarize advancements in assessing and predicting SUD risk. Drawing on a lifetime of clinical observation, my previous writings, and the Green et al and Morales et al reviews, the checklist below highlights key SUD risk factors. The below checklist may be used as a self-assessment instrument or completed with the aid of a peer recovery coach or professional therapist.

Place an (X) before each risk factor that to the best of your knowledge applies to your personal circumstances:

Biological Vulnerability

	problems	
	Male	
	Prenatal AOD exposure	
	Potential dopamine deficiency as indicated by such symptoms as muscle cramps/spasms/tremors/stiffness, memory impairment, low motivation, impaired concentration, or depression	
	High or low AOD tolerance from onset of use (compared to one's peers) Enhanced pleasure from drug use, e.g., euphoric recall of your first physical/emotional response to alcohol and/or another drug	
Medical/Psychiatric Vulnerability		
	Low tolerance for pain	
	Use of AOD to reduce chronic physical pain	
	Use of AOD to counter sleeping difficulties	
	Use of AOD to mask or self-medicate sexual dysfunction	
	Use of AOD as masking, self-medication, or manifestation of psychological	
	distress or psychiatric condition, e.g., anxiety, post-traumatic stress disorder,	
	depression, bipolar disorder, attention deficit hyperactivity disorder,	
	schizophrenia, mild autism)	
	Multiple medical/psychiatric conditions	

Pattern of Use Vulnerability

	Drugs of choice with high addiction potential (e.g., tobacco, alcohol,
	opioids, stimulants)
	Multiple drug use (concurrent or sequential use of alcohol, tobacco, and other drugs)
	Higher-risk mode of ingestion (e.g., drug injection, smoking)
	High volume and frequency of drug use
	Solitary drug use
	Impairment in high-risk contexts (AOD use while driving, swimming, or other
	high-risk physical activities)
	Loss of control cluster (diminished control over frequency, timing, quantity,
	settings, and consequences of AOD use; failed pledges to cease or reduce AOD use; radical personality change while using)
Perso	onality Trait Vulnerability
	Extraversion
	Conduct disorder in childhood/adolescence (school adjustment problems,
	aggressive behavior, stealing, vandalism, cruelty to animals, deceitfulness,
	sexual acting out)
	Borderline personality disorder
	Antisocial personality disorder
	Impulsivity
	Risk-taking / Sensation-seeking
	Narcissism (self-centeredness)
Eamil	y/Developmental Vulnerability
Ганн	Historical trauma (membership in a historically oppressed group that
	continues to experience stigma, discrimination, and microaggressions)
	Low or high financial insecurity of family during childhood/adolescence
	Housing instability or homelessness in childhood
	Food insecurity in childhood
	Parental neglect (weak parental supervision / low parental involvement during
	childhood and adolescence)
	Early abandonment and loss (e.g. parental or sibling death/separation)
	Victimization, (e.g., physical/sexual abuse or assault (particularly in presence of
	traumagenic factors, i.e., early age of onset, long duration of victimization,
	multiple perpetrators, perpetrators from within family or social network, disbelief
	or blame following victimization disclosure, and paucity of healing resources)
	Horrification (exposure to victimization of others, e.g., witnessing parental or
	neighborhood violence, war casualties, terrorism, genocide, forced mass
	migration)
	Family conflict during childhood
	Parental (biological, adoptive, stepparent) modeling of excessive substance use
	and related problems
	Provision of alcohol or other drugs to you by parents or older sibling
	Low or high level of academic performance
	Early onset of puberty

	Onset of AOD use/intoxication Onset of AOD-related problems between before age 18 or after age 65 (developmental windows for problem onset vulnerability) Single, divorced, or widowed	
	Complicated (prolonged and excessive) grief from loss of significant people, property, or positions Unemployed or retired	
	High cumulative lifetime adversities	
	Weak extended family and social support relationships	
Environmental Vulnerability		
	High availability of alcohol, tobacco and other drugs within one's living environment, work environment, and/or neighborhood	
	High exposure to drug-related promotional media (alcohol, tobacco and drug advertising; exposure to drug-promoting music, films, and literature)	
	Close peers who frequently use alcohol, tobacco, and other drugs Close friends with AOD-related problems	
Checklist Experience		
	I denied or minimized items in this checklist that I know I should have checked The number or risk factors checked would have been higher for me if family members and friends had completed this on my behalf	

There are 52 risk factors listed above. How many of these risk factors apply to your personal circumstances?

Unfortunately, there is no clear cutoff score predicting SUD risk because studies to weigh the relative import of each factor are limited, nor are there definitive studies on the combination of risk factors most predictive of SUD development. In sorting out the implications of the risk factors you identified, consider the following.

*The above list is not complete. There are risk factors not noted above, such as genemediated neurobiological differences in drug sensitivity and subsequent cellular adaptations to the drug experience that may heighten SUD vulnerability—differences and adaptations that we will likely be able to medically screen for in the future. For now, the above list includes those risk factors that can be most easily self-assessed.

*The sheer volume of SUD risk factors affirms that there are as many pathways into AOD problems as there are pathways of problem resolution, suggesting skepticism when hearing anyone claiming discovery of THE singular cause or cure of addiction.

*Risk factors are not destiny. It is possible to have a low number of risk factors and still develop significant AOD/SUD-related problems; it is possible to have a high number of risk factors and not develop a SUD, particularly in the presence of numerous protective factors (e.g., recovery capital). The low predictive power of a single risk factor is not unique to SUD and is common across a wide spectrum of medical and psychiatric

disorders. The risk factor checklist above is about probabilities, not certainties, but the list may help you understand things that unfolded in your life that are otherwise inexplicable.

*Protective factors are internal and external resources, relationships, experiences, and activities that that have the power to offset risk factors and increase the probability of SUD resistance, resilience, and recovery. Examples of such protective factors include adult onset of AOD exposure, medical/psychiatric health, family health and stability, neighborhood safety and stability, positive role models and mentors, academic and occupational success, effective coping skills, early access to problem-solving resources, and life purpose and meaning.

*Some risk factors bear significant greater power for SUD prediction. For example, studies to date suggest that family history (genetic vulnerability) accounts for more than half of the overall risk for SUD development, with persons with an addiction family history having 10 times the risk of SUD development compared to those without such a history. Other than family history, the predictive power of any single risk factor alone is weak.

*Risk factors vary by drug choice, with some factors predictive of alcohol use disorder or opioid use disorder, but not other SUDs.

*We are at an early stage of determining how risk factors interact with each other and with other influences. Risk factors are likely additive and synergistic, meaning the greater the number of risk factors (particularly when combined with SUD family history), the great the risk for problem development. There may also be particular combinations or sequences of risk factors that dramatically elevate the risk of SUD onset, a prolonged course, and a worse long-term outcome. The volume of risk factors and the particular combination of risk factors interact with personal characteristics (such as gender and drug choice) to create an ignition point of dramatically heightened SUD risk and dictate the speed and severity of SUD progression. Future scientific studies will likely identify these potent combinations and sequences.

*Combining risk assessment and assessment of recovery capital provides a framework for self-assessment, for exploring the viability of various recovery pathways, and for determining the best level of care needed at a particular point in time. The goals are to provide guidance to personal decision-making and at a policy level to allocate limited prevention, harm reduction, early intervention, treatment, and recovery support services to those at high risk of developing the most severe, complex, and chronic SUDs.

My overall conclusion? The risk of SUD development, the need for peer and professional recovery support in achieving SUD remission, the need for medication support for successful recovery maintenance, and the greater viability of abstinence versus moderation resolution strategies all increase as the number of SUD risk factors increases and the number of protective factors decline. In short, the answer to "Who is at highest risk for addiction and why?" provides the same answer to "Who is most likely

to need peer and professional support, most benefit from medication support, and most benefit from abstinence versus moderation approaches to problem resolution?"

At present, the best we can do in terms of assessment technology is to help people identity combinations of risk factors and protective factor deficiencies that are associated with the highest SUD severity/complexity/duration. While this may help some individuals make future drug use decisions and increase self-monitoring, the greatest value of risk research will likely be in helping people seeking recovery answer the "Why me?" and "What now?" guestions as part of recovery story construction.

Also worth noting: before we blame addiction on the poor choices or weak character of the individual, we should note how many SUD risk factors are beyond one's personal control. For people at risk for or experiencing these problems, what IS within our control is the decision to mobilize resources to prevent, neutralize, and overcome these risk factors. Insight into SUD causative factors does not, in itself, spontaneously initiate stable recovery, but it can be an important anchor to building a personal recovery story and reducing risk of SUD recurrence. Understanding these factors and how they interact can also increase the effectiveness of those providing recovery support services. I hope the checklist provided here will help achieve those multiple purposes. It is my hope that future research weighing the import of particular risk and protective factors will result in a brief SUD prediction checklist.

In closing, I would be remiss if I did not also acknowledge the potential dark side of AOD/SUD risk prediction technologies. Such technologies could produce unintended harm via discrimination against people labeled "at SUD risk" via discrimination in education, employment, public benefits, health and life insurance, etc. Claims of genetic risk for alcoholism, for example, led to the inclusion of addicted people in mandatory sterilization laws during the height of the eugenics movement in the United States during the early twentieth century and to the attempted genocidal elimination of addicted people in Nazi Germany. We must remain mindful of the potential misuse of risk prediction and insure safeguards that prevent such misuse.

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