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ORIGINAL ARTICLE

How to Measure Addiction Recovery? Incorporating Perspectives of Individuals with Lived Experience

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Abstract Recovery from addiction is a complex phenomenon. Without a clear and measureable definition, its ambiguity risks hindering the advancement of recovery-oriented practice and research. The purpose of this study was twofold: (1) understand the meaning of recovery from the perspective of individuals with lived experience and (2) identify measurement domains to inform the development of a recovery monitoring system. We conducted five semi-structured focus groups and two interviews with individuals 18 years and older who completed an addiction treatment program and were enrolled in aftercare. Participants were asked questions about how they personally defined "successful" recovery. Data were analyzed using a general inductive approach through independent parallel coding. We explored emergent themes including the following: Recovery is a process; abstinence is an important aspect of recovery, but not sufficient; recovery is multidimensional; and, recovery requires ongoing commitment. This study identified measurable recovery-oriented outcomes and methodological considerations to inform future recovery monitoring systems.

Keywords Addiction · Substance use · Alcohol · Health outcomes · Recovery

As the paradigm for how we conceptualize addiction shifts from an acute to chronic disease model, so too does the need to reconsider how best to treat addiction and evaluate treatment outcomes (McLellan et al. 2000; McLellan et al. 2005; White 2007). Under the chronic disease paradigm, addiction recovery is considered a lifelong process where one is actively engaged in managing one's addiction or risk problems resurfacing (Dennis and Scott 2007; McLellan et al. 2007). This view is similar to how recovery is conceived in the mental health field (Best and Laudet 2010; Watson and Rollins 2015) and among other chronic diseases like hypertension,

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diabetes, and asthma (McLellan et al. 2000). Measuring recovery then becomes largely focused on indicators of ongoing management and improvements in quality of life. Increasingly, ongoing recovery monitoring is becoming an important element of comprehensive performance measurement frameworks for addiction treatment (Rush et al. 2009; Rush et al. 2013) and an expected extension of addiction treatment in Canada (Canadian Centre for Substance Use and Addiction 2017) and internationally (WHO 2016). However, as White (2007) cautions, the focus on recovery in the addiction field is occurring without a clear definition of the phenomenon: the ambiguity of which risks hindering the advancement in recovery-oriented practice and research (Laudet 2007; White 2007).

Across various types of treatments for addiction, the most common outcome measured is substance use (White et al. 2005), with abstinence being the most commonly reported indicator. Many agree that recovery in its fullest sense is more than abstinence; however, abstinence is often used as a proxy to infer treatment success (McLellan et al. 2007). Broad definitions of recovery put forth by experts in the field tend to agree abstinence or sobriety, personal health, quality of life, and citizenship or community are all important aspects (ASAM 2013; Betty Ford Inst. 2007). Some definitions make no explicit mention of abstinence but emphasize a person-driven and more holistic view of recovery (White 2007; SAMHSA 2012). Other research further identify recovery domains and measurable indicators of recovery (e.g., Borkman et al. 2016; Dodge et al. 2010; Duffy and Baldwin 2013; Kaskutas et al. 2014; Kaskutas et al. 2015; Laudet 2007; McQuaid et al. 2017; Watson and Rollins 2015) and recovery capital (Cloud and Granfield 2009; Groshkova et al. 2013). This work includes exploring what recovery means to service providers (Neale et al. 2014) as well as substance users themselves (Kaskutas et al. 2014; Laudet 2007; Mackintosh and Knight 2012; Watson and Rollins 2015), with only one study conducted within a Canadian context (McQuaid et al. 2017).

As part of a larger initiative to develop, implement and evaluate a recovery monitoring system across a mental health and addictions treatment center (Costello et al. 2016), this study examined patients' perspectives of recovery from alcohol and drug addiction. Consistent with a participatory approach (Cornwall and Jewkes 1995), former patients of a residential addictions treatment program were engaged as collaborators to inform the development of meaningful recovery-oriented outcome domains, indicators, and measures that are reflective of their lived experiences.

Study Objectives

The purpose of this study was twofold: (1) understand the meaning of addiction recovery from the perspective of individuals with lived experience and (2) identify measurable domains and indicators to inform the development of a recovery monitoring system.

Methods

The study was grounded in the principles of phenomenology that aim to explore how individuals make sense of their own lived experience with a particular phenomenon and uncover the *essence* (i.e., uniform meaning) to shared experience (Van Manen 1990:9–10; Norlyk and Harder 2010). In this case, focus groups were used to gather participants'

perspectives on recovery and insights into their own lived experiences, meanings, and realities. Researchers *bracketed* their past knowledge of recovery by posing broad questions about the phenomenon to participants and adopting a general inductive approach to data analysis to search for commonalities among individuals' lived experiences. This study received clearance from the Regional Centre for Excellence in Ethics, Research Ethics Board [Guelph, Ontario, Canada] (approval no. 14-27).

Setting

The study was conducted in an outpatient addiction aftercare program located in [Guelph, Ontario, Canada]. The 9-month aftercare program offers weekly group-based sessions facilitated by an addiction counselor. The sessions focus on post-treatment relapse prevention and are open to graduates of a residential addiction treatment program offered at the same facility. The residential program provides group-based treatment to adults (19+) addicted to alcohol and/or drugs (length of stay of 35 days), as well as specialized programing for co-occurring post-traumatic stress disorder (PTSD; up to 56 days of stay). Residential treatment is abstinence-based with a focus on medical stabilization, assessment, recovery-oriented education, and skills training, and 12-Step facilitation provided by a multidisciplinary team of health professionals.

Recruitment

We recruited a purposeful sample of individuals enrolled in the outpatient aftercare program. Purposeful sampling was necessary as it was important to understand the perspectives and lived experiences of those who completed the residential treatment program and were engaged in early recovery (i.e., up to 1 year post-treatment). Members of the research team recruited participants by visiting 18 aftercare groups between December 2014 and March 2015. During each visit, the researchers described the purpose of the study, nature of involvement and invited individuals to participate in a focus group. On the day of the focus group, the research team reviewed the study information letter and obtained written informed, signed consent from all participants.

Participants

Five focus groups were conducted with three to six participants in each group (23 participants in total). In addition, one dyadic interview and one individual interview were conducted to accommodate low group attendance. In total, 26 individuals participated in the study. On average, participants were 3 months into the aftercare program, ranging from 1 week to 8 months. Eighty percent ($n = 20$) reported not using alcohol or drugs during that period. Participant characteristics are presented in Table 1.

Data Collection

Semi-structured focus groups and interviews lasted approximately 1 h in length. All four authors participated in data collection either as a moderator/interviewer or an assistant. The moderator/interviewer posed three main open-ended questions: (1) Some people talk about recovery being an ongoing journey or a process with no defined endpoint. What are your

Table 1 Participant characteristics

	n	Percent (%)
Total sample	26	100.0
Gender		
Female	20	76.9
Male	6	23.1
Age		
19–29	3	13.0
30–39	5	21.7
40–49	4	17.4
50–59	6	26.1
60+	3	13.0
Average years (range)	46	(22–70)
Ethnicity		
White	24	92.3
Non-white	2	7.7
Marital status		
Married or living as married	12	48.0
Divorced, separated, widowed	5	20.0
Never married or not living as married	8	32.0
Housing		
Rented or owned	24	96.0
Other	1	4.0
Education		
No post-secondary	6	24.0
Some post-secondary	8	32.0
Completed college or university	11	44.0
Employment status		
Employed, at work	12	48.0
Employed, absent from work	4	16.0
Unemployed	3	12.0
Not in the labor force (e.g., retired, disabled)	6	24.0
Substance of choice		
Alcohol and drugs	12	50.0
Alcohol only	10	41.7
Drugs only	2	8.3

thoughts about that idea? (2) How would you define "successful" recovery? (3) What things have you found to be particularly harmful or helpful to your recovery? Participants were encouraged to speak openly and honestly about their own views of and experiences in recovery. The assistant recorded field observations and notable quotes during the discussion. At the end, participants completed a brief demographic questionnaire and received a $20 gift certificate. The moderator/interviewer and assistant debriefed after each session to discuss observations and document initial themes. All focus groups and interviews were audio-recorded and transcribed verbatim. Random segments of the transcripts were later checked against the original audio recordings for accuracy.

Analysis

A general inductive approach was used to address the study objectives and allow research findings to emerge from frequent, dominant, or significant themes in the data (Thomas 2006). The inductive approach encouraged the research team to approach the data with an "open mind" and bracket their pre-understandings of recovery (Norlyk and Harder 2010). The

emergent themes represented the data at the semantic level illuminating the explicit or surface meaning of participants' subjective lived experience in recovery (Braun and Clark 2006; Norlyk and Harder 2010).

Four members of the research team each independently read and reread the transcripts to familiarize themselves with the data, noting initial ideas for codes that represented interesting aspects of the data. Codes were initially organized around the three broad questions posed to participants exploring: (1) the metaphor of recovery as a journey, (2) the definition of successful recovery, and (3) supports that aid and/or barriers that hinder recovery. Using NVivo 10, each team member worked systematically through the dataset to independently code data using their initial set of codes. Data collected from focus groups and interviews were coded separately as parallel datasets to examine differences and similarities in responses, but later combined and analyzed together as one dataset since little difference existed.

The research team met to compare individual codes and discuss how codes related to the coded text. When overlap was low, the team discussed creating more robust codes and clarified definitions of existing codes as necessary. This step formed an initial check of validity and resulted in a final set of codes that incorporated the perspectives of all team members. The team also noted any initial themes at this stage.

Using a deductive approach, one team member then went back to the dataset and re-categorized the coded data according to the codes agreed upon by the team and re-read the entire dataset to code any missing text. A second coder reviewed each of the codes and coded text for completeness and consistency. The two coders met regularly to clarify code definitions, refine codes (as necessary), and document potential themes. The two coders then organized coded text into potential themes. An initial thematic map was created to illustrate relationships between overarching themes, subthemes, and codes. The team met to review the initial thematic map and define themes in more detail. One team member re-read the collated extracts for each theme to confirm data that formed a coherent pattern and then reviewed the entire data set to confirm the thematic map that "accurately" reflected the dataset as a whole. This step offered a second validity check and resulted in the creation of the final thematic maps (see Figs. 1 and 2).

Individual member checking with participants was not possible given time and resource constraints; however, we shared main themes with individuals enrolled in the same aftercare program to further check validity (Thomas 2006). In addition, we shared main themes with

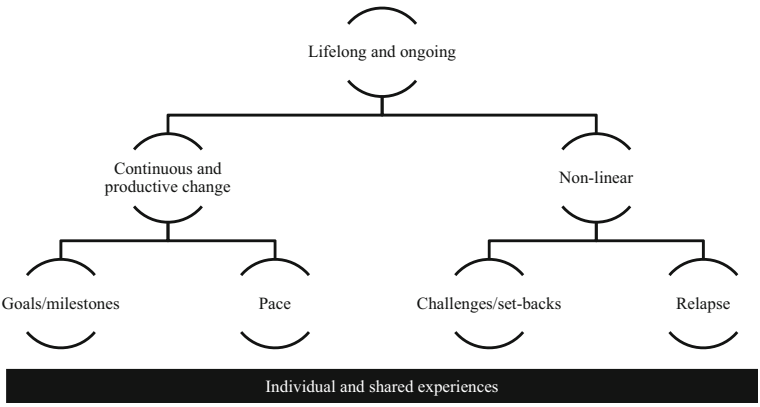

Fig. 1 Dominant recovery process themes

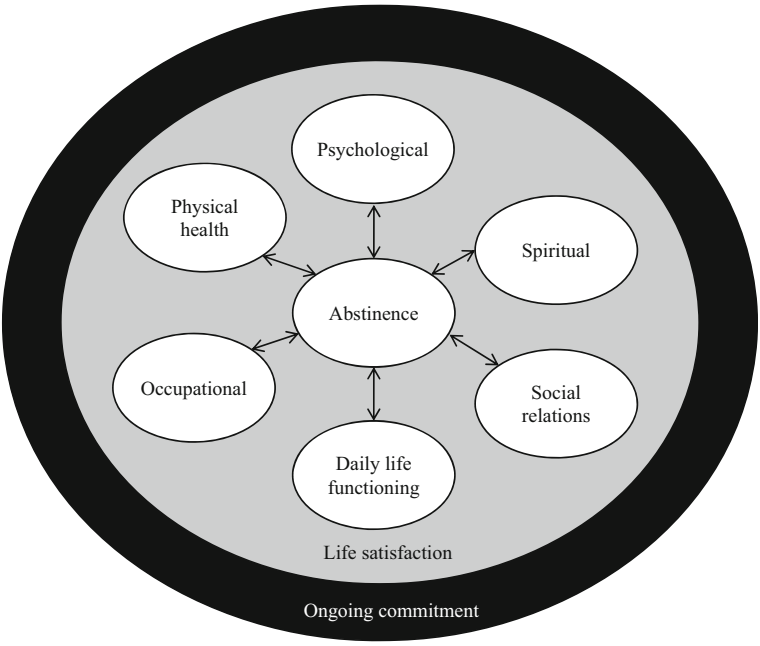

Fig. 2 Dominant recovery-oriented outcome themes

program staff to test their validity from the staff perspective. In both cases, member checking confirmed the identified themes and interpretations, further validating the study findings.

Results

We identified four major themes associated with how participants perceived recovery. At a high-level, these themes included the following: Recovery is a process; abstinence is an important aspect of recovery, but not sufficient; recovery is multidimensional; and, recovery requires ongoing commitment. Figures 1 and 2 diagram the proposed relations of each of the dominant themes to one another. Below, we describe each theme, sub-theme, and their axil codes and provide illustrative examples from the participants themselves.

Recovery Is a Process

As a dominant theme across all discussions, participants agreed that recovery was similar to a process or journey characterized as *lifelong* and *ongoing*. For instance, one participant described how his understanding of recovery changed over his lifetime to be more reflective of a *lifelong* process: "[Recovery] is a process and it's something that I kind of understand now that I have to do forever. I am continually learning and learning and learning. I do not think you ever stop [learning] in regard to this crazy disease." Many participants did not see a defined end-point to their recovery despite the inference made by the concepts of process and journey themselves (i.e., that there is an ultimate destination or end-point). Instead, participants noted that recovery was marked by *continuous and productive change* that reflected personal learning and growth throughout the recovery process. Productive change was often

characterized as achieving smaller *goals* first followed by attainment of larger *milestones* or successes. Frustration with the *pace* of this progression was also noted by some participants, while others understood progress to be slow and incremental. One participant described the idea of milestones existing along his journey to mark personal achievements:

> Well for myself I think it will be a journey for the rest of my life but there are definite huge aspects of it that have endpoints. Um, things like regaining the trust of my wife and daughter. Hopefully at some point that [the mistrust] will stop and I can move on from that.

Participants also noted the *non-linear* nature of the recovery process citing that there is no direct route or path to success. Instead, many described the "ups and downs" and "twists and turns" that were considered a typically part of the recovery process. They noted that *continuous and productive change* may be offset by *challenges* or *setbacks* that could divert or stall progress. *Relapse* was often discussed as a factor that diverts progress. Some described relapse as a setback that could signal the end of one's journey, leading to consequences like re-entering treatment, incarceration, or even death. Others considered relapse a learning opportunity that could re-catalyze movement forward in the recovery process. This dichotomy is illustrated by the following quotes:

> . . . the type of addict that I am, it doesn't matter if a relapse happens in six months or in five years, if it ever happens the type of behavior that I engage in is life-threatening. It will kill me . . . I never can [use] again if I want to live.
>
> I felt that every time I relapsed . . . I would learn something new through each recovery period. I wasn't quite at the same point as I was at [before] so . . . it's a constant learning process and it's not a straight line - it's ups and downs.

Participants also discussed how the recovery process could be a personal, yet shared experience. On one hand, some participants described the recovery process as being deeply *individual* with no universal set of goals, clear path forward, nor fixed pace. This included reference to setting personal goals that uniquely defined one's journey in order to make it personally meaningful (e.g., regaining trust of family members, regaining custody of a child, returning to work full-time, etc.). Meanwhile, others acknowledged that some aspects of the experience are shared among others also in recovery and this *shared experience* creates an opportunity for mutual learning and support. This is reflected in the following quote:

> . . . you're going to find people who have been through what you've been through and they have the roadmap, you know. They can say, a year ago I was in your, you know, I was living what you're living, going through now, exactly, and this is how I coped with it . . . you feel like you can identify with them, that you connect with them like completely.

Abstinence Is an Important Aspect of Recovery, but Not Sufficient

Participants identified abstinence or sobriety as an important aspect of recovery, something that was necessary for achieving longer-term recovery goals; a foundational element, as one participant describes: "Well that's [sobriety is] the main goal, ya. It has to be, right. Otherwise, none of the other goals will be even remotely achievable." When discussing abstinence, some participants noted that focusing on abstinence as a primary goal was particularly important in the early days of recovery so to avoid relapse. Meanwhile, others discussed the importance of sustained abstinence over the longer-term as a marker of success.

Importantly, participants acknowledged that abstinence alone was not a sufficient criteria for defining successful recovery. One participant explains: "There's that line . . . being clean doesn't mean that you're in recovery but in order to get recovery you need some clean time . . . " Many discussed the need to remain abstinent while consciously working on other aspects of one's life. As one participant explained, focusing on abstinence alone was not enough to achieve recovery:

> I always thought if I, like once I get sober, my life is going to become so much better, ya know, and I never understood why the longer I went sober the worst I felt . . . my problem is not being able to deal with life on life's terms and living it sober. Uh, so for me like just being sober it's not going to be enough.

Recovery Is Multidimensional

In addition to abstinence, participants described successful recovery as achieving positive changes or improvements in various areas of life. For some, this meant returning to a pre-addiction state of stability and well-being (e.g., regaining trust of family members; regaining custody of a child; returning to work full-time; regaining physical health, etc.); however, for others, a return to a pre-addiction state of life was not a desirable outcome. One participant described how it was necessary for her to define a new sense of enriched well-being to strive for in recovery:

> I think it's interesting, like the word recovery, because it implies getting back to where I was and I feel like I'm already in a completely different place than I have ever been . . . I don't think it's about getting back to where I was cause I was never in a great place. I think it's about, like, defining a whole different sense of being ok.

More specifically, the multidimensional nature of recovery was categorized into the following sub-themes: psychological, spiritual, social relations, physical health, occupational, daily life functioning, and life satisfaction. Improvement in at least one of these areas appeared sufficient for some, while others indicated that change across multiple areas was necessary to fulfill one's own vision of recovery. Participants did not necessarily identify how each area may or may not be related to one another; however, they did place emphasize on different areas depending on their own situation. Below, we describe each sub-theme in more detail.

Psychological Participants described successful recovery as positive changes in *emotions and thought patterns*. Specifically, participants discussed experiencing or anticipating improvements in feelings of guilt, shame, and self-blaming or self-loathing. Others noted more general improvements like thinking more positively or becoming "emotionally healthy" as well as improvements in self-esteem and feelings of hopefulness. Some participants also discussed how recovery for them included improvements to *co-occurring mental health symptoms* such as depression or anxiety. One participant explained how treatment had a positive effect on his anxiety:

> . . . My anxiety has ya know, decreased over fifty percent without, ya know, any medication. And, uh, I just feel like I have like, natural energy, like I'm eating regularly, eating healthy, exercising and I'm just overall generally happy . . .

Spiritual Some participants described recovery as establishing or re-establishing a connection with oneself and/or a Higher Power. This connection, whether it was achieved through

meditation, mindfulness, prayer, or engagement with a 12-step fellowship, was seen as an important factor in establishing *self-awareness*, *inner peace*, *acceptance*, and *meaning in life*. Spirituality was discussed not only in terms of a desired recovery outcome, but also as an important facilitator for maintaining recovery over the long-term. One participant described how spiritual connections would "always be there…something [he] could depend on" and another participant discussed how spirituality served as an important facilitator:

> For me the largest part to my recovery for all of those years was my belief in a Higher Power and my relationship with a Higher Power…. If my day got off on the wrong foot or whatever, my day was a mess till all of the sudden I sat down and analyzed it and was like well I didn't ask for help today. And I learned that I can ask for help any time of the day, as many times a day . . . And that went for about probably 17 years, and then there was some things that happened . . . I walked away from it, didn't do it any longer and I lost everything . . . so re-establishing a relationship with a Higher Power is the key for me at this point in time and to me it's the biggest part of the program of recovery.

Social Relations Many participants characterized recovery as improvements in the quality of *family* and *social relationships*. This often included re-establishing trust, becoming more engaged or "present," being able to identify and establish healthy and supportive relationships, or simply "connecting" with another person. There was often distinction between social relationships established within the 12-step recovery community and those that existed outside of the 12-step community. In any case, re-establishing, establishing, and maintaining healthy and supportive relationships, as well as *reducing isolating behaviors*, were seen as important aspects of recovery. Not only were improved social relations discussed in terms of an important outcome of recovery, it also appeared to play an important facilitating role in maintaining recovery. One participant described the nature of the changes she expected to see in her family and social relationships as she continued on in recovery:

> Another measurement of recovery for me is how much or how little I'm hurting other people. I think the more that I recover the more that [I'm] kind of building relationships with my family, um, just generally sort of having a better impact and having a better energy around people.

Physical Health Some described successful recovery as including improvement in one's physical health. In addition to abstaining from alcohol and drugs, improvements in physical health were often linked to *physical activity or exercise, healthy eating habits and/or quitting smoking*. For some, physical health was an explicit recovery goal as one participant described:

> I'm making a concerted effort to get my physical health back to where I want it to be. It was started here [residential program] . . . walking and exercising in the morning, kind of tweaked my memory that oh yes, that's not been a part of my life for quite some time. That is definitely one of my [recovery] goals and so far it's been good.

Occupational Some participants discussed the act of *returning to work* or school as a marker of personal recovery (e.g., "I got back to work full time"); however, the notion of returning to work or school once one felt "ready" or had the "confidence" was an important caveat.

Notably, returning to one's previous job was not necessarily perceived as a positive outcome, particularly if the work environment was seen as unsupportive to one's recovery or associated with undue stress. Some participants also described improvements in their *job satisfaction*, while others anticipated future improvements to work-life balance or reduction in work-related stress.

Daily Life Functioning Another aspect of recovery identified by some was being better able to manage or balance one's daily life activities. Specifically, this included an increased ability to manage and balance work, family responsibilities, and social activities but also being able to maintain one's house, pay the bills, and make time for self-care activities. One participant described:

> …Now I can concentrate on all the things I kept planning on doing but never did for a year and half. I finally painted rooms, I finally got my stove fixed, uh, just little things that I kept putting off, putting off, putting off that I'm finally doing. And it's been great. That part anyways.

Life Satisfaction Many participants spoke of recovery as achieving an overall state of life satisfaction, happiness, or personal well-being. This theme was often discussed in terms of an ultimate outcome, one that may reflect the culmination of incremental behavioral, social, and psychological changes. One participant alluded to the incremental nature of achieving life satisfaction or happiness, and the motivational effect it may have on behavior: "My life's getting better, like, every day and that, uh, that keeps me motivated not to drink."

Recovery Requires Ongoing Commitment

Some participants also characterized recovery, at least in part, as requiring ongoing commitment to and engagement in activities that support the pursuit of abstinence. Ongoing commitment to a "recovery program" was emphasized by many. This included involvement in community-based 12-step recovery programs (i.e., attending meetings, having a sponsor, "working the steps", becoming a sponsor) and participation in more formal outpatient services (e.g., individual counseling). Participants spoke about the need to commit to and engage in an ongoing recovery program as an immediate step towards recovery, while others discussed ongoing engagement as means to actively manage one's recovery over the longer term.

Discussion

Consistent with previous research, participants in this study described recovery as a lifelong, non-linear process that encompasses personal growth, learning, challenges, and achievements (Best and Laudet 2010; Kaskutas et al. 2014; Laudet 2007; Mackintosh and Knight 2012; McQuaid et al. 2017; Watson and Rollins 2015). They further described successful recovery to include abstinence, as well as improvements in several areas of one's life including psychological and spiritual aspects, social relations, physical health, occupational, daily life functioning, and life satisfaction. For many, ongoing commitment to a recovery program was necessary to achieve and maintain many of these improvements. Our findings support the broad

definitions of recovery put forth by experts in the addiction field (ASAM 2013; Betty Ford Inst. 2007; SAMHSA 2012; White 2007) and are consistent with other research identifying recovery-oriented outcome domains (e.g., Best et al. 2016; Borkman et al. 2016; Dodge et al. 2010; Duffy and Baldwin 2013; Kaskutas et al. 2014; Kaskutas et al. 2015; Laudet 2007; Watson and Rollins 2015).

Our findings, however, add another layer to how we conceptualize and begin to monitor recovery among individuals early on in the recovery process (i.e., less than 1 year post-treatment), a potentially vulnerable time for relapse. Although abstinence was identified by some as a potentially foundational piece in the recovery process, participants discussed many other ways their lives had improved and areas where they anticipated improvements in the future. Specifically, participants illustrated the importance of spirituality (Jarusiewisz 2008) and improvements in family and social relationships (Best et al. 2016) as aspects of a meaningful recovery, aspects that are also supported in previous research. Life satisfaction was identified as the ultimate goal, suggesting that psychological, social, occupational, and other improvements may vary or be incremental early on in recovery, while sizable improvements are anticipated over longer periods of time in recovery. Hibbert and Best (2011) have previously emphasized the need to focus on changes and growth in specific areas of recovery over time. Measuring multidimensional outcomes early on, and repeatedly, during the recovery process will help to uncover common trajectories or pathways of recovery.

From an organizational and systems perspective, our findings begin to illustrate the breadth of recovery-oriented outcomes that may be important to measure and monitor when evaluating addiction treatment programs and services (McLellan et al. 2007; McLellan et al. 2005). Importantly, the notion of recovery, as described by participants in this study, reflects that within a chronic disease paradigm with a large focus on ongoing symptom management and improvements in quality of life. Symptom management could be ongoing for 3 to 5 years before stability is met (Laudet 2007), highlighting the need to measure recovery outcomes at multiple time points as part of ongoing program and system level performance evaluations so to accurately reflect the recovery process.

Strengths and Limitations

Although focus groups may not be a conventional method of phenomenological research (Norlyk and Harder 2010), in this case, they generated rich qualitative data. The study conditions may have fostered a comfortable environment for participants to provide rich descriptions and discussion of their own experiences: Participants were recruited from the same group-based aftercare program and were familiar with sharing personal experiences within this context. The convergence of ideas across both focus groups and interviews further strengthens the validity of the data. In this case, focus groups proved to be a cost-effective and efficient method to collect in-depth knowledge about the phenomenon under study that may not have been as easily captured using quantitative methods.

As noted, the general inductive approach to data analysis encouraged the research team to approach the data with an open mind and bracket any pre-understandings of recovery (Norlyk and Harder 2010). This allowed findings to emerge from frequent, dominant, or significant themes in the data rather than approaching the data with preconceived notions or theories. Inevitably, the findings were shaped by the assumptions and experiences of the researchers conducting the study and carrying out the analysis (Thomas 2006); however, we attempted to limit these inherent biases by incorporating an independent parallel coding process and numerous validity checks.

This is one of few qualitative studies that examined perspectives of recovery from individuals with lived experience; however, our homogenous sample may have limited discussion on certain topics. Participants represented a higher socioeconomic status which likely limited discussion of how factors such as housing, food security, and social inclusion may become part of one's definition of recovery. Participants also lacked ethnic diversity which may have limited discussion on some unique cultural aspects of recovery, including the role culture that may play in the healing process. Furthermore, some research suggests that the definition of recovery may also be influenced by one's treatment path, age, time in active recovery, and severity of substance use (Laudet 2007; Witbroadt et al. 2015). In this study, the participants' shared exposure to an abstinence-based treatment philosophy during the residential and aftercare programs likely contributed to their emphasis on abstinence, particularly as an early treatment goal. Abstinence may not be a foundational goal for all individuals in recovery, particularly for those engaged in harm reduction approaches (e.g., Marcellus et al. 2014; Watson and Rollins 2015). However, as Laudet (2007) suggests, individuals with a severe addiction often come to the conclusion that abstinence is required after several attempts at recovery without abstinence. Nevertheless, understanding recovery from various lenses and identifying consistent measurement domains across multiple treatment philosophies and individual characteristics is important for informing program and system level measurement of addiction recovery.

Conclusions

Conceptualizing recovery as a lifelong process reinforces the need to measure and monitor recovery-oriented outcomes not only during treatment but also over a period of time following treatment. Doing so will enable a more comprehensive approach to evaluating addiction treatment outcomes (Rush et al. 2009). The continuous and productive change, varied pace, and no direct route aspects of recovery signifies the need to measure outcomes periodically following treatment. This will allow for the exploration of recovery trajectories over time, identification of associated mediators and moderators, and highlight reasonable treatment outcome expectations (McLellan et al. 2005). Overall, the adoption of recovery-oriented outcome monitoring system could inform recovery promoting services and supports across the lifespan, adding significant contributions to research and practice.

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Compliance with Ethical Standards All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (Regional Centre for Excellence in Ethics, Guelph, Ontario, Canada) and with the Helsinki Declaration of 1975, as revised in 2000 (5).

Conflict of Interest The authors declare the following potential conflict of interest: Homewood Research Institute is an independent charitable organization funded through a variety of sources including community stakeholders, corporations, private foundations, and philanthropic support from the Schlegel family. The Schlegel family owns Homewood Health.

Informed Consent Informed consent was obtained from all patients prior to being included in the study.

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