



# Why Do Those With Long-Term Substance Use Disorders Stop Abusing Substances? A Qualitative Study

Henning Pettersen<sup>1</sup>, Anne Landheim<sup>1,2,3\*</sup>, Ivar Skeie<sup>2,4\*</sup>, Stian Biong<sup>5\*</sup>, Morten Brodahl<sup>1\*</sup>, Victoria Benson<sup>6\*</sup> and Larry Davidson<sup>6\*</sup>

<sup>1</sup>Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders, Mental Health Division, Innlandet Hospital Trust, Brumunddal, Norway. <sup>2</sup>SERAF – Norwegian Centre for Addiction Research, University of Oslo, Oslo, Norway. <sup>3</sup>Inland Norway University of Applied Sciences, Elverum, Norway. <sup>4</sup>District Psychiatric Centre Gjøvik, Innlandet Hospital Trust, Gjøvik, Norway. <sup>5</sup>Faculty of Health and Social Sciences, University College of Southeast Norway, Kongsberg, Norway. <sup>6</sup>Program for Recovery and Community Health, School of Medicine, Yale University, New Haven, CT, USA.

Substance Abuse: Research and Treatment  
Volume 12: 1–8  
© The Author(s) 2018  
Reprints and permissions:  
sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/1178221817752678



**ABSTRACT:** Although a significant proportion of adults recover from substance use disorders (SUDs), little is known about how they reach this turning point or why they stop using. The purpose of the study was to explore the factors that influence reasoning and decision making about quitting substance use after a long-term SUD. Semistructured interviews were conducted with 18 participants, each of whom had been diagnosed with a SUD and had been abstinent for at least 5 years. A resource group of peer consultants in long-term recovery from SUDs contributed to the study's planning, preparation, and initial analyses. Participants recalled harmful consequences and significant events during their years of substance use. Pressure and concern from close family members were important in their initial efforts to abstain from substance use. Being able to imagine a different life, and the awareness of existing treatment options, promoted hope and further reinforced their motivation to quit. Greater focus on why those with SUDs want to quit may help direct treatment matching; treatment completion may be more likely if the person's reasons for seeking help are addressed.

**KEYWORDS:** Substance use disorder, reasons to quit substance use, collaborative research, qualitative study

**RECEIVED:** July 27, 2017. **ACCEPTED:** December 18, 2017.

**TYPE:** Original Research

**FUNDING:** The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by Innlandet Hospital Trust, Norway.

**DECLARATION OF CONFLICTING INTERESTS:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**CORRESPONDING AUTHOR:** Henning Pettersen, Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders, Mental Health Division, Innlandet Hospital Trust, P.O. Box 104, 2381 Brumunddal, Norway.  
Email: henningpettersen@hotmail.com

## Background

Compared with other types of dependent behaviors, long-term drug or alcohol use disorders are often associated with the development of physical or psychological harm, social and interpersonal problems,<sup>1</sup> and experiences of shame and stigma<sup>2,3</sup> in addition to denial and self-deception.<sup>4,5</sup> Furthermore, several bio-psycho-social protective and risk factors interact when individuals engage in problematic substance use. Issues such as access to treatment,<sup>6</sup> social determinants of health,<sup>7</sup> and drug policies<sup>8</sup> exert considerable impact on the persistence of problematic substance use, as well as on achieving abstinence.

A review of qualitative studies of changes in unhealthy behaviors, including substance use, concluded that successful behavior change was not primarily the result of specific treatments or life events. The key moment leading to behavior change was rather self-appraisal, prompted by distressing accumulated evidence that revealed an intolerable conflict between continued use and personal values and goals.<sup>9</sup> Studies of natural recovery have generated similar findings and in addition have highlighted the significance of respondents becoming

aware of the consequences of their problems.<sup>10,11</sup> Studies of individuals in treatment have identified a reduction in quality of life and a lack of control,<sup>12,13</sup> family influences,<sup>14</sup> and detachment from a substance-user identity<sup>15</sup> as primary reasons for their choice to abstain. Longitudinal studies conducted in the United States and Sweden found that peer pressure and social stabilization were the most often cited reasons for abstaining from problematic substance use.<sup>16–18</sup>

Several studies have suggested that 5 years of abstinence may be the threshold for indicating stable and sustained recovery.<sup>19–21</sup> Being in recovery from problematic substance use involves more than simply being in remission from the disease, however. In general, those pursuing recovery seek improved functioning and a satisfying quality of life, with stable recovery involving reestablishing a meaningful life.<sup>21,22</sup> Accordingly, this study used the following definition of recovery (from the US Substance Abuse and Mental Health Services Administration): “A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.”<sup>23</sup> The role of opioid maintenance treatment (OMT) within such a vision of recovery remains contentious.<sup>24–26</sup> The overall view among clinicians and health authorities in Norway, though, is to consider persons in OMT

\* A.L., I.S., S.B., M.B., V.B., and L.D. contributed equally to this work.



who use prescribed medications only, without using or abusing other substances, as being in recovery.<sup>27,28</sup>

Although a significant number of adults recover from substance use disorders (SUDs), knowledge is scarce regarding the nature of the processes and mechanisms that underlie reasons for quitting or how individuals reach a turning point. Understanding what contributes to a user's decision to stop using may help policymakers design programs and health care professionals develop and implement more effective intervention strategies. Internationally, few studies have examined the experience of abstaining from substance use among individuals with long-term SUDs. This study is distinct from those previously cited, in using qualitative methods to examine recovery from a variety of substances and treatment types, and does so among both men and women.

The purpose of this study was to fill a gap in the research literature by exploring the factors that influence reasoning and decision making about quitting substance use after a long-term SUD.

## Methods

The study design was descriptive and exploratory, using individual semistructured interviews to gain insight into individuals' life experiences, the subjective meaning of those experiences, and the factors participants identify as influencing their decision to stop using.

### *Collaborative research design*

Traditional research into mental health and SUD treatment is increasingly being considered by service users to be disempowering and to reflect their treatment priorities poorly.<sup>29,30</sup> Engaging meaningfully with the people who have firsthand experience with the health condition under investigation, and with the treatments offered, can increase the quality, relevance, and utility of study findings.<sup>31</sup> Thus, a resource group of peer consultants in long-term recovery from SUD was established when the study began in August 2015. This group's mandate was to review the study's aim and research questions and prepare the thematic interview guide. The resource group also contributed to the analyses by reading interview transcripts at an early stage and working alongside the first author (H.P.) to establish initial themes. We also established an exclusive Facebook group that enabled exchanges during the 12 months of data collection and meetings. The resource group consisted of Morten Brodahl, Stig Haugrud, Tore Klausen, and Jeanette Rundgren, all of whom were affiliated with the Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders.

### *Context*

Participants were recruited from the Comorbidity Study: Substance Dependence and Co-occurrent Mental and Somatic Disorders (COMORB study). The COMORB study is

a longitudinal study of 2 cohorts in Norway that looked at mental<sup>32,33</sup> and somatic<sup>34</sup> comorbidities, respectively. The 2 cohort studies are as follows: (1) DD-III, an 18-year follow-up of a dual diagnosis study of psychiatric comorbidity in a heterogeneous sample of patients with SUDs and (2) OMT-II, a 20-year follow-up of a study on OMT, for which somatic morbidity among dependent opioid users was assessed before, during, and after OMT. These 2 cohorts were merged for joint data collection in 2015 (N = 148). The current qualitative study recruited participants from this joint cohort in 2016.

### *Recruitment and sample*

The primary inclusion criterion was being in stable recovery for at least 5 years. Stable recovery was defined as abstaining from all substance use, being on OMT with prescribed medication, or engaging in unproblematic use of other substances. Of the total sample of 148 in the joint cohort sample in the follow-up study in 2016, 35 met this inclusion criterion for this study. The remaining participants in the joint cohort sample still engaged in problematic use of substances at follow-up or reported unproblematic use of substances lasting for less than 5 years. A purposeful, criterion-based sampling procedure was used to recruit a sample of 18 participants. Purposive sampling selects subjects based on study purpose, with the expectation that each participant will provide unique and rich information of value to the study.<sup>35</sup> To obtain information-rich data from which to derive insights and in-depth understanding,<sup>36</sup> we sought to include participants who were heterogeneous and varied in terms of sex, age, substance(s) used, and experience(s) with different treatment types. These data were collected through qualitative interviews designed by the resource group in collaboration with H.P.

The participants were 10 men and 8 women aged 35 to 68 (mean: 52) years. They reported an active period of problematic substance use that ranged from 13 to 36 (mean: 21) years, followed by a period of abstinence that ranged from 5 to 18 (mean: 12) years. In all, 6 of the participants had primarily used heroin, 5 had primarily used alcohol, 5 had a history of mixed substance use, 1 had used amphetamines exclusively, and 1 had used cannabis exclusively. In all, 8 participants were completely abstinent at the time of their interview; 10 reported unproblematic use. Most of the participants had been diagnosed with major depression and/or anxiety disorder, 5 had been diagnosed with attention deficit/hyperactivity disorder as adults, and 2 had been diagnosed with a personality disorder.

### *Data collection*

A small number of participants were appropriate because this is an exploratory, qualitative study. Given our manner of interviewing, group discussion and data analysis were time-consuming, so 18 participants were considered both practical and sufficient.

Individual interviews lasting approximately 1 hour were conducted with each participant. All interviews were conducted

face-to-face by H.P. in participants' homes. The interviews were digitally recorded and a verbatim transcript of each interview was completed before performing the next interview (this was done to prepare for the step-by-step procedure required for further data analyses). Halfway through the interviews, the interview guide was adjusted based on feedback from the research group, to incorporate the following questions: (1) What was your way of thinking about substance use years ago when you contemplated quitting, compared with your present way of thinking? and (2) To what extent was it your own decision to quit, and how much would you emphasize being forced to quit because of detrimental health conditions? All participants were asked to consider their experiences with abstaining from substance use, regarding both their decision-making process and their specific reasons for abstaining or using in moderation. The intention was to let participants reflect freely on their experiences and to ask clarifying questions without making interpretations.<sup>37</sup>

### *Analysis*

To address the study aim, qualitative data from the semistructured interviews were analyzed using systematic text condensation.<sup>38</sup> This method includes a stepwise procedure that aims to identify recurring initial codes relevant to the study purpose and informed by phenomenological psychology.<sup>39</sup>

The interview transcripts were read with an open mind, to minimize the influence of the researcher's preconceptions and to focus on the information conveyed by the participants. For the initial analysis, each member of the resource group, in addition to H.P. and S.B., went through the transcript of every fourth to fifth interview. The overarching themes that were established conveyed issues related to participants' reasons for abstaining. These themes were subsequently discussed and summarized in successive meetings between the resource group and H.P. Analysis was concluded by merging the findings from each subgroup into main themes that incorporated the interviews with each of the 18 participants. The main theme concerned how abstaining from substance use was motivated by having experienced harmful consequences.

Subsequently, a total of 56 meaning units, consisting of sentences or paragraphs from the main themes within the transcripts, were identified and translated from Norwegian to English. After organizing all meaning units into 5 subthemes via multiple discussions and an iterative process of reading and rereading, a text of condensed meaning was constructed for each subtheme. The final phase consisted of summarizing the meaning of the content using a new description. H.P. conducted the latter part of the analysis in collaboration with M.B., V.B., and L.D.

### *Ethical considerations*

The COMORB study was approved by the Regional Committee for Medical and Health Research Ethics, Southeast Region (REK-no. 2014/1936). All participants

signed informed consent and were informed that they could withdraw from the study at any stage. Consent covered the possibility of being contacted for further, in-depth interviews. To protect anonymity, no identifiable information about any participant is reported herein. Each member of the resource group of peer consultants signed a document confirming declaration of nondisclosure of confidential information.

### **Results**

Participants recalled having experienced harmful consequences and significant events because of their years of substance use. They reported that pressure from and concerns of close family members had been important to their efforts to abstain from continued use. Being able to imagine a different life, and an awareness of existing treatment options, promoted hope and further reinforced participants' motivation to quit.

#### *Harmful consequences and significant events*

Most of the participants experienced substance use as having detrimental effects on both their physical and mental health over time. Furthermore, they found that it was challenging to maintain positive relationships with people in general, and particularly to keep their family together, when substances were their first priority. However, these harmful effects took time to manifest, with their arguments for quitting substance use only emerging after multiple years of using, regardless of which substances were used. For instance, a 50-year-old man who had been addicted to heroin for several years recalled that it was more demanding to be on drugs and participate in criminal activity during middle age, compared with when he was a young adult.

Most of the participants told stories about having to hit rock bottom to reach a turning point, and some used the term "warning sign" as an expression of becoming aware that they were in a miserable condition. Such events included a partner or close family member dying from an overdose, a traumatic accident due to substance use, or one of many factors leading to a sense of losing control of their daily lives. Each participant's experience of hitting bottom was unique, probably because each was sensitive to different aspects of their lives. However, common among these participants were experiences of despair, hopelessness, and a sense of having lost control. These feelings were cited as prerequisites for reaching a decision to quit. A 65-year-old widow and her late husband had both been addicted to substances. She had used heroin for 36 years and been abstinent for the past 15 years. She explained,

I just wasn't able to cope with things any more, and I felt totally devastated. I was very uncomfortable with myself and people close to me. I was so mentally worn-out. It took some years to reach such a state.

In contrast, a few participants reported arriving at a point in their substance use where they were no longer capable of

thinking rationally or making decisions. Mentally worn-out and physically exhausted, on the verge of committing suicide or experiencing other life-threatening events, they felt forced to quit. It appeared that their reasons for quitting were more easily recognized by those close to the participants than to the participants themselves. In these cases, family members or service providers acted and assisted with treatment admission.

#### *Concern and love from close family members*

Several participants described family members who actively pressured them to change their habits and quit using substances. Some explained that they had received strict instructions to quit, with reasons based on harm to others as well as to themselves. In most instances, these concerns were raised by the participants' children, who also seemed to have the greatest impact on their decision to quit. For example, 1 woman, aged 58 years, recalled her oldest daughter went so far as to consider cutting off connections with her if she did not take quitting seriously. For some participants, having a nonusing partner who became aware of their substance use was influential, although this was less important than pressure from their children. In contrast, a couple of participants who had partners with their own substance use problems experienced both pressure and support from their partners, which were crucial in their decision to quit. A 52-year-old woman who had been abstinent from heroin use for the past 15 years felt strongly committed to her father when she decided to quit:

I had disappointed my father so many times. He always picked me up when I had completed detoxification treatment. I remember I was motivated to show my dad that I could manage. But he died only 3 weeks after I started Methadone treatment. Unfortunately, I didn't make it back home on time. Some of my driving force was to please my father. I had a great wish that he could have been able to see me in sobriety, and not the listless and tired girl he had been used to seeing.

Except for 2 participants, each participant had children and each had a partner with whom they had cohabited. Prevalent among the participants was an awareness that their entire family was beginning to fall apart, due mainly to their substance use. A majority described their reasons for quitting as wanting to build or sustain bonds with their family and particularly to keep contact with their children. A 48-year-old mother of two who had used amphetamines for several years and been abstinent for 17 years explained her reasons for abstaining:

The main reason to quit was in consideration of my two children. The oldest lived with her father at that time, and the younger one I volunteered to place in a foster home. I thought it should be temporary, and it was really a wish of mine to keep a good relationship with both of them.

Also important for participants was having their conscience weighing on them when they thought back to the troubled

upbringing they had inflicted on their children. Several participants had their children taken and placed in foster homes by the child welfare system. For some, this created an even greater desire to abstain from substance use to keep in contact with their children, although they were still plagued with uncertainty and doubt about making the decision to quit.

#### *Countering doubt and hesitation*

Widespread among the participants' stories was the prolonged doubt they experienced for years before making the decision to quit. Some reported a life in which pain was unalleviated by either using or abstaining from substances. They acknowledged that they had to stop using while knowing they could not manage to do so.

Some participants also had to challenge the views of their service providers. A 35-year-old woman who had used heroin and been abstinent for the past 5 years explained,

I have thought since then that the actual decision was made rather suddenly. I made my choice about quitting substance use, but I also had in mind that I most certainly would relapse. My treatment providers strongly opposed this way of thinking. But by thinking this way I was able to put aside my feelings of shame by accepting that I would probably experience relapses later in life.

Some spoke of a weak mental voice that was still in significant doubt about the decision to quit, even when they had strong arguments for doing so. A 40-year-old man who had never married, no children, and lived alone had used a combination of cannabis, alcohol, and amphetamines for 15 years and had been abstinent for the past 10 years. When considering his decision to quit he reported,

I recall sitting in the waiting room at the detoxification unit, thinking "Shall I really . . . or not?" There was a weak voice still very much in doubt about the decision. But next to me sat another guy having the same dilemma. We looked at each other, rather surprised. Then my thought was: "He doesn't back away, so I won't either." Actually, we had only five minutes of nonverbal contact, but that was important in order to stick to my decision.

One woman, aged 35 years, explained that she had been in and out of different substance use treatment centers for nearly 10 years and recalled that she underwent nearly 1 year of contemplation after her last treatment admission before she finally made the decision to quit.

One characteristic of these participants' thinking was their willingness to keep trying to quit, even after experiencing multiple unsuccessful treatment episodes. Reports frequently included an ability to self-reflect and an attitude of never giving up, even though both professionals and people close to them saw their relapse as a failure. Some of the participants who reported experiencing mental illness or childhood trauma did not see drugs as their primary problem; rather, they viewed drugs as a solution to their *real* problems. In such instances, the

reasons for abstaining from drug use became complex and were highly related to their basic life problems. Some participants had been able to break through their denial of their substance use through contact with peers; this was reported primarily by participants who had attended a 12-step program. These participants were also able to think ahead and visualize a better life, beyond substance use.

### *Having hope and imagining a different life*

Most of the participants saw a connection between being able to imagine a different life and developing a motivation to abstain. For some, it could be positive memories of their childhood or the fear of developing even more severe substance use. The previously mentioned 35-year-old woman who had been abstinent for the past 5 years explained,

I had a wish to live a different life than what was captured by the substance use environment. I have good memories from my childhood, and I knew it was possible to live a decent life. I thought about sunny days. It was not a lot, but I remember that it is possible to do well. If you talk about a person not having a single good memory, then it becomes difficult. You ought to get into contact with such memories.

This habit of imagining a better life also suggested that a certain degree of self-respect was helpful in reaching the decision to quit. One woman, aged 61 years, who had abused alcohol for 25 years and been abstinent for the past 18 years, received institutional treatment once. She gave the following explanation for quitting:

Eventually I became afraid to meet other people, and needed a few drinks in order to manage going to work. There was one time I imagined becoming one of the drunks frequenting the parks, and that just wasn't me. I had reached my point of no return.

For some participants, it seemed that having their dignity violated led to visions of a better life. Even being able to appreciate daily chores that they had neglected for several years became helpful in their recovery.

One man, aged 40 years, explained that the desire to project forward to what would happen in the world as he grew older gave him hope. For others, hope was related to being able to make changes in their lives, despite having a hereditary vulnerability to addiction. Some participants who received methadone saw this treatment as the primary contribution to their being able to live a decent life without using heroin. They recalled that several years previously, being offered methadone treatment had given them hope and kept them alive.

### *Awareness of available treatment*

Some participants found that it was even more difficult to decide to seek help than it had been to decide to quit. This may have been due both to the stigma surrounding SUDs and to the

shame of having to admit to being dependent on others for help. It may also have been because substance use was something they viewed as being initially self-inflicted but then impossible to self-manage. For instance, a 63-year-old man explained that although he was usually burdened by his conscience due to his drinking before he sought treatment, the last time he went through treatment he managed to seek help before reaching this state. He explained,

The first time asking for help was the real hard one. It felt like a defeat. The reason was that it was because of something I had inflicted on myself, but couldn't solve. But gradually help-seeking became less troublesome.

Most of the participants had received institutional treatment more than once; they reported that help seeking gradually became less difficult after each treatment episode and that the threshold for asking for help became lower. Several had experienced institutional treatment as a pleasant stay at a place where they were cared for, rather than a place where they became abstinent. One man, aged 68 years, had experienced severe alcohol problems for 25 years. He had been institutionalized for treatment several times and had the following experiences:

I was so strongly attached to alcohol, and I experienced a despair in acknowledging that I had to stop drinking, and knowing at the same time that I couldn't manage to stop. But the psychotherapist I was seeing for my depression strongly advised me to seek substance use treatment. The reason I followed his advice, was that he told me his own story of former alcohol problems. We discovered together that I needed treatment.

On reflection, most reported experiencing gradually improving results after each institutional stay. Many who had sought treatment did so under professional supervision or guidance, and several of the participants placed an emphasis on being aware of existing treatment options as important among the factors in their abstaining.

## **Discussion**

Our findings provide important insights into why long-term substance users decide to quit based on their own perspective. Their main reasons for quitting were experiencing the harmful consequences of substance use, concerns and pressure from close family members, countering doubt, having hope, and being aware of available treatment options.

Our finding that experiencing harmful consequences of substance use is a precursor to establish the motivation to quit is consistent with previous research on the users' perspective.<sup>12-14</sup> For the participants in our study, the decision to quit was not just about hitting rock bottom, or caused by a single significant event, but rather a gradual deterioration in both mental and physical health and in the quality of their relationships with close family members, which suffered over time. They consistently underscored these issues, despite being a

markedly heterogeneous group with different substance and treatment experiences. These findings are consistent with a study examining substance abuse recovery in untreated individuals who found whether or not treatment is received, the decision to quit takes time.<sup>11</sup>

Although contextual issues and health concerns were given as prominent factors in this study, these findings differ from quantitative survey studies, in which issues related to identity were found to be the main motive for quitting.<sup>40,41</sup> Similar factors have also been emphasized by a qualitative study among heroin users in Greece, in which reasons to quit were mainly attributed to identity redefinition.<sup>15</sup> The reason that contextual issues and health concerns were reported as more influential by participants in this study may be that the current participants had longer tenures of both substance use and abstinence. Our participants were older (mean age: 52 years) and most of them had children and a spouse.

Family interventions can help spouses, children, and other close relatives influence or pressure the using family member to enter treatment, accept help, and address the impact of their substance use on the whole family. Nevertheless, some family members are less vulnerable than others and suffer less from the adverse effects of a loved one's substance use. *Al-Anon* and *Nar-Anon* programs promote a belief that the partner or spouse should detach from the substance user.<sup>42</sup> Although several of the participants in this study attended a 12-step program, most of them recalled that pressure or involvement from their spouse or children gave them reasons to quit. It emerged that both pressure from a close family member and their own desire to reestablish or improve contact with loved ones were significant reasons for quitting. In this respect, findings from this study clearly support programs such as the *Community Reinforcement and Family Training (CRAFT)*<sup>43</sup> and the *Johnson Institute Intervention*,<sup>44</sup> in which actively engaging close family members are emphasized.

For most of the participants in our study, it was more challenging to seek help than to admit to having a problem. This ambivalence about the need for SUD treatment seems universal,<sup>45,46</sup> as is fear of embarrassment or even stigmatization from admitting to a need for, or attending, treatment.<sup>47</sup> This may explain why barriers to problem recognition are different from barriers to deciding that treatment is needed.

Our participants experienced dilemmas over their need to stop using while simultaneously acknowledging that they could not manage to stop. Although these participants had developed strong arguments for quitting during their years of substance use, a part of them still refused to do so. Therefore, their reasons for abstaining became complex, implying both cognitive skills and persistence. This supports findings from a qualitative study of self-change in substance users from Switzerland and Canada.<sup>11</sup> Participants in our study were able to reflect on their challenges and successes with abstaining from substance use. Although not directly comparable, this may challenge recent research indicating that heroin addiction leads to cognitive and

decision-making deficits that persist at least 18 months after quitting.<sup>48</sup> Compared with the *Biernacki* study, in which all participants were former heroin users who had been in treatment for less than 1 year, only a third of our participants were former heroin users, all of whom had been abstinent for a long period (i.e., 12 years).

Furthermore, users' self-reported reasons for abstaining can be conceptualized using self-determination theory,<sup>49</sup> which emphasizes the understanding of both extrinsic and intrinsic motivation to explain human behavior. According to this explanatory model, intrinsic motivation is generally superior to extrinsic motivation in driving behavioral change. Our findings can be seen as putting equal emphasis on extrinsic factors as motivators, including pressure from close family members, inflicted harm, and available treatment. The intrinsic motivational factors were essentially related to identity, self-reflection, and being able to visualize a better future.

The ability of the participants in our study to develop hope was linked to the contrast between an impoverished self and the self they had lost. Elements of hope were found not only in pleasant memories of childhood but also when confronted with the miserable lives of several substance-using friends. Major theorists have conceptualized the construct of hope as both an individual's sense of successful determination to meet goals (agency) and successful plans to meet those goals (ability to generate pathways).<sup>50</sup> As more of an extension than a criticism of this theory, *Stevens et al*<sup>51</sup> offered a perspective on hope that also takes into consideration one's perceived context by incorporating opportunities, choices, and obstacles. Their study suggests that system-level effects are critical to an individual's hopefulness. Viewing the findings of our study from the perspective of this model, hope was promoted through cognitive factors such as self-respect, dignity, and contemplation of a future. However, being able to make changes in life, facing daily chores, and having access to treatment options can be seen as contextual factors. One quantitative study of hope among 90 residents of communal-living recovery homes suggests a stronger relationship between hope and recovery from drug use compared with hope and recovery from alcohol use.<sup>52</sup> Those authors partly explain their finding by suggesting that users are likely to report their illegal substance use less often than they do their alcohol use. In contrast, compared with former drug users, our study participants with former alcohol problems were more likely to identify hope as one reason for quitting. One explanation may be that the most of those with former alcohol use problems had attended a 12-step program and were familiar with hope as a key element in the recovery philosophy of *Alcoholics Anonymous*.<sup>53</sup>

Some studies show that being unaware of treatment services is a barrier to accepting one's own substance use problems and may prevent help seeking.<sup>54,55</sup> The participants in our study were assisted or pushed forward by caring professionals or people close to them, which was also motivating and became a reminder that something could be done.

One question is whether help seeking is something that must be learned or practiced. When participants in this study referred to having several stays in institutional treatment before eventually deciding to quit, they acknowledged that they had gained something from treatment, despite being unable to abstain. This reflects the fact that some may seek treatment for reasons other than to abstain, and that those who seek treatment are more likely to have had prior treatment. It may also be that as concluded by Saunders et al in their study of alcohol treatment, previous treatment reduces certain barriers to further treatment.

Importantly, the current findings confirm previous research on the reasons for abstaining from substance use, implying that our results may be generalizable beyond the specific context of the study. Individuals who abstain from substance use are seldom included as participants in research projects, emphasizing the importance of our heterogeneous study sample. Furthermore, having collaborators with firsthand SUD experience to guide preparation, data analysis, and write-up contributed to internal data validation and a broader interpretation of the findings. However, we did not use memos throughout the coding and analysis, as recommended by Giorgi (2009). Thus, setting aside our expected meanings of the data was challenging. This was the case particularly for members of the resource group, who were recruited as study collaborators due to their own experiences with substance use having similarities with the participants' experiences. One further study limitation was that we used retrospective recall in asking participants about their experiences. A problem with retrospective accounts is that memory is quite fallible. What people report several years later is influenced by a great deal of rehearsal over time. Memory of one's motivation is even more problematic because people are often relatively unaware of their motivations.<sup>18</sup> Thus, some of the information from the interviews may have been influenced or biased by attitudes or modes of expression learned through treatment experiences,<sup>56</sup> especially among participants who attended 12-step programs. Nonetheless, these findings provide insights that will be useful for practitioners across diverse settings.

## Conclusions

Participants' acknowledgment that an awareness of available treatment options influenced their decisions to quit implies that different kinds of treatment options should exist not only for the effects of the treatments themselves but also to motivate users to seek help. It also implies that information about treatments should be widely available. Both individuals entering treatment and practitioners will benefit from a better understanding of users' motivations for seeking treatment rather than simply trying to meet the treatment program's goals. A greater focus on why clients might want to quit substance use may help direct treatment matching because users may be more likely to complete treatment if their reasons for seeking help are addressed. When possible, clients' families should be engaged

early in the treatment process, as this may improve outcome. For those with childcare responsibilities, it may be valuable to encourage clients to communicate with their children about their children's feelings and concerns surrounding substance use. Furthermore, it will likely enhance the effectiveness of treatment if clients are asked about their former treatment experiences, as they seem to accumulate useful knowledge from successive treatment interventions.

## Acknowledgements

The authors thank the study participants for their time and participation. They also express their gratitude to Jeanette Rundgren, Stig Haugrud, and Tore Klausen, members of the resource group, for their valuable contributions to study preparation and early data analysis. They further thank Professor Robert E Drake for his constructive feedback on this manuscript.

## Author Contributions

HP collaborated with the resource group on preparing the study and construction of the interview guide, conducted the interviews, and collaborated with SB and the resource group on the initial data analysis. HP, MB, VB, and LD conducted the latter analysis. HP had the primary role in drafting the manuscript, with inputs by MB, VB, LD, AL, IS, and SB. All authors read and approved the final manuscript.

## REFERENCES

1. National Institute of Drug Abuse (NIDA). Trends and statistics, 2016. <https://www.drugabuse.gov/related-topics/trends-statistics>. Accessed December 4, 2016.
2. Barry CL, McGinty EE, Pescosolido BA, Goldman HH. Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatr Serv*. 2014;65:1269–1272.
3. Parcespe AM, Cabassa LJ. Public stigma of mental illness in the United States: a systematic literature review. *Adm Policy Ment Health*. 2013;40:384–399.
4. Schooler JC, White EH, Cohen CP. Drug abusers and their clinic-patient counterparts: a comparison of personality dimensions. *J Consult Clin Psychol*. 1972;39:9–14.
5. Richards HJ, Pai SM. Deception in prison assessment of substance abuse. *J Subst Abuse Treat*. 2003;24:121–128.
6. SAMHSA. *Results from the 2015 National Survey on Drug Use and Health: Summary of National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2016.
7. WHO. *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health* (Final Report). Geneva, Switzerland: World Health Organization; 2008.
8. Strang J, Babor T, Caulkins J, Fischer B, Foxcroft D, Humphreys K. Drug policy and the public good: evidence for effective interventions. *Lancet*. 2012;379:71–83.
9. Kearney MH, O'Sullivan J. Identity shifts as turning points in health behavior change. *West J Nurs Res*. 2003;25:134–152.
10. Cloud W, Granfield R. The social process of exiting addiction: a life course perspective. *Nord Stud Alcohol Drugs*. 2004;44:185–202.
11. Sobell LC, Klingemann HK, Toneatto T, Sobell MB, Agrawal S, Leo GI. Alcohol and drug abusers' perceived reasons for self-change in Canada and Switzerland: computer-assisted content analysis. *Subst Use Misuse*. 2001;36:1467–1500.
12. Weiss L, Gass J, Egan JE, Ompad DC, Trezza C, Vlahov D. Understanding prolonged cessation from heroin use: findings from a community-based sample. *J Psycho Drugs*. 2014;46:123–132.
13. Gilbert H, Drummond C, Sinclair J. Navigating the alcohol treatment pathway: a qualitative study from the service users' perspective. *Alcohol Alcoholism*. 2015;50:444–450.
14. Andrews D, Kramer R, Klumper L, Barrington C. A qualitative exploration of individuals' motivators for seeking substance user treatment. *Subst Use Misuse*. 2012;47:1224–1233.

15. Fotopoulou M. Reasons behind Greek problem drug users' decisions to quit using drugs and engage in treatment of their own volition: sense of self and the Greek *filotimo*. *Addiction*. 2014;109:627–634.
16. Alverson H, Alverson M, Drake RE. Social patterns of substance-use among people with dual diagnoses. *Ment Health Serv Res*. 2001;3:3–14.
17. Öjesjö L. The recovery from alcohol problems over the life course: the Lundby longitudinal study, Sweden. *Alcohol*. 2000;22:1–5.
18. Vaillant GE. *The Natural History of Alcoholism Revisited*. Cambridge, MA: Harvard University Press; 1995.
19. Dennis ML, Foss MA, Scott CK. An eight-year perspective on the relationship between the duration of abstinence and other aspects of recovery. *Eval Rev*. 2007;31:585–612.
20. Hser YI. Predicting long-term stable recovery from heroin addiction: findings from a 33-year follow-up study. *J Addict Dis*. 2007;26:51–60.
21. Kaskutas LA, Borkman TJ, Laudet A, et al. Elements that define recovery: the experiential perspective. *J Stud Alcohol Drugs*. 2014;75:999–1010.
22. Lorman WJ. Maintaining sobriety and recovery. *Nurs Clin North Am*. 2013;48:437–444.
23. SAMHSA. *Guiding Principles and Elements of Recovery-Oriented Systems of Care: What Do We Know From the Research?* Rockville, MD: Substance Abuse and Mental Health Services Administration; 2009.
24. McKeganey N. Harm reduction at the crossroads and the rediscovery of drug user abstinence. *Drugs*. 2012;19:276–283.
25. Strang J. *Medications in Recovery*. London, England: National Treatment Agency, UK Drug Policy Committee's Recovery Consensus Group; 2011.
26. White WL, Mojer-Torres L. *Recovery-Oriented Methadone Maintenance*. Chicago, IL: Great Lakes Addiction Technology Transfer Center; 2010.
27. Lobmaier P, Gossop M, Waal H, Bramness J. The pharmacological treatment of opioid addiction: a clinical perspective. *Eur J Clin Pharmacol*. 2010;66:537–545.
28. WHO. *Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence*. Geneva, Switzerland: World Health Organization; 2009.
29. Faulkner A. *The Ethics of Survivor Research: Guidelines for the Ethical Conduct of Research Carried Out by Mental Health Service Users and Survivors*. Bristol, UK: Policy Press; 2004.
30. Trivedi P, Wykes T. From passive subjects to equal partners. *Br J Psychiatr*. 2002;181:468–472.
31. Davidson L, Bellamy C, Flanagan E, Guy K, O'Connell M. Maximizing opportunities for recovery—a participatory approach. In: McCormack B, Eide T, Skovdal K, Eide H, Kapstadand H, Van Dulmen S, eds. *Person-Centred Healthcare Research—"The Person in Question": The Person-Centered Research Handbook*. London, UK: Wiley; 2017:69–85.
32. Bakken K, Landheim A, Vaglum P. Substance-dependent patients with and without social anxiety disorder: occurrence and clinical differences. A study of a consecutive sample of alcohol-dependent and poly-substance-dependent patients treated in two counties in Norway. *Drug Alcohol Depend*. 2005;80:321–328.
33. Landheim A. *Mental Illness in Patients in Substance Abuse Treatment: Prevalence and Relation to Long-term Substance Abuse* [dissertation]. Oslo, Norway: University of Oslo; 2007.
34. Skeie I. *Somatic Morbidity Among Dependent Opioid Users Before, During and After Opioid Maintenance Treatment: Longitudinal Cohort Studies of Acute and Sub-acute Disease Incidence* [dissertation]. Oslo, Norway: University of Oslo; 2012.
35. Patton MQ. *Qualitative Research & Evaluation Methods*. London, England: SAGE; 2002.
36. Miles MB, Huberman AM, Saldaña J. *Qualitative Data Analysis: A Methods Sourcebook*. London, England: SAGE; 2013.
37. Kvale S, Brinkman S. *Interviews: Learning the Craft of Qualitative Research Interviewing*. 2nd ed. Thousand Oaks, CA: SAGE; 2009.
38. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scand J Public Health*. 2012;40:795–805.
39. Giorgi A. *The Descriptive Phenomenological Method in Psychology: A Modified Husserlian Approach*. Pittsburg, PA: Duquesne University Press; 2009.
40. Downey L, Rosengren DB, Donovan DM. Sources of motivation for abstinence: a replication analysis of the Reasons for Quitting Questionnaire. *Addict Behav*. 2001;26:79–89.
41. McBride CM, Curry SJ, Stephens RS, Wells EA, Roffman RA, Hawkins JD. Intrinsic and extrinsic motivation for change in cigarette smokers, marijuana smokers, and cocaine users. *Psychol Addict Behav*. 1994;8:243–250.
42. Timko C, Young LB, Moos RH. Al-Anon family groups: origins, conceptual basis, outcomes, and research opportunities. *J Groups Addict Recover*. 2012;7: 279–296.
43. Roozen HG, De Waart R, Van Der Kroft P. Community reinforcement and family training: an effective option to engage treatment-resistant substance-abusing individuals in treatment. *Addiction*. 2010;105:1729–1738.
44. Johnson V. *Intervention: How to Help Those Who Don't Want Help*. Minneapolis, MN: Johnson Institute; 1986.
45. Mojtabai R, Olfson M, Mechanic D. Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. *Arch Gener Psychiatr*. 2002;59:77–84.
46. Fox JC, Blank M, Rovnyak VG, Barnett RY. Barriers to help seeking for mental disorders in a rural impoverished population. *Comm Ment Health J*. 2001;37: 421–436.
47. Grant BF. Barriers to alcoholism treatment: reasons for not seeking treatment in a general population sample. *J Stud Alcohol*. 1997;58:365–371.
48. Biernacki K, McLennan SN, Terrett G, Labuschagne I, Rendell PG. Decision-making ability in current and past users of opiates: a meta-analysis. *Neurosci Biobehav Rev*. 2016;71:342–351.
49. Ryan RM, Deci EL. Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemp Educat Psychol*. 2000;25:54–67.
50. Snyder CR, Harris C, Anderson JR, et al. The will and the ways: development and validation of an individual-differences measure of hope. *J Pers Soc Psychol*. 1991;60:570–585.
51. Stevens EB, Buchanan B, Ferrari JR, Jason LA, Ram D. An investigation of hope and context. *J Comm Psychol*. 2014;42:937–946.
52. Mathis GM, Ferrari JR, Groh DR, Jason LA. Hope and substance abuse recovery: the impact of agency and pathways within an abstinent communal-living setting. *J Groups Addict Recover*. 2009;4:42–50.
53. Jason LA, Ferrari JR. Oxford house recovery homes: characteristics and effectiveness. *Psychol Serv*. 2010;7:92–102.
54. Naughton F, Alexandrou E, Dryden S, Bath J, Giles M. *Assessing Treatment for Problem Alcohol Users: Why the Delay?* Gloucester, UK: Gloucestershire Research Unit, Health Psychology Department, Gloucestershire Royal Hospital; 2013.
55. Saunders SM, Zygowicz KM, D'Angelo BR. Person-related and treatment-related barriers to alcohol treatment. *J Subst Abuse Treat*. 2006;30:261–270.
56. Holland D, Lachicotte W, Skinner D, Cain C. *Identity and Agency in Cultural Worlds*. Cambridge, MA: Harvard University Press; 1998.