Mapping, assessing and promoting multiple psychological senses of community (MPSOC) through clinical pathways for treating substance use problems

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Abstract

Aim: The recent nationally implemented clinical pathways for the treatment of substance use problems in Norway require mapping and assessing of patients’ needs, challenges, and resources. However, there is a lack of tools for systematically mapping and assessing patients’ social situations and social networks as part of the national guidelines. The aim of this article is to present a tool developed...
to map and assess the patient’s social situation, and to propose approaches for promoting multiple psychological senses of community (MPSOC) through clinical pathways for treating substance use problems. **Methods:** The proposed tool and approaches are developed based on findings in a previous in-depth collaborative study of MPSOC and recovery among people with substance use problems who received help and services from Norwegian municipalities. **Findings:** The findings suggest that multiple communities (geographical, relational and ideal) and senses of communities (within and outside treatment) simultaneously can influence individual recovery processes from problematic substance use in both positive as well as negative ways. As such, these community dimensions are of central importance to include in mapping and assessing of patients’ social situations, as well as in the promotion of MPSOC through clinical pathways. **Conclusions:** The suggested tool and approaches can increase the likelihood of achieving key aims of the national clinical pathways. Most important, mapping, assessing and promoting MPSOC through clinical pathways may promote long-term recovery processes and positive recovery capital for persons with substance use problems.

**Keywords**
clinical pathway, multiple psychological senses of community, recovery process, substance use problem, substance use service

Clinical pathways for treating substance use problems in Norway were implemented nationally in January 2019. To address service-related limitations, the national guidelines for implementing clinical pathways include an increased focus on different aspects of the patient’s context such as user involvement in treatment and recovery, involvement of significant others, better ways of securing health and good ways of living, user satisfaction, and acknowledging recovery processes as individual (Helsedirektoratet, 2018). People’s psychological sense of community (PSOC) is essential in various ways with respect to these guidelines, as a person’s experience of social belonging can deepen and expand the treatment dimensions and processes, thereby enhancing the treatment’s outcome. For example, the involvement of PSOC is central for pursuing shared aims (which recovery often is) (McMillan & Chavis, 1986; Talò et al., 2014), in people’s health and well-being (Davidson & Cotter, 1991; McCarthy et al., 1990), satisfaction with public services (Sagy et al., 1996), and individual recovery processes from substance use (Bahl et al., 2019).

Based on an in-depth collaborative study of multiple PSOC (MPSOC) and recovery among people with substance use problems who received help and services from Norwegian municipalities (Bahl et al., 2019), we aimed to develop a practical tool to map and assess the patient’s social situation, and approaches for promoting MPSOC through clinical pathways for treating substance use problems. These approaches will be useful for promoting well-being, health, and individual recovery processes, thereby increasing the likelihood of meeting the key aims for the implementation of clinical pathways for the cross-disciplinary specialised treatment of substance use in Norway, known as Tverrfaglig Spesialisert Behandling av Ruslidelser (TSB), and follow-up services (kommunale tjenester) for people with substance use problems. Moreover, acknowledging the relevance of people’s PSOC for health promotion may highlight how people’s ecological systems are fundamental for health promotion and well-being.

**Clinical pathways for treating substance use problems in Norway**
The national clinical pathways for treating substance use problems involve a comprehensive approach...
course of assessment, treatment, and follow-up services. The patient is referred by his or her general practitioner or others in the municipality to cross-disciplinary specialised treatment for substance use in outpatient or inpatient services, and finally to follow-up services in the municipality. Mapping and assessment are the foundations of the clinical pathways for treating substance use problems. The person’s needs, challenges, and resources should be assessed within a basic and extended module. Issues such as use of substances, somatic and mental health, functional level, social situation, and meaningful activities are among the most important. Furthermore, the patient should be involved in working out an individual treatment plan based on the assessment results. Relevant services may also be involved, and each patient has a co-ordinator who should follow him or her through the entire course of treatment to implement the treatment plan.

One of the aims of the Norwegian services for people with substance use problems is to contribute to the subject’s own efforts to achieve the best possible results in terms of their personal, functional, and coping abilities, as well as helping them to be more independent and able to participate socially in the community (Helsedirektoratet, 2014). However, several limitations within these services hinder fulfilment of these aims. First, services for people with substance use problems are often fragmented. Limited cooperation occurs between specialised treatment services and follow-up services in the municipalities (Hansen et al., 2018). Second, after treatment and returning to their communities (geographical and relational), people may also have difficulties as they often are recognised and defined as having substance use problems. Thus, a substance use identity will be attributed to them in their communities (Kompetansesenter rus Midt-Norge, 2018b). Third, despite findings suggesting that treatment outcomes (for the patient and family members) are often better when the family is involved and that the patients need more help from services to establish social relationships, few addiction treatment services in Norway involve the family or other recovery-facilitating communities in the treatment process (Copello et al., 2010; Kalsas et al., 2020; Kompetansesenter rus Midt-Norge, 2020). Finally, the use of assessment tools is recommended by the national clinical guidelines, but few are available to systematically map and assess the social contexts and situations of patients. Thus, despite the increased focus on individual participation, social relationships, and the patients’ everyday lives, genuine assessments and promotion of community participation are still missing elements in the promotion of recovery.

**PSOC and recovery processes**

Feeling that one belongs, or is part of, and that care and social support are available, is essential for personal health, health promotion, subjective well-being, and social functioning (Ahern et al., 1996; Davidson & Cotter, 1991; Gattino et al., 2013; Jorgensen et al., 2010; Talò et al., 2014). However, boundaries or societal mechanisms including norms and personal and societal group identities can strongly demarcate or exclude membership to groups and communities and influence social relations and feeling that one is part of (Phelps et al., 2012). The phenomenon of belonging, or PSOC, is commonly captured by four dimensions: (a) an experience of inclusion and identification with a community (membership); (b) different community and individual impacts (influence); (c) a sense that one’s needs will be integrated and fulfilled through the community’s resources (integration and fulfilment of needs); and (d) a more or less shared history of life and connections with other community members (shared emotional connections) (McMillan & Chavis, 1986). PSOC, moreover, can include different types of affective experiences. One may experience a positive, neutral, and negative sense of community, which in turn can have consequences for health and recovery processes (Bahl et al., 2019; Brodsky et al., 2002; Brodsky & Marx, 2001; Jason et al., 2001; Mannarini et al., 2014).

Several studies have shown that people’s PSOC can play an important role in recovery
from substance use (Barbieri et al., 2016; d’Arlach et al., 2006; Drake et al., 2005; Kollath-Cattano et al., 2018; Laudet, 2008; Peterson & Reid, 2003; Stevens et al., 2010; Stevens et al., 2012). Different types of communities are important for preventing and recovering from substance use problems, including therapeutic communities (Oxford House Recovery Housing), geographical communities (neighbourhood), and relational communities (schools and sober environments) (Battistich & Hom, 1997; Ferrari et al., 2002; Lardier Jr et al., 2017; Mayberry et al., 2009; Stevens et al., 2010; Stevens et al., 2012). The interconnection between PSOC and recovery is obvious in definitions of recovery from substance use problems as a process for achieving a better life, including community engagement and citizenship (Best, 2019; Betty Ford Institute Consensus Panel, 2007). People’s summaries of recovery-facilitating resources or recovery capital (social capital, physical capital, and human and cultural capital) further illustrate the link between people’s PSOC and their potential for recovery. The quality and quantity of (positive and negative) recovery capital, moreover, has been shown to play a major role in predicting successful recovery processes both in and out of treatment (Cloud & Granfield, 2008; Granfield & Cloud 1999).

Important goals in the addiction field include promoting recovery processes and recovery capital through interventions that include the family and other communities, as well as community reinforcement (e.g., peer support or meaningful activities with community members) (Beckwith et al., 2019; Best, 2019; Betty Ford Institute Consensus Panel, 2007; Kalsas et al., 2020; McKay, 2017; White & Evans, 2013). These interventions often rely on assessments or mapping using tools based on a unifying theoretical framework (Beckwith et al., 2019). However, previous research regarding the role of community in recovery for people with substance use problems has been based on a definition and framework where PSOC is assumed to be unidimensional (only positive) and restricted only to one community setting. Thus, little information on or tools for including and working systematically with people’s multiple communities and their different affective community experiences are available in approaches for substance use treatment.

MPSOC represents a broad and nuanced theoretical conceptualisation that is embedded in quantitative bipolar measurements of PSOC, representing a complete framework for understanding PSOC in different groups (e.g., resilient single mothers and members of resistance organisations), as well as across the lifespan (e.g., young and older adults) and in different cultures (e.g., Norway) (Bahl, 2018; Brodsky, 1996; Brodsky, 2009; Mannarini et al., 2014). In our previous study of PSOC, we employed the MPSOC phenomenon as a theoretical framework to explore the different roles that communities might play in recovery from substance use problems (Bahl et al., 2019). Based on the findings obtained in our study of MPSOC among people with substance use problems (Bahl et al., 2019), we propose practical suggestions regarding how to promote MPSOC through clinical pathways for treating substance use problems. However, first, we briefly review our previous study (Bahl et al., 2019).

An in-depth collaborative study of MPSOC and recovery among Norwegian people with substance use problems

Employing the MPSOC concept (Brodsky et al., 2002; Brodsky & Marx, 2001) as the theoretical and analytical approach in our previous study (Bahl et al., 2019), the aim was to obtain a multifaceted and in-depth understanding of personal experiences of the positive and negative influences of multiple communities on individual substance use recovery processes. In this study, we conducted semi-structured interviews with a sample of 16 informants from four Norwegian municipalities in two different regions (east and middle of Norway). Age ranged from 24 to 77 years, and the sample included informants with different experiences and recovery processes of various lengths.
A collaborative thematic analysis of the interview material was conducted with a peer researcher who had recovered from substance use and who was trained in qualitative research. Through several discussions, themes from the individual researchers were added, reviewed and validated into five final themes (see Table 1).

From the identification of these main themes, we concluded that the concept of MPSOC provides a fruitful framework for a thorough understanding of how communities and PSOC affect individual recovery processes. The identified themes suggested that multiple communities and psychological senses of communities (within and outside treatment) can simultaneously

| Theme names                          | Theme definitions                                                                 | Example extracts                                                                                     |
|--------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1: Positive geographical communities | Geographical communities (local community in the municipality, housing offered from the municipality and neighbourhood) positively affecting the recovery processes of informants. | I: “How is your living situation?”
M29: “I live in an apartment with my cohabitant.”
I: “Is that OK?”
M29: “It is really good for me. It’s good for my well-being.” |
| 2: Negative geographical communities | Geographical communities (local community in the municipality and housing offered by the municipality) negatively affecting the recovery processes of informants. | M48: “…there (in the local community) I met all the substance abusers…That was not beneficial for my recovery. You are offered pills…and then it’s really hard to say no.” |
| 3: Positive relational communities   | Relational communities (family, friends, and sober post-treatment communities) with positive influences on the recovery of the informants. | W46: “That (self-help group) has been a crucial community for me. There I got an explanation that I’m not just stupid, that I actually suffer from a condition which is called ‘addiction’ and which drives me to do things contrary to my own interests and values, actually. It’s a community where you belong and which helps you to stay sober.” |
| 4: Negative relational communities   | Relational communities (family and sober post-treatment communities) with negative influences on the recovery of the informants. | W45: “I have a stepbrother. And, it is hard when he calls and says that he doesn’t have a place to live. I say ‘Yes, but then you have to stay at X (shelter), because you can’t come here’. I would have risked my own apartment, which I am very happy with and…I would most probably have risked using drugs again, because I am very impulsive.” |
| 5: Ideal communities                 | Ideal communities were often described as a place where one can feel useful and learn from others who had a longer experience with recovery. | M48: “…Ideally, there could have been more communities like, where you could meet, and play a little, and yes…make use of the experiences we have. Because there are a lot of experiences, or a lot of competence among substance users. There are many skilled people, who could have used their hands more…I think that would have helped a lot, both for mastering substance use and things like that. All that.” |
influence individual substance use recovery processes in both positive and negative ways.

Another conclusion from this study was that the informant’s individual meaning systems of MPSOC include the idea or concept of ideal communities (communities regarded as ideal for one’s recovery). The difference between ideal communities and other types seemed to be that the former require that the person is able to envision their social needs for recovery. One of the informant’s descriptions illustrates this ideal community notion with respect to recovery and a social life with people “outside” services:

W42: . . . the different services should be better at co-operating about the different community offers that I need (for my recovery) . . . where more healthy people could come and not just people with substance use problems.

Our findings also suggested that people with substance use problems who receive services from Norwegian municipalities describe their community experiences in a dichotomous manner as either positive or negative. In fact, the analysis did not yield any findings on neutral PSOC in any of the identified communities.

Moreover, the findings suggested that participation in communities that are perceived as positive for one’s recovery is likely to facilitate natural recovery by promoting elements such as social competence and social support, an experience of safety and stability, and social recovery capital. This example excerpt clearly illustrates these elements in a sober post-treatment community:

W37: In this community you meet people who have experience (with substance use problems) themselves. And, who may have been sober for a longer time than yourself. So, this community is absolutely a place for building community connections. And, I have worked for it . . . the focus has been that you become secure about it and then do new things eventually. I have received help here too. Tips and advice and guidance about it (how to reach out to people).

The informant’s descriptions, moreover, suggested that social recovery capital is facilitated by new and sober social relationships, such as friends, as well as by family:

W42: Apart from my family … you need some friends who do not have any relation to the substance use community (to recover) . . . and of course, I do have some, but I would like to have more.

Finally, based on our analysis, we concluded that restricting contact with communities that are perceived as negatively affecting one’s recovery is important to prevent feeling a lack of safety, exposure to substances and substance use, reminders of a substance use related identity, crisis and conflict, and exclusion. As one of our informants (M53) put it:

There (at the shelter) was not any respect for people’s needs (or their recovery) at all. They are at your door 24/7. It is not possible to push the drugs away. People come from outside to cause trouble all the time. I could not get any experience of peace. So that was a “gold package” (for my recovery).

**Approaches for systematically mapping and promoting PSOC through clinical pathways**

Based primarily on the findings obtained in our in-depth collaborative MPSOC study (Bahl et al., 2019), we will now present some suggestions regarding how to work systematically with MPSOC in the cross-disciplinary specialised treatment of substance use problems and in follow-up services as part of the patient’s individual clinical pathway. Thereby one can promote a sense of social membership and belonging in different communities, as well as emotional connections within and outside treatment.

**Practical suggestions for cross-disciplinary specialised treatment of substance use**

Beginning cross-disciplinary specialised substance use treatment represents the start of
building trusting and co-operative relationships between several health-care professionals and the patient. Initially, the standard procedure involves an extended mapping and assessment of the patient’s needs, challenges, and resources, and thereby setting specific aims accordingly. One of the aspects considered in the extended mapping process is the patient’s social situation, which should include a mapping of multiple communities such as work, school, neighbourhood, and social networks. Social identity mapping (Beckwith et al., 2019) and mapping of community assets (Kretzmann & McKnight, 1996) are examples used in Australia and the USA, respectively, for identifying the roles of social group membership and community assets in supported recovery processes. Such tools for systematically assessing patients’ social situations are lacking in Norway.

Mapping and assessing MPSOC when initiating cross-disciplinary specialised treatment

Considering MPSOC as a thorough and satisfactory conceptualisation for capturing the social situation of patients, we decided to develop some questions to use as a mapping and assessment tool, as well as an illustrative model (see Appendix 1 and Appendix 2) in the extended assessment before commencing cross-disciplinary specialised treatment of substance use. As the findings from our MPSOC study show, multiple communities (and psychological senses of communities or feeling part of) can help building trusting relationships with professionals, thereby influencing individual recovery processes (Bahl et al., 2019). Moreover, community experiences were described as either positive or negative. Similar to recovery capital (see Cloud & Granfield, 2008), PSOC can be understood as a positive–negative continuum. Therefore, our tool includes a mapping of the patient’s membership in multiple (geographical, relational, and ideal) communities and an assessment of his/her affective experience, both positive and negative, towards each of the communities. This initial mapping and assessment of MPSOC for patients provides the foundation for constructing MPSOC within treatment.

Constructing MPSOC within treatment

First, to establish PSOC within treatment, the briefing questions regarding PSOC (see Appendix 1) can be used within the patient’s interdisciplinary co-ordinating group (“Ansvarsgruppe” in Norwegian) to identify his or her PSOC within the group. Next, the group may discuss and agree on what they can do to maintain or increase a desired level for each of the PSOC dimensions. Moreover, using the initial mapping and assessment results, the group can discuss how to promote PSOC in the patient’s other communities. For example, the group could discuss the possibility of involving individuals from the patient’s recovery-facilitating communities (e.g., family members, friends, or neighbours). These communities are likely to be important for promoting social competence, social support, feelings of safety and stability, and social recovery capital, thereby increasing and strengthening a “recovery identity” (Bahl et al., 2019; Beckwith et al., 2019; Best, 2019; White & Evans, 2013). Importantly, the assessment of whether a community is positive or not for recovery should be unanimous between the professionals and the patient.

Post-treatment plan for MPSOC

Maintaining the motivation for lifestyle change and long-term recovery occurs outside treatment, primarily in the community (McKay, 2017; Ravnadal & Lauritzen, 2004). As pointed out, PSOC represents a central element of lifestyle change and long-term recovery. It is therefore essential that services systematically work to ensure that people with substance use problems have meaningful activities and a satisfying social life (Hansen et al., 2018). Therefore, our final suggestion for cross-disciplinary specialised treatment is to include a post-treatment plan for MPSOC in the patient’s individual plan (“Individuell Plan” in Norway).
Norwegian) at the end of treatment. The task of developing the treatment plan should involve all members of the interdisciplinary co-ordinating group, including the patient, service providers, potential community connectors (e.g., voluntary organisations such as the Blue Cross or other organisations that provide services to the municipality), the patient’s co-ordinator for future follow-up services, and possibly members of recovery-facilitating communities (e.g., family, friends, neighbours, peer support, and sober post-treatment communities or other communities that the patient has identified as ideal for the recovery process).  

In particular, we suggest that the initial mapping and assessment of the patient’s social situation is used as a baseline to develop a post-treatment plan by focusing on how positive PSOC dimensions (membership, influence, integration and fulfilment of needs, and shared emotional connection) can be promoted in (geographical, relational, and ideal) communities when returning to everyday life. The post-treatment MPSOC plan may also include plans for involvement in established recovery-facilitating communities, how to approach new recovery-facilitating communities in everyday life, and how to moderate community participation according to the patient’s own individual needs. Finally, modifying the substance use identity and connections to communities with strong substance use norms and negative recovery capital are central to individual recovery processes (Beckwith et al., 2019; Cloud & Granfield, 2008). Our findings suggest that contact with communities that are experienced as negatively affecting one’s recovery is likely to promote feeling a lack of safety, exposure to substances and substance use, reminders of a substance use related identity, crisis and conflict, exclusion, and negative recovery capital. For individuals who are members and experience PSOC within communities that have a strong substance use identity and norms, the community post-treatment plan needs to include an additional aspect on how to reduce interaction with these communities.

**Practical suggestions for follow-up services**

According to the clinical pathways for treating substance use problems in Norway, the TSB and municipality services are responsible for collaborating in post-treatment follow-up services. Each municipality has rehabilitation departments that co-ordinate the services provided by the municipality. The national guidelines for implementing clinical pathways for treating substance use problems also state that every person with a substance use problem is entitled to receive help from a co-ordinator in their municipality with regard to their social situation (Helsedirektoratet, 2018).

**Implementing the individual post-treatment plan for MPSOC and follow-up**

To promote PSOC after treatment, we suggest that the follow-up services in municipalities implement the individual post-treatment plan for MPSOC and follow-up as part of the co-ordinator’s tasks. These co-ordinators are critical community connectors who can identify important aspects of a person’s ideal PSOC and mobilise these aspects through social connections in the municipality. For example, co-ordinators can promote and reinforce PSOC and recovery processes for service users by facilitating and strengthening their connections to communities with a strong recovery identity, promoting staff support in geographical communities (e.g., supported housing), and enabling peer recovery support (Bahl et al., 2019; Kalsas et al., 2020; McKay, 2017; White & Evans, 2013). Ideally, every co-ordinator will be part of the patient’s interdisciplinary co-ordinating group during treatment, so he or she will participate in developing the plan and know the plan well. Nevertheless, we recommend that the co-ordinator communicate the plan to other relevant service providers and/or voluntary organisations that are involved in the follow-up services for the patient (e.g., general practitioners, psychologists, and peer support). These service providers and organisations may
play key roles in supporting the moderation of contact with communities identified as sources of destructive or negative PSOC and thereby possible hindrances to recovery.

Limitations and practical challenges

More research is needed about MPSOC meaning systems, particularly among various groups of people with substance use problems. Systematic knowledge is required about how services can promote recovery processes according to people’s different needs, for example, about how young and older people with substance use problems probably need different communities and elements within their communities to facilitate their recovery processes. Currently, more explorative research is also needed regarding the MPSOC concept among people with substance use problems and their significant others to obtain a valid understanding of their meaning systems.

Our practical suggestions, moreover, are associated with some practical challenges. First, we will consider the challenges for cross-disciplinary specialised treatment related to mapping and assessing MPSOC, constructing MPSOC within treatment, and developing a post-treatment plan for MPSOC.

Mapping and assessing at treatment initiation can be challenging for both patient and staff. The patient is most often extremely vulnerable and ill when treatment starts. Although participating in the mapping of individual resources might be empowering, it is also likely to be experienced as highly demanding. For staff, assessing an additional new social aspect requires the allocation of extra time to assessment and mapping. However, tools are needed to systematically assess the multiple communities of patients, such as work, school, neighbourhood, and social networks. Also, using the MPSOC tool is likely to deepen and expand the treatment dimensions and processes, thereby being useful for both the patients and staff during treatment.

Second, constructing PSOC within treatment requires that the patient’s interdisciplinary co-ordinating group is functioning well. In previous studies, people with substance use problems have reported that their group does not function as intended or that they lack such a group (Kompetansesenter rus Midt-Norge, 2018a, 2018b). Moreover, PSOC depends on members having a shared history and aim. Providing the group with time to address and construct PSOC is likely to have positive outcomes for the therapist’s understanding of the patient’s challenges, and thus the group’s possibilities for co-operation and potential for promoting recovery. Our suggestions also include the involvement of other recovery-facilitating communities (e.g., family members, friends, or neighbours) in treatment. But not all patients have recovery-facilitating communities to include in their treatment. Thus, during the recovery of these patients, it is especially important to focus on promoting a positive therapeutic PSOC within treatment and to work closely with their follow-up services.

The post-treatment plan for MPSOC should be included in the patient’s individual plan. Some patients may have mental health problems (e.g., depression or psychosis) in addition to substance use problems, thereby making it difficult to envision and develop a post-treatment plan for community participation. In addition, some patients might not be interested in community participation per se, or reducing contact with communities that are negative for their recovery. In cases where the patient would prefer to establish new community relationships after treatment, the post-treatment plan should include follow-up services to address how to deal with potential challenges, such as mental health and community interactions that might hinder the patient’s recovery. Facilitating community participation in new communities that are ideal for recovery is likely to promote mental health and possibly prevent contact with communities that are negative for recovery.

Finally, we will mention some practical challenges with respect to the follow-up services. We suggested that the implementation of the individual post-treatment plan for MPSOC and follow-up
should be included in the actual co-ordinator’s work. Thus, the co-ordinators become responsible for communicating the plan to other service providers and voluntary organisations. In general, these co-ordinators are not yet available in the municipalities. In fact, there is currently uncertainty concerning the obligations of municipalities regarding the implementation of clinical pathways. This situation, however, represents an opportunity to include these particular tasks as part of the co-ordinator’s ordinary work while highlighting the importance of allocating sufficient time to participating in interdisciplinary co-ordinating groups during treatment, following up every individual plan after treatment, and co-operating with the patient’s relevant follow-up services and communities.

Concluding remarks

Mapping and assessing the needs, challenges, and resources for patients provides the foundations of the clinical pathways for treating substance use problems. There is, however, a lack of tools for systematically mapping and assessing the social situations of patients as recommended by the national guidelines. The extended mapping of the patient’s social situation requires tools that consider multiple communities (e.g., work, school, neighbourhood, and social networks) in the assessments. MPSOC provides a central multifaceted framework for understanding how multiple communities (geographical, relational, and ideal) and psychological senses of community (positive, neutral, and negative) can promote individual recovery processes from substance use problems (Bahl et al., 2019). We have now presented a tool developed to systematically map and assess patients’ social situations. In addition, we have proposed several approaches for promoting MPSOC (within treatment and in follow-up services), in different stages of clinical pathways for treating substance use problems:

a. Systematically mapping and assessing baseline MPSOC (in the patient’s geographical, relational, and ideal communities) when initiating cross-disciplinary specialised treatment for substance use.

b. Applying the dimensions of the MPSOC tool to assess and construct a sense of community in treatment among members of the interdisciplinary co-ordinating group and within the everyday communities of patients outside treatment.

c. Developing a post-treatment plan for MPSOC as part of the patient’s individual plan.

d. Implementing and follow-up of the patient’s post-treatment plan for MPSOC in follow-up services.

These suggestions involve several challenges, such as the requirement of patients’ effort to participate in mapping and assessing in a very vulnerable period of their life. Allocation of sufficient time to staff for undertaking additional tasks and constructing the PSOC is also required, as is well-functioning co-operation between the interdisciplinary co-ordinating group, follow-up services co-ordinator, community connectors (e.g., volunteer organisations), and other communities. However, if these challenges can be managed, our suggested approaches may increase the likelihood of meeting key aims of national clinical pathways for the treatment of substance use problems in Norway: user involvement in treatment and recovery, the involvement of significant others, better ways of securing health and good ways of living, user satisfaction, and acknowledgment that recovery processes are individual, can be ensured. To conclude, and most importantly, the suggested approaches can provide important resources for promoting long-term recovery processes and positive recovery capital.

Author’s Note

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Note
1. This suggestion is similar to dialogical meetings in social networks (Seikkula et al., 2003) but different because it focuses on community dimensions (membership, influence, integration, and fulfilment of needs and shared emotional connection) rather than dialogue.

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**Appendix 1: MPSOC mapping and assessment tool for clinical pathways**

1. **English version**

Briefing: Psychological sense of community includes the following four dimensions:

a. **Membership**: Feeling of belonging, acceptance, and identification with the community.

b. **Influence**: Experience of having some impact on the community and a sense of acceptable influence from the community.

c. **Integration and fulfilment of needs**: Sense that one’s individual needs will be integrated and fulfilled through the community’s resources and by one’s own contributions to the community.

d. **Shared emotional connection**: Experience of members that the community shares and will continue to share a common history.

1. Mapping of communities: Given these dimensions, what communities do you consider as your sources for a psychological sense of community?

2. Assessing multiple psychological senses of communities (MPSOC)

   (a) **Relational PSOC**:

   - Do you experience a sense of community within any (real or virtual) communities where people belong because of their common interest (e.g., Facebook groups, self-help groups, or activity groups)?
   - Do you feel that any of these communities influence your recovery in a positive way?
   - Do you feel that any of these communities influence your recovery in a negative way?

(b) **Geographical PSOC**:

   - Do you experience a sense of community within any communities where people belong because of their shared geographical belonging (city, town, or neighbourhood)?
   - Do you feel that any of these communities influence your recovery in a positive way?
   - Do you feel that any of these communities influence your recovery in a negative way?
(c) Therapeutic PSOC:
- Do you experience a sense of community with others in any therapeutic communities (e.g., in residential treatment or other clinical settings)?
- Do you feel that any of these communities influence your recovery in a positive way?
- Do you feel that any of these communities influence your recovery in a negative way?

(d) Ideal PSOC:
- What communities would be ideal to be part of for your recovery?

1.2 Norwegian version
Orientering: Fellesskapsfølelse inkluderer fire dimensjoner:

a. Medlemskap: En følelse av tilhørighet, aksept og identifikasjon med fellesskapet.

b. Påvirkning: En opplevelse av å ha påvirkning på fellesskapet, samt en opplevelse av akseptabel påvirkning fra fellesskapet.

c. Integrering og tilfredstilelse av behov: En opplevelse av at ens individuelle behov vil bli integrert og tilfredsstilt gjennom fellesskapets ressurser, samt at ens egne bidrag integreres i fellesskapet og er tilfredsstilende for fellesskapet.

d. Delt emosjonell tilknytning: En delt opplevelse mellom medlemmene av fellesskapet om at fellesskapet deler og vil fortsette å dele en felles historie.

1. Kartlegging av fellesskap: Hvis du tar disse dimensjonene i betraktning, hvilke fellesskap anser du som dine kilder til fellesskapsfølelse?

2. Utredning av fellesskapsfølelser

(a) Relasjonell fellesskapsfølelse:
- Opplever du fellesskap i noen (virkelige eller virtuelle) fellesskap hvor mennesker kommer sammen på grunn av felles interess (f.eks. Facebook-grupper, selvhjelpesgrupper, eller aktivitetsgrupper)?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en positiv måte?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en negativ måte?

(b) Geografisk fellesskapsfølelse:
- Opplever du fellesskap i noen fellesskap på basis av geografisk tilhørighet (f.eks. i en by, landsbygd eller et nabolag)?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en positiv måte?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en negativ måte?

(c) Terapeutisk fellesskapsfølelse:
- Opplever du fellesskap i noen terapeutiske fellesskap (f.eks. i behandling eller andre kliniske settinger)?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en positiv måte?
- Opplever du at noen av disse fellesskapene påvirker bedringen din på en negativ måte?

(d) Ideell fellesskapsfølelse:
- Hvilke fellesskap ville vært ideelle å være en del av for din bedring?
Appendix 2: MPSOC mapping model with examples of community experiences

Positive

Family (Relational)

Friends (Relational)

Creative community (Ideal)

Interdisciplinary group (Therapeutic community)

Negative

Neighbourhood (Geographical)

Acquaintances in hometown (Geographical)
## Appendix 3: Background of informants

### Table 2. Background of informants.

| Informant | Age | Size of Municipality | Municipality services | Years of service utilisation | Relational communities (positive +, negative –) | Geographical communities (positive +, negative –) | Ideal communities |
|-----------|-----|----------------------|-----------------------|-----------------------------|-------------------------------------------------|-------------------------------------------------|-------------------|
| W24       | 24  | Large                | Integration and work assisting service, general practitioner, drug and addiction services | 3               | +: Integration service and work assisting service | +: Cohabitation |                           |
| M29       | 29  | Small                | Drug and addiction services, work assessment allowance, general practitioner, interdisciplinary co-ordinating group | 14              | +: Interdisciplinary co-ordinating group | +: Cohabitation | +: Integration service and work assisting service. |
| W37       | 37  | Large                | Concurrent substance abuse and mental health disorder team, addiction consultant, home nursing care | 10              | +: Family, concurrent substance abuse and mental health disorder service, religious community | –: Local community | Halfway houses. |
| W38       | 38  | Large                | Medically assisted delivery of opiates, housing assistance | 23              | +: Family | –: Family | –: Service-related community |
| W42       | 42  | Medium               | Medically assisted delivery of opiates, home nursing care, drug and addiction services, addiction consultant, general practitioner, interdisciplinary co-ordinating group, housing assistance, physical exercise group | 15              | +: Interdisciplinary, co-ordinating group, exercise group, low-threshold service | –: Local community | Substance-free relations, creative communities. |
| M42       | 42  | Large                | Medically assisted delivery of opiates, general practitioner, day treatment centre | 29              |                       | Place to conduct meaningful activities |                           |
| M43       | 43  | Large                | Medically assisted delivery of opiates, social benefits | 23              | +: Medically assisted rehabilitation | –: Activity group offered by the municipality |                           |
| M43       | 43  | Medium               | Medically assisted delivery of opiates, general practitioner, make-work programme | 6               | +: Make-work programme | | | (continued)
| Informant | Age | Size of Municipality | Municipality services | Years of service utilisation | Relational communities (positive +, negative –) | Geographical communities (positive +, negative –) | Ideal communities |
|-----------|-----|----------------------|-----------------------|-----------------------------|-----------------------------------------------|-------------------------------------------------|------------------|
| W45       | 45  | Large                | Medically assisted delivery of opiates, general practitioner, addiction consultant, interdisciplinary co-ordinating group | 5                           | +: Family, addiction consultant, after-care service –: Family | +: Local community |                   |
| W46       | 46  | Large                | Aftercare programme, addiction consultant, general practitioner, interdisciplinary co-ordinating group | 10                          | Interdisciplinary co-ordinating group          |                                                 |                  |
| W48       | 48  | Large                | Medically assisted delivery of opiates, general practitioner, housing assistance | 13                          |                                                 |                                                 | Creative communities |
| W49       | 49  | Large                | Concurrent substance abuse and mental health disorder service, addiction consultant, day treatment centre, housing assistance, general practitioner | 19                          | +: After care service, close friends, religious community (Christian), day-care centre, self-help group –: Alcoholics Anonymous |                                                   |                  |
| M52       | 52  | Medium               | Addiction consultant, drug and addiction services, general practitioner, make-work programme | 4                           | +: Family, Alcoholics Anonymous –: Neighbourhood | Safe place to live |                  |
| M53       | 53  | Large                | Medically assisted delivery of opiates, nurse in opioid maintenance treatment, general practitioner, Norwegian Labour and Welfare Administration, drug and addiction services | 15                          |                                                 | –: Shelter |                  |
| M53       | 53  | Small                | Drug and addiction services, Norwegian Labour and Welfare Administration, general practitioner | 18                          | +: Family                                      | +: Neighbourhood |                  |
| M77       | 77  | Large                | Concurrent substance abuse and mental health disorder service, social worker, general practitioner | > 25                        | +: Religious community (Christian), senior centre | +: Local community, senior centre |                  |