FEDERAL RESEARCH PROGRAMME ON DRUGS

SUMHIT

Substance use and mental health care integration

A study of service networks in mental health and substance use disorders in Belgium, their accessibility, and users' needs

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Contract – DR/89

FINAL REPORT

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CONTENT

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3. PUBLICATIONS

Several pieces of this report have been submitted for publication in international, peer-review academic journals.

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PRELIMINARY NOTE

Drug addiction and mental illness are sensitive topics with different interpretations depending on the terminology used. Across the different sections of the present report, we tend to refer to substance use disorders (SUD), whatever the substance is, including alcohol, and to mental disorders or mental illness (MI). We also refer to “care” as any type of support, either medical, psychological, social, or other, and to people utilising care services or in need of care as “care users” or sometimes “users”. We, therefore, distinguish people who use drugs without specific needs from people who have substance use disorders, and from care users, i.e. people utilising services or in need of care. We are using these terms in a generic sense, without any specific, normative orientation that would underlie these concepts. The conceptual framework underpinning the whole research is the personal recovery approach(1-4), key aspects of which we expound upon in the following pages. Although the concept is also subject to different interpretations, we understand it as an approach to SUD and MI that supports the autonomy, social inclusion, empowerment, and personal resources of people in need of care in order to develop a meaningful life despite the possible problems related to illness(1).

GENERAL BACKGROUND

I. INTRODUCTION

This is the final report of the research project "Substance Use and Mental Health care Integration, a study of service networks in mental health and substance use disorders in Belgium, their accessibility, and users' needs" (SUMHIT). The research addressed several aspects of the divide that exist between the organisation of care in mental health, which we refer to as "generic" in this report (e.g. based in community mental health services or psychiatric wards), and in substance use disorders, which we refer to as "specialised" in this report.

It is well established in the scientific literature that many people who have a substance use related disorder (SUD) also have concomitant mental disorders, while many people with mental illness (MI) also use drugs. However, care in the specialised SUD sector and in the generic mental health care sector (MHC) have been developed separately. Professionals and services from both sectors do not always collaborate efficiently, and users cared for in the two sectors may have different profiles of needs. In addition, there might be care needs that are unmet because of the divide. In this context, the main objective of SUMHIT was to examine and assess the place of people who use drugs in the field of generic mental health care. The project also examined the availability of generic mental health care for people with SUD and the capacity of both generic mental health care and specialised SUD care sectors to collaborate within the regulation framework of the mental health service networks that have been established in Belgium since 2010. Using both quantitative and qualitative data, SUMHIT addressed three levels of study: care users, care professionals and services, and the whole care system. In particular, the research examined (1) the met and unmet needs of people with SUD in terms of mental health care and their care pathways, (2) experiences of professionals (clinicians and service managers from the full range of generic and specialised services, network coordinators…), and (3) structural care system features (e.g. networks) that frame practicing collaboration. Key findings and suggestions for organisational mechanisms were discussed with key stakeholders from the two main linguistic communities as to provide authorities and professionals with evidence-based policy and care recommendations in order to improve the continuity of care between sectors, the tailoring of care pathways to specific profiles, and to support a global approach of care users' personal recovery.

II. STATE-OF-ART

Many people who have a substance use disorder (SUD) suffer from concomitant mental disorders, while many people with mental illness (MI) also use drugs. Estimates of drug use among people with MI usually range from 20 to more than 50%(5, 6). In Belgium, within the evaluation of the 'Title 107' reform of mental health care delivery (2014-2015), among the 1,200 service users with severe MI recruited across all service types from the mental health service networks, 18.5% had a concomitant diagnosis of SUD(7). People with co-occurring SUD and MI have more severe adverse outcomes than people with either condition alone, in terms of accessibility to services, unmet needs, adherence to treatment and relapse, social integration, and personal recovery(8). However, in most countries, including Belgium, the specific care and assistance sector dedicated to people with SUD (hereafter, "specialised drug-addiction sector") has been developed separately from the generic mental health care (MHC) sector. Most people using either generic MHC or specialised SUD services are facing, however, similar complex and long-term problems, both in nature and extent. Their medical, psychological, and social needs require comprehensiveness from the part of the care providers, in particular in terms of care continuity and personalised care(1, 3, 4, 9-12).

The divide is on the side of clinician and care system practices, not on the side of users(13). Specifically in Belgium, the lack of capacity of services to address the issues of people with multiple needs, in particular regarding people with SUD, was outraised as an important weakness of the mental health care reform(14). Moreover, fragmentation is amplified by the complex distribution of health policy responsibilities between the Federal State and the several overlapping federated entities (Regions and Communities)(15). However, during the first two decades of the 21st century, both the SUD and MHC sectors have undergone major changes. Regarding MHC, at the beginning of the 2000s, the Belgian generic MHC sector was still heavily hospital-centred, with one the highest rates of hospital beds per inhabitant in OECD countries, and lengthy stays in psychiatric inpatient services(16, 17). The nation-wide reform policy of mental health care delivery, known as 'Title 107', started in 2010. It established networks of services with four main aims: (1) to strengthen the supply of care in the community, (2) to improve continuity of care within and across care sectors, (3) to reduce and intensify the resort of hospital stays, and (4) to favour the social rehabilitation of care users(15, 18). Regarding the specialised care for people with SUD, a new drug policy framework, calling for a comprehensive and integrated drug policy, was established in 2001(19). It shifted the main priority of the Belgian drug policy from enforcement to prevention and assistance. This policy framework, combined with the devolution of health policy responsibilities to federated entities, prevention and assistance supply sectors (including harm reduction and rehabilitation) grew importantly, with a variety of novel interventions and service types embedded in multiple approaches. Alike in the generic MHC sector, the priority in the specific SUD sector was given to community services and a strong emphasis was placed on social rehabilitation over more traditional, residential drug-free treatment – though the latter remained on the continuum of existing assistance options. Therefore, the conditions aligned with a renewed model of collaboration or integration between the two sectors. The the main objective of SUMHIT was the examination and assessment of the current situation and opportunities for improved comprehensiveness of the care supply in MH and SUD care.

More particularly, one key weakness of the Belgian healthcare system, both in SUD and MHC care, is its low capacity for continuity of care(20, 21). Continuity of care encompasses three main dimensions: cross-sectional continuity, i.e. the capacity for multiple clinicians and services to offer comprehensive care and support within one care episode; longitudinal continuity, i.e. the capacity of the care system to maintain contact with chronic users across episodes of care; and relational continuity, i.e. appropriate therapeutic alliance(22). Whilst relational continuity of care is mainly related to elements at the individual level, longitudinal and cross-sectional continuity are strongly affected by organisational and system dimensions. For example, research has indicated that collaboration within service networks was driven by interpersonal and informal relationships rather than by formal and organisational mechanisms(23). However, little is known about how to effectively organise care within service networks(24).

In other respects, for some years, literature on both SUD and MHC has strongly emphasised personal recovery as overarching principle(1, 3, 9-11, 25-28). Personal recovery is widely evidenced in the literature and sustained by several evidence-based interventions(4, 12, 25, 27-41). Personal recovery is an approach to psycho-social rehabilitation of people with mental or substance-related impairments that aim to support them regain their autonomy despite illness(1, 2). Therefore, services and interventions working within this approach consider social integration (housing, activity, participation in social life, and personal goals) as a priority over the management of illness and symptoms. This implies the people's involvement in decisions regarding their own health and care and the use of people's preferences and own resources in defining care objectives and outcomes, social inclusion being the priority(28, 35, 40-42).

Because of its potential overarching nature, the framework of personal recovery is likely to help care professionals of both sectors to set shared objectives between them and with users. Therefore, the adoption of a personal recovery approach is expected to reduce issues in continuity of care, and consequently, to reduce the risks of adverse events and crises episodes, as well as to strengthen the user's autonomy and right to choose what they consider to be the most appropriate and suitable treatment. Moreover, at the level of services and the whole care system, the personal recovery approach is likely to reduce the key issues of care continuity and fragmentation that delays the system capacity to respond to care users' needs. Therefore, it should result in a reduction of the use of crisis and emergency care, reduce the overload of most services (and reduce the waiting time to access services), and eventually reduce system costs while increasing system effectiveness. It is expected to be especially impactful for the most vulnerable subgroups. Despite evidence and the availability of evidence-based tools and interventions, however, the approach is only gaining interest from many care professionals in Belgium(43). In this research, we argue that the personal recovery approach is likely to favour an optimal integration of the SUD and MHC sectors(10).

III. RESEARCH QUESTIONS AND CONTENT OF THE REPORT

SUMHIT addressed three levels of study: (1) care users, (2) care professionals and services, and (3) service networks and the care system. The main research question has been *"what is the current level of collaboration/integration between the (generic) MH and (specialised) SUD care sectors and how can it be effectively improved?"*

To address this main research question, several work packages were carried out with specific actions at the three levels of study. The study used a mixed-methods approach, as both quantitative and qualitative data was collected at these three levels, and different methodologies were used to analyse them, including statistics, social network analysis, inductive and deductive thematic analyses, and document and literature reviews. When composing the final report, it seemed more consistent to present the results according to several research sub questions at the three study levels, instead of reporting results per work package. Indeed, most of these research subquestions are addressed with findings from multiple analyses. Therefore, the present report is structured around five sections.

The first section is the present *introduction and general background of the study*. In the second section, we address the *users' needs and access to services.* A self-reported survey was carried out with users of diverse service types across the country in order to assess the users' met and unmet needs, and the predictors of these needs. Findings obtained during the course of the project allowed us recruiting care users with specific profiles for a deeper exploration of these needs during qualitative interviews. We examined the access and use of care by users and intended to unveil whether users of generic MH and specialised SUD services and professionals had different needs and what the determinants of accessing and using these two sectors were. We also examined the lived experience of users in their contacts with both sectors, including the barriers and facilitators encountered. Users with no (more) contacts with the care system were also included in this part of the study.

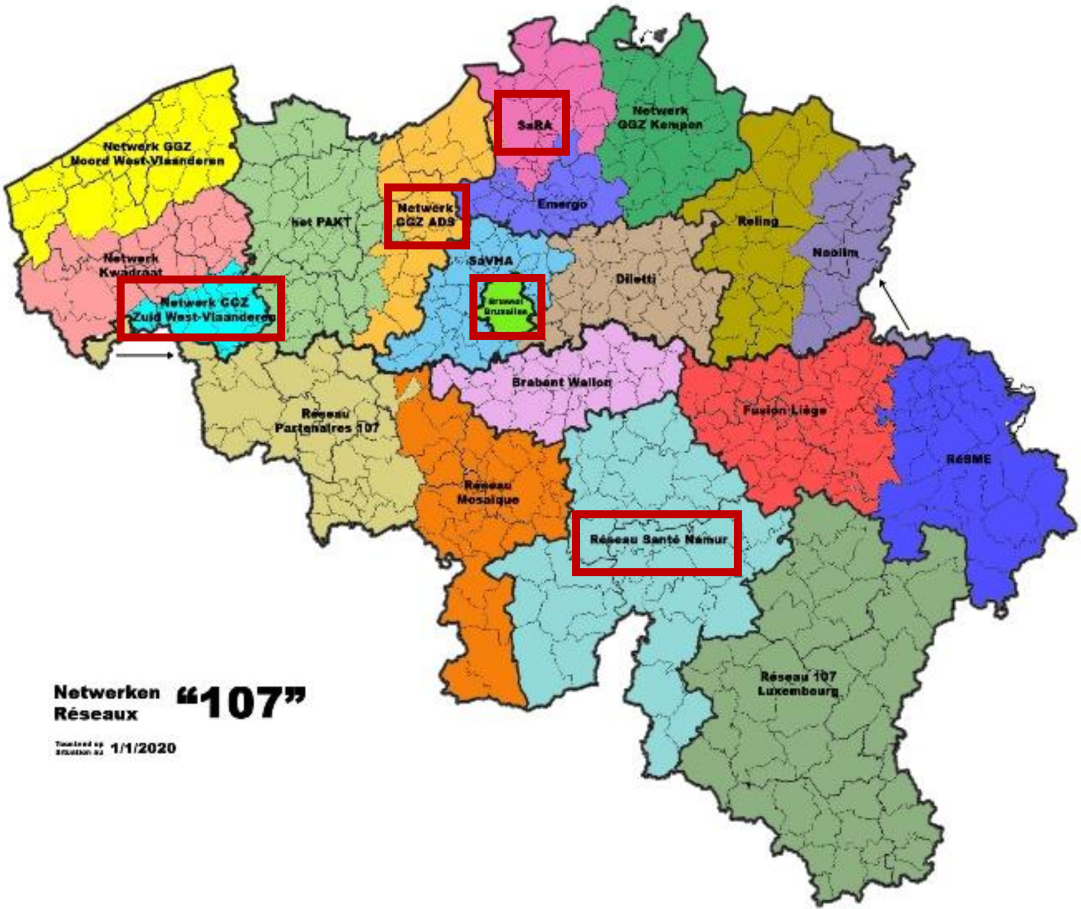
The third section reports the *professionals' experiences*. These experiences encompass the relationships of professionals with care users, but also the perceived barriers and facilitators in the collaboration process with other professionals and services, in particular within the service networks. This section also reports experiences of collaboration and interventions developed elsewhere and good practices retrieved from the literature. The forth section addresses the *level of networks and the care system.* In particular, we examined the specificities of the care supply and the structure of networks, with a specific view on the positioning of specialised SUD services in the broader context of MHC service networks.

Finally, the fifth section is a *general discussion* of the findings obtained at the three levels of study and includes the study *recommendations for both policy and practice* in order to improve the collaboration capacity of both sectors. These recommendations were elaborated upon through co-construction with managers and decision-making stakeholders.

IV. GENERAL METHODOLOGY AND STUDY SETTING

SUMHIT addresses the capacity of the Belgian mental healthcare system to encompass the needs of people with SUD therein. Therefore, the research is framed, at the organisational level, within the mental-health policy that established networks of services in 2010 in order to cover the mental health needs of the population(15, 18). More specifically, the reform policy established 20 network areas across the country (12 in Flanders, 1 in the Brussels-Capital Region, and 7 in Wallonia). Five areas were selected for the study. The selection was made based on several criteria: (1) we wanted to include the three regions, (2) we wanted to include large urban areas, where people with SUD and mental comorbidity are usually found more easily and the provision of services is more important, but we also wanted to include semi-urban areas where the provision of services may be scarcer. In addition, (3) previous research on mental health service networks indicated that these networks may vary considerably in terms of size, i.e. number of services included, as well as in composition, i.e. proportion of service types(44, 45). Based on these criteria, we selected five network areas: Antwerpen (SaRA), Aalst-Dendermonde-St-Niklaas (GGZ ADS), and Zuid-West Vlaanderen (GGZ ZWVl) in Flanders; Brumenta (the Brussels network, which is composed of 4 subnetworks: Brussels-East, Hermes+, Rézone, and Norwest); and the "Réseau Santé Namur" in Wallonia (See map).

In the five areas selected, several research actions were carried out. At the level of users, a survey on care needs and contacts with services was organised. The survey was based on a self-reported questionnaire that was composed with different scales validated in the literature. In particular, it included the Camberwell Assessment of Needs-Short Appraisal Scale for Patients (CANSAS-P) in order to assess the needs for care in 23 domains(46). For the survey, we aimed to obtain information from at least 500 users, half of them recruited from the Dutch-speaking area and the other half from the French-speaking area. In addition, we aimed to recruit half of the sample from generic MHC services and the other half from specialised SUD services. 53 qualitative interviews with users were also conducted (34 in Dutch and 19 in French) with users of services as well as with people who dropped out of care. At the level of care professionals and services, a service survey was also carried out with the help of tools used in previous research(47, 48). The survey was based on an online questionnaire filled out by service team members and addressing the organisation of the services, staffing, funding, target-group of users, accessibility, care supply, orientation towards recovery, and contacts with other services in the network. Focus groups were also organised with professionals and peer-workers. These data were complemented by literature reviews. Finally, two focus groups (one per linguistic group) were carried out with managers, coordinators, and decision-makers, in order to co-elaborate the final recommendations. Detailed methods are presented in each section of the report.



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USERS’ NEEDS AND ACCESS TO SERVICES

I. NEEDS OF SERVICE USERS WITH SUBSTANCE USE DISORDERS IN BELGIUM

A. Background and objective

Mental health comorbidity is very common in people with substance use disorders. The prevalence of mental health disorders is higher among people with substance use disorders, and the prevalence of substance use disorders is higher among people with mental disorders, than in the general population(1, 2). Studies report estimations ranging from 20% to 75% of people with a mental health disorder who also have a substance use disorder, depending on the type of substance and disorder(1, 3-6). Other studies also report that 38% to 71% of people with substance use disorders also suffer from mental disorders(2, 5, 7). In Belgium, a cross-sectional survey assessed that 15.6% of users with severe mental illness had a substance-related comorbidity(8).

Managing mental health comorbidity in people with substance use disorders poses a challenge, as the two combined conditions influence each other to cause additional burdens(5). Co-occurring disorders are associated with higher morbidity (e.g. HIV or hepatitis) and mortality (e.g. overdose, suicide), poorer clinical outcomes (e.g. relapses, medication non-compliance), more psychiatric hospitalizations, worse social outcomes (e.g. homelessness, violence, incarceration), more stigmatization and more reported unmet needs compared to people with either condition alone(5, 6, 9, 10).

Despite the frequent association of mental health disorders and substance use disorders, these two conditions are most generally addressed in separate care sectors, leading to possible unmet care needs. Indeed, some people with substance use disorders tend to resort primarily to primary and mental health care services, while people in specialised addiction care services may also need support for their mental condition. Therefore, a better understanding of the met and unmet needs of people with substance use disorders is likely to help identify gaps in their care support with a view to improving the quality of the care supplied(11-14). In addition, the assessment of needs is needed in order to provide person-centred and users-led care support(13, 15).

B. Method

1. Survey design

The survey carried out with users was cross-sectional and based on a convenience sample. Participants were recruited in the three regions and in services partners in the five networks involved in the study. The eligibility criteria for study participants were: (1) being aged 18 years or older; (2) having or having had a substance use disorder (either with alcohol, illicit drugs, or medication); (3) being able to complete a questionnaire in either French or Dutch and (4) being able to provide informed consent. We assumed that different service types are addressing users with different need profiles. Therefore, in order to maximise profile diversity, we aimed to recruit a small number of participants in as many different types of services as possible, including specialised addiction services (therapeutic communities, crisis centres, outpatient drug addiction services, low-threshold, and harm-reduction services), generic mental health care services (community mental health, day centres, psychiatric wards in general hospitals, psychiatric hospitals, sheltered accommodation, outreach and home care teams), and social and primary care services.

The questionnaire included the following measures:

- Care and support needs, assessed using the Camberwell Assessment of Needs-Short Appraisal Schedule (CANSAS-P)(16). It addresses 22 life domains, for each of which respondents have to choose between having no needs, a need met by a professional, or an unmet need(16-18). An additional item addressing needs related to justice was added by the study consortium, as several people with substance-related issues are involved in legal processes, resulting in a modified 23-item version of the CANSAS-P scale.
- Practices of substance use, assessed using a part of the Treatment Demand Indicator (TDI)(19).
- Service utilization within the last 12 months, assessed using an adapted version of the Client Service Receipt Inventory (CSRI)(20).
- Psychological well-being, assessed using the WHO-5 Well-Being Index(21).
- Social integration, assessed using the SIX, a tested and validated index that includes the accommodation status, family situation, working status, and friendship(22).

The final sample size was 562 users, 243 recruited from outpatient services, and 313 from inpatient services. Of these 562 respondents, 261 were recruited from specialised addiction services and 298 from generic mental health services. In general, the definition of a generic or specialised service is based on units, e.g., a psychiatric unit specialised in alcohol-related disorders has been considered as a specialised service). However, for some analyses, particularly those involving the TDI, services were considered as a whole setting. Therefore, no distinction was made between units and hospitals were considered generic, even if they had a specialised unit. When it was the case, we reported on that circumstance.

2. Statistical analysis

Users' need profiles were identified using a Latent Class Analysis. This classification method allows for identifying subgroups of individuals who share common characteristics in terms of needs, as well as calculating the probability of each individual's membership in each class. A one-class model was first estimated and then classes were added until the model with the best fit was reached. The Bayesian Information Criterion (BIC) was used to select the best model. Multinomial regression was then used to identify users' characteristics that could predict class membership.

Needs and covariates were analysed using a logistic regression with multiple imputation. In order to retain as many observations as possible for our analysis, missing values in the database were imputed using the method of chained equations. The method consists of replacing missing values with their most probable value according to the values given to other available variables. Several data sets were generated in order to pool the results of the models and to take into account the variability of the predictions. Results presented in C.4 and C.5 were pooled using this imputation method. On the other hand, missing values that were excluded in some analyses, resulting in different numbers of observations.

Some analyses were performed on groups of need domains, allowing increased statistical power. Need domains that were related to each other were grouped using a 2-step method: considering firstly the associations between needs, and secondly performing a multiple-component analysis in order to validate the group construct. Five groups of need domains were identified: A) mental health needs, B) substance use needs, C) socio-economic needs, D) relationship needs, and E) daily activity needs. More information is available in the appendix.

3. Treatment Demand Indicator

Secondary analysis of the Treatment Demand Indicator (TDI) was performed in the context of this study. The TDI is an indicator of new treatment demands for care in substance use disorders. Data for the TDI are routinely collected in all countries of the European Union, and the data collection protocol follows guidelines from the EMCDDA. In Belgium, Sciensano is responsible for collecting and analysing TDI data(19). Data include all new treatment episodes from a large proportion of specialised services across the country, as well as a sizable proportion of generic mental health care services that offer care to people with SUD. In particular, the TDI covers the vast majority of treatment episodes that are recorded in psychiatric hospitals, psychiatric wards of general hospitals, in addition to the specialised addiction services, both out- and inpatient. It is estimated that the TDI covers 80% of the services that care for people with SUD. The TDI, however, hardly captures treatment episodes that occur in GP offices and in generic outpatient mental health services, particularly in the French-speaking community.

C. Results

1. Sample description

The socio-demographic, substance use and service use characteristics of respondents are presented in Table 1a and 1b. Participants had a mean age of 42 years and 72.3% were male. The majority had secondary education (50.8%) and was receiving social benefits (78.9%). On average, respondents had a rather low level of social integration (2.9 out of 6), and a moderate level of subjective well-being (13.2 out of 25). The three most prevalent self-reported main problematic substances were alcohol (52.3%), cocaine (17.4%), and cannabis (12.0%). 47.2% of the respondents reported using multiple substances. Only 3.8% of the respondents reported injection as the route of administration for the main problematic substance reported. Almost half of the sample (49.2%) reported using the main problematic substance at least four times a week.

2. Met and unmet needs among services users with substance use disorders

On average, users reported needs in 8 domains, either met or unmet, and they reported unmet needs in 4 domains. Almost all respondents (97%) reported at least one need domain, and 81% reported at least one unmet need domain. Self-reported need domains are shown in Figure 1. The most self-reported need domains, either met or unmet, were psychological distress (69.1%), psychotic symptoms (55.5%), physical health (54.2%), alcohol (53.5%) and money (49.5%). Three of the most reported unmet need domains were related to interpersonal relationships: intimate relationships (39.7%), company (28.5%), and sexual expression (27.0%). In addition, daytime activities (30.6%) and physical health (28.7%) were also important unmet need domains.

Table 1a: Socio-demographic and substance use characteristics of the sample

Characteristics	n = 562[1]
Network area of recruitment	
SaRA (Antwerp)	135 (24.2%)
ADS	108 (19.4%)
Zuid-West Vlaanderen	71 (12.7%)
Brussels	145 (26%)
Réseau Santé Namur	98 (17.6%)
Language	
French	245 (43.6%)
Dutch	317 (56.4%)
Age	42.3 (11.4)
Gender (Men)	405 (72.3%)
Income source	
Salary	80 (14.3%)
Social benefits	441 (78.9%)
Other	38 (6.8%)
Education	
Primary education	171 (30.9%)
Secondary education	281 (50.8%)
Post-secondary education	101 (18.3%)
Social integration (SIX)	2.9 (1.6)
Well-being (WHO-5)	13.2 (5.4)
Main problematic substance	
Alcohol	270 (52.3%)
Cocaine	90 (17.4%)
Cannabis	62 (12.0%)
Opiates	52 (10.1%)
Stimulants other than cocaine	21 (4.1%)
Hypnotics	17 (3.3%)
Hallucinogens	2 (0.4%)
Volatile inhalants	2 (0.4%)
Multiple substance use	265 (47.2%)
Route of administration	
Ingestion	234 (52.7%)
Inhalation	130 (29.3%)
Sniffing	49 (11.0%)
Injection	17 (3.8%)
Other	14 (3.2%)
Frequency of use	
Less than 4 times a week	224 (50.8%)
At least 4 times a week	217 (49.2%)

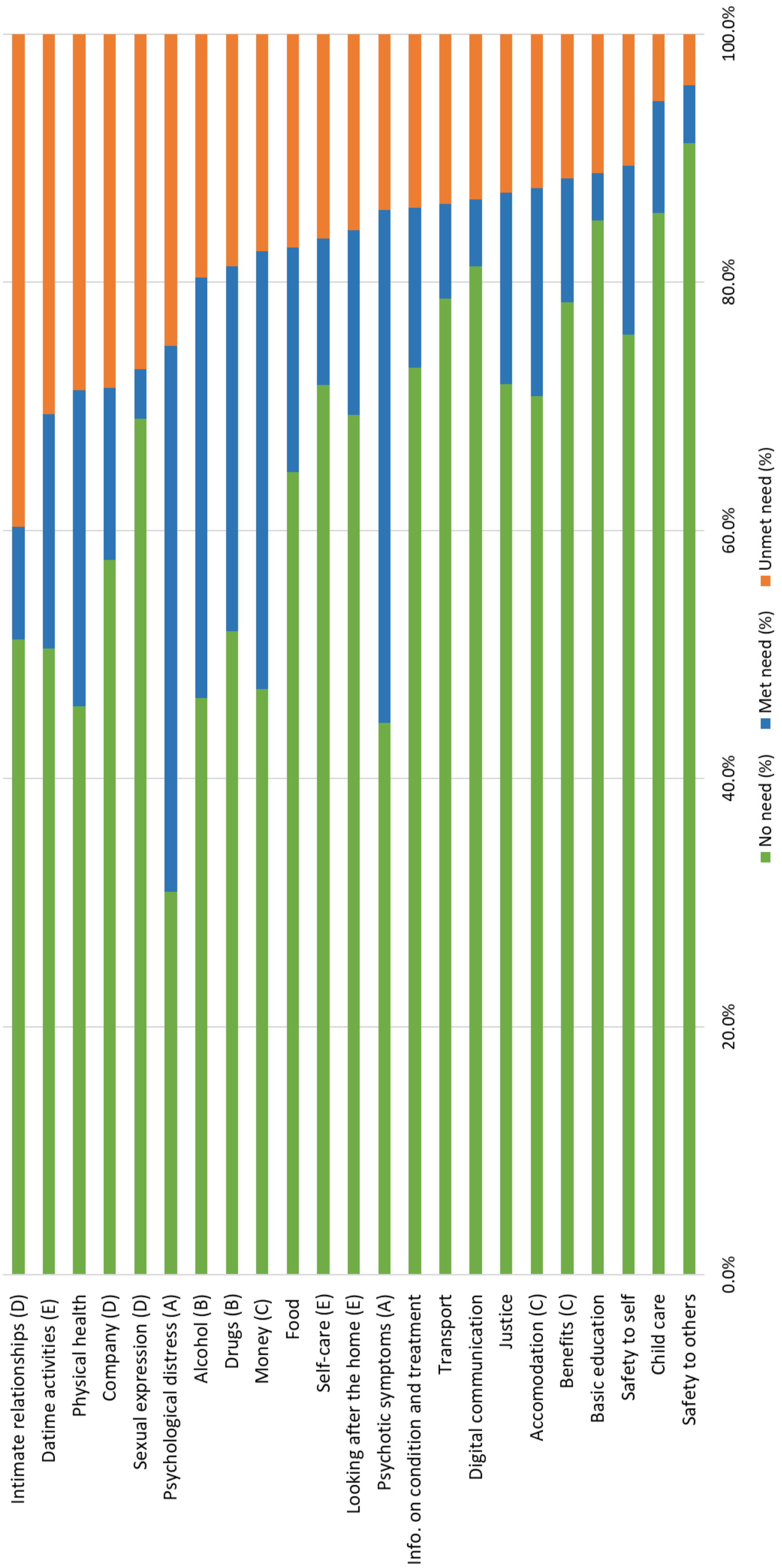
[1] n (%); Mean (SD)

Table 1b: Service use characteristics of the sample

Characteristics	n = 562[1]
Contact with a GP	456 (81.1%)
Contact with an outpatient mental health service	445 (79.2%)
Hospitalization for other problems (MH or SU)	358 (67.3%)
Unknown	11 (2.0%)
Contact with a social service	256 (45.6%)
Contact with an outpatient specialised addiction service	245 (43.6%)
Hospitalization for physical problems	162 (28.8%)
Unknown	10 (1.8%)
Contact with homecare and outreach services	104 (18.5%)
Contact with self-help services	41 (7.3%)
Contact with emergency services	196 (4.9%)

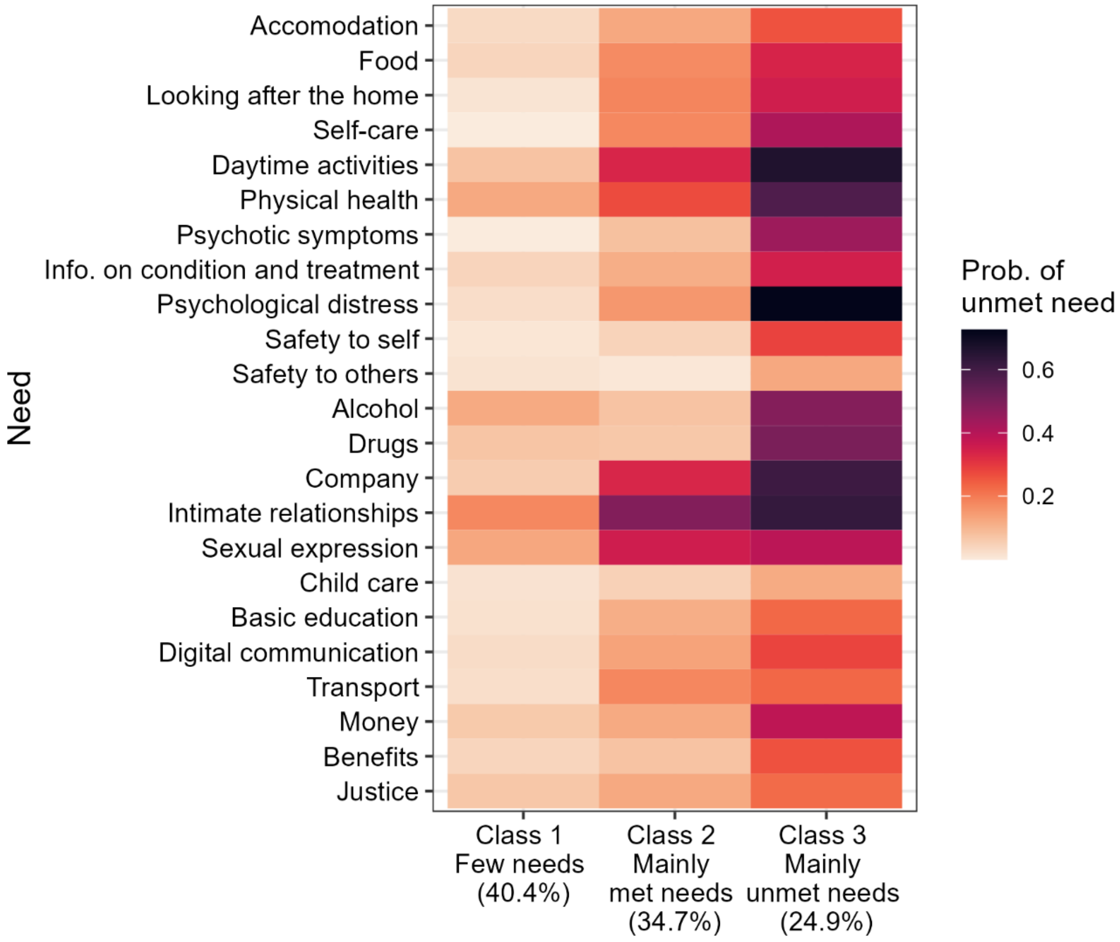
[1] n (%)

Figure 1: Self-reported needs within the sample (n = 562)



Three classes of need profiles were identified. The first class was the largest and was composed of 40.4% of the sample. This class gathered users who were the most likely to report no needs in most domains. Therefore, we named this class "users with few reported needs". Although they reported fewer needs, users in this class reported met needs regarding alcohol (41.0%) and psychological distress (40.9%). The second class was composed of 34.7% of the sample and comprised users who were more likely to report met needs. We named it "users with reported met needs”. The most reported met needs in this class were related to psychotic symptoms (62.9%) and psychological distress (73.2%). However, users in this class also reported unmet needs in intimate relationships (48.6%) and sexual expression (35.5%). The third class was composed of 24.9% of the sample and comprised users who were more likely to report unmet needs in most domains. We named it "users with many reported unmet needs”. In this class, users reported unmet needs regarding daily activities (66.6%), psychological distress (72.6%), and intimate relationships (62.7%). Figure 2 presents the probability of reporting an unmet need in each domain for each class.

Figure 2: Probability of self-reported unmet need across classes



Significant differences in the composition of the classes were found when including covariates in the model. The results of the multinomial logistic regression are presented in Table 2. Higher levels of social integration and well-being were associated with the likelihood of belonging to the class with few reported needs compared to the two other classes. Considering the class of users with few reported needs as the reference, being a woman (OR = 2.765, p = 0.025), contacts with social services during the last 12 months (OR = 2.545, p = 0.022) and contacts with homecare and outreach services (OR = 3.683, p = 0.003) increased the likelihood of belonging to the class with reported met needs. By contrast, being a user of multiple substances increased the likelihood of belonging to the class with many reported unmet needs (OR = 3.870, p = 0.008), whereas a higher level of education decreased the likelihood of belonging to the latter class (OR = 0.215, p = 0.007). Surprisingly, a hospitalization for physical problems within the last 12 months decreased the likelihood of belonging to the class with reported met needs (OR = 0.435, p = 0.030).

3. Main determinants of self-reported unmet needs

Table 3 presents the individual characteristics that were associated with the five groups of unmet needs: mental health, substance use, socio-economic situation, relationships, and daily activity.

The score of well-being was systematically associated negatively with all groups of unmet needs: each additional point on the well-being scale was associated with a 10 to 12% decrease of the likelihood to report an unmet need. In addition, reporting an unmet need in mental health significantly increased the likelihood of reporting any other need, the strongest association being found for needs related to substance use (OR = 4.77, $p < 0.01$). The reverse association, i.e. reporting an unmet need regarding substance use in relation to a need in mental health, was also strongly significant (OR = 5.44, $p < 0.01$).

Other associations with specific groups of needs were also identified. In particular, low social integration, the use of opiates, and having unmet needs regarding relationships were all significantly associated with unmet needs in mental health. Interestingly, a visit to a generic mental health service reduced the likelihood of reporting socio-economic unmet needs by half (OR = 0.57, $p < 0.05$), whilst visiting a specialised addiction service was associated with about a two-fold increase of reporting socio-economic unmet needs (OR = 1.97, $p < 0.01$). Therefore, people visiting specialised addiction services had significantly more unmet needs regarding their socio-economic situation than people visiting generic mental health services.

Table 2: Associations of service users' characteristics on class-membership probability (n = 417, reference = Class 1 « few reported needs »)

	Class 2 « reported met needs »		Class 3 « many reported unmet needs »	
	OR	95% CI	OR	95% CI
Age	0.992	[0.96-1.02]	1.011	[0.97-1.05]
Gender, women (ref = men)	2.765**	[1.14-6.71]	0.923	[0.34-2.54]
Education level (ref = secondary)				
Primary	1.71	[0.72-4.04]	0.815	[0.3-2.2]
Post-secondary	1.223	[0.49-3.04]	0.215***	[0.07-0.66]
Social integration (SIX)	0.759**	[0.58-0.99]	0.756**	[0.58-0.98]
Well-being (WHO-5)	0.805***	[0.74-0.87]	0.681***	[0.61-0.76]
Hospitalization for physical problems (ref = no)	0.435**	[0.21-0.92]	0.460*	[0.19-1.1]
Hospitalization for other problems (ref = no)	0.828	[0.35-1.97]	1.025	[0.39-2.68]
Contact with a GP (ref = no)	1.249	[0.37-4.24]	0.697	[0.21-2.37]
Contact with an outpatient mental health service (ref = no)	1.323	[0.38-4.57]	0.964	[0.27-3.41]
Contact with an outpatient specialised addiction service (ref = no)	0.968	[0.46-2.05]	1.067	[0.46-2.49]
Contact with a social service (ref = no)	2.545**	[1.15-5.65]	0.704	[0.29-1.69]
Contact with emergency services (ref = no)	1.25	[0.56-2.8]	0.934	[0.38-2.28]
Contact with self-help services (ref = no)	2.104	[0.8-5.57]	0.19	[0.01-3.9]
Contact with homecare and outreach services (ref = no)	3.683***	[1.54-8.83]	0.747	[0.25-2.25]
Multiple substance use (ref = no)	2.249*	[0.87-5.81]	3.870***	[1.43-10.46]
Main problematic substance category (ref = alcohol)				
Cannabis	1.656	[0.51-5.33]	0.983	[0.2-4.94]
Cocaine	1.689	[0.5-5.74]	2.842	[0.81-9.96]
Opiates	1.385	[0.34-5.59]	2.312	[0.57-9.41]
Other	0.653	[0.17-2.47]	0.569	[0.11-2.98]

*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

Table 3: Characteristics associated with unmet needs in mental health, substance use, socio-economic situation, relationships, daily activities, and physical health: results from logistic regressions (n = 562)

	Unmet need in mental health		Unmet need in substance use		Unmet need in socio-economic situation		Unmet need in relationships		Unmet need in daily activities	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Gender, women	1.19	[0.73-1.96]	0.77	[0.48-1.23]	0.72	[0.45-1.17]	0.69*	[0.46-1.05]	1.41	[0.91-2.19]
Age	0.99	[0.97-1.02]	0.99	[0.97-1.01]	1.01	[0.99-1.03]	1.00	[0.98-1.02]	0.99	[0.97-1.01]
Social integration (SIX)	0.82**	[0.71-0.95]	1.01	[0.88-1.16]	0.88*	[0.77-1.00]	0.91	[0.80-1.03]	1.06	[0.93-1.21]
Well-being (WHO-5)	0.88**	[0.90-0.99]	0.93***	[0.89-0.97]	0.90***	[0.86-0.94]	0.90***	[0.86-0.94]	0.88***	[0.84-0.91]
Contact with an outpatient mental health service					0.57**	[0.36-0.92]				
Contact with an outpatient specialised addiction service					1.97***	[1.32-2.95]				
Contact with a social service			0.48**	[0.32-0.75]						
Main substance: Cannabis	0.79	[0.36-1.72]								
Main substance: Cocaine and other stimulants	1.41	[0.77-2.57]								
Main substance: Opiates	2.22**	[1.08-4.55]								
Main substance: Other	0.66	[0.22-2.05]								
Unmet need in mental health			4.77***	[3.61-8.63]	1.91***	[1.24-2.94]	2.03**	[1.3-3.16]	2.18**	[1.36-3.5]
Unmet need in substance use	5.44***	[3.48 – 8.50]							2.02***	[1.29-3.17]
Unmet need in socio-economic situation	1.77**	[1.10 – 2.85]								
Unmet need in relationships	2.48***	[1.56-3.97]								
Unmet need in daily activities							2.26***	[1.47-3.46]		
Unmet need in physical health									2.13***	[1.36-3.32]
*** p<0.01 **p<0.05 *p<0.1	significance level(α)=0.05									

4. Specific predictors of met needs in mental health and substance use

Within the sample of respondents, 420 individuals reported a need in mental health, either met or unmet, whilst 441 individuals reported a need related to substance use. In Table 4, we present the predictors of having the need met for these two subgroups.

Associations between service use and met needs were found when considering the two subgroups of people with either mental health, or substance use needs. Reporting an unmet need regarding substance use was strongly associated with a reduced likelihood of having a mental health need met. This was particularly the case for people declaring opiates as their main problematic substance. Reporting a met mental health need was associated with a higher score of social integration and of well-being. Conversely, reporting an unmet need in mental health strongly decreased the likelihood of reporting a met need in substance use, while reporting a met need in mental health increased the likelihood of reporting a met need in substance use. The reverse association was, however, not statistically significant. Therefore, this finding could indicate that meeting mental health needs contribute to addressing substance-related needs, while meeting substance related-needs do not necessarily contribute to addressing mental health needs. In addition, people with substance use needs who reported a visit to a social service in the last 12 months were almost twice as likely to report their need met.

5. Use of services according to care needs

Table 5 shows the differences in need domains, either met or unmet, according to the category of service from where the respondents were recruited, either generic or specialised. Reassuringly, respondents in generic mental health care services reported more needs in mental health than respondents in specialised addiction services, while the latter reported more needs related to substances than respondents in generic services. In addition, the majority of these respondents reported having their needs met, either for mental health or for substance use. However, two thirds of respondents recruited in specialised addiction services reported having needs in mental health, and for 35%, the need was unmet. Likewise, three quarters of respondents recruited in generic mental health services reported a need related to substance use, and 27% reported the need as unmet. This finding should be seen in the context of the 31% of the respondents in generic mental health services who reported at least a visit to an addiction service during the last 12 months; as well as the 66% of respondents in addiction services who reported a visit to a generic mental health service during the last 12 months. It seems, therefore, that people visiting specialised addiction services are more likely to also visit generic mental health services than the other way around.

Regarding socio-economic needs, the results confirmed those presented before: respondents recruited in specialised addiction services significantly reported more socio-economic needs than respondents recruited in generic mental health care services. In addition, for 41% of the respondents in specialised services, these needs were considered unmet, while they are only 23% in this situation among respondents in generic mental health services.

There was, however, no significant difference regarding daily activity needs or regarding contact with social services.

Table 4: Predictors of reporting a met need in mental health among people reporting a need in mental health, and predictors of reporting a met need in substance use among people reporting a need in substance use

	Met needs in mental health among people reporting a need in mental health, n=420		Met needs in substance use among people reporting a need in substance use, n=441	
	OR	95% CI	OR	95% CI
Gender, women	1.12	[0.67-1.87]	1.31	[0.78-2.2]
Age	1.00	[0.98-1.03]	1.02	[1-1.04]
Social integration (SIX)	1.21**	[1.04-1.41]	1.02	[0.88-1.18]
Well-being (WHO-5)	1.06**	[1.01-1.11]	1.08***	[1.03-1.13]
Main substance				
Alcohol	ref	ref		
Cannabis	1.15	[0.52-2.56]		
Stimulants	0.61	[0.33-1.15]		
Opiates	0.35**	[0.15-0.78]		
Other substances	1.39	[0.43-4.52]		
Contact with an outpatient mental health service	2.00**	[1.06-3.77]	1.29	[0.74-2.23]
Contact with an outpatient specialised addiction service			1.65**	[1.04-2.63]
Contact with a social service			1.92***	[1.19-3.09]
Need in substance use				
None	ref			
Met need	1.71	[0.88-3.33]		
Unmet need	0.23***	[0.12-0.46]		
Need in mental health				
None			ref	
Met need			2.38***	[1.26-4.49]
Unmet need			0.30***	[0.15-0.57]

*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

Table 5: Reported needs and contacts with services according to the type of recruitment service[1]

	Users recruited in a generic mental health service, n = 383	Users recruited in a specialised addiction service, n = 172	χ^2
Unmet need domains reported (mean)	3.8	4.6	0.025[a]
Mental health needs	301 (78.6%)	114 (66.3%)	24.3***
Met need	204 (54.0%)	54 (31.6%)	
Unmet need	97 (25.7%)	60 (35.1%)	
Substance use needs	294 (76.8%)	142 (82.6%)	7.0**
Met need	192 (50.7%)	79 (46.7%)	
Unmet need	102 (26.9%)	63 (37.3%)	
Socio-economic needs	232 (60.6%)	118 (68.6%)	19.1***
Met need	145 (38.6%)	48 (28.4%)	
Unmet need	87 (23.1%)	70 (41.4%)	
Relationship needs	244 (63.7%)	105 (61.0%)	
Met need	44 (11.7%)	25 (14.7%)	2.01
Unmet need	200 (53.2%)	80 (47.1%)	
Daily activity needs	230 (60.1%)	96 (55.8%)	1.88
Met need	92 (24.3%)	33 (19.3%)	
Unmet need	138 (36.4%)	63 (36.8%)	
Contact with an outpatient mental health service	326 (85.1%)	113 (65.7%)	26.0***
Contact with a specialised addiction service	118 (30.8%)	126 (73.3%)	85.1***
Contact with a social service	183 (47.8%)	72 (41.9%)	1.4

[1] In this table, specialised units in generic services are considered generic

*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

[a] Fisher exact test with a p-value= 0.025 indicating a significant link

6. Determinants of service use (TDI secondary analysis)

In order to place our findings in a broader context relating to service use, we carried out a secondary analysis of the TDI database, in particular regarding the determinants of service use.

As the TDI database includes a large number of treatment episodes in both specialised and generic care services, we analysed the differences in users' profiles between the two sectors within the TDI database and compared it with the information collected in SUMHIT. We selected all the treatment episodes for the people who had a first-ever treatment demand in 2019. The total sample size was 8.322 treatment episodes. We used logistic regression to model the probability of being treated in a specialised addiction service. The results of this analysis are shown in Table 6.

Table 6: Correlates of new treatment episodes in specialised addiction services compared to generic services[1] for people with a first-ever treatment demand in 2019 (pooled results), Odds-ratio from the TDI database (n = 8322)

	OR	95% CI
(Intercept)	0.30	[0.22-0.41]
Gender (female)	0.70***	[0.61-0.8]
Age	0.97***	[0.97-0.98]
Main income source (in the last 30 days)		
Salary	ref	
Unemployment income	0.61***	[0.51-0.73]
Disability income	0.56***	[0.47-0.66]
Other social income	0.77*	[0.62-0.97]
Pension income	0.41***	[0.25-0.65]
No incomes	1.13	[0.93-1.38]
Other	1.14	[0.47-2.76]
Accommodation (in the last 30 days)		
Stable accommodation	ref	
Institution	1.44	[1-2.09]
Prison	1.09	[0.64-1.83]
Unstable accommodation	0.84	[0.63-1.12]
Homeless	1.56*	[1.03-2.35]
Other accommodation	2.27	[0.69-7.49]
Education		
Secondary level of education	ref	
Higher education	1.50***	[1.25-1.81]
Primary level of education or lower	1.55***	[1.33-1.8]
Main problematic substance		
Alcohol only	ref	
Alcohol and another (illicit) substance	1.83***	[1.45-2.31]
Cannabis	6.44***	[5.36-7.75]
Cocaine (including crack)	9.41***	[7.83-11.31]
Other stimulants than cocaine	7.18***	[5.46-9.44]
Hypnotics and sedatives	1.48*	[1.03-2.12]
Opiates	12.48***	[9.15-17]
Other substance	5.46***	[3.42-8.7]
Ever injected a substance (lifetime)	1.88**	[1.24-2.86]
Main referral for the treatment episode		
Self-referral	ref	
Family	1.56***	[1.28-1.9]
Friends	3.05***	[2.3-4.05]
Court	4.86***	[3.98-5.95]
GP	1.41**	[1.14-1.74]
Hospital	1.09	[0.87-1.36]
Other medical or psycho-social service	3.52***	[2.83-4.39]
Other specialised addiction service	6.05***	[3.8-9.65]
Other	6.23***	[3.59-10.82]

[1] In this table, specialised units in generic services are considered generic

*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

We found a very strong association between the main problematic substance reported and the type of service used. Any main problematic substance other than alcohol significantly increased the likelihood of being treated in a specialised addiction service, from 6 to 12 times. People who designated alcohol as the main problematic substance in combination with the use of another substance were also 1.83 times more likely to be treated in a specialised service.

There was also a significant association between the referral for the treatment episode and the service type. With the exception of hospitals, for which the association was not significant, all referral sources increased the likelihood of accessing a specialised addiction service. People who were referred by friends, courts, another specialised addiction service, or another medical or psychosocial service were 3 to 6 times more likely to be referred to a specialised addiction service. Regarding socio-demographics, women and people with other sources of income than salary were less likely to be treated in specialised services. Finally, the accommodation status was not significant, except for people who are homeless who were more likely to be treated in specialised services.

The secondary analysis of the TDI database provides valuable supplementary information to the findings derived from the SUMHIT sample. It also allows for identifying more clearly different users' profiles according to the type of service considered. In SUMHIT, we found that service users reporting opiates as their main problematic substance were more likely to report unmet needs in mental health. The TDI secondary analysis confirms this finding, indicating that this group was 12 times more likely to be treated in a specialised addiction service. This example highlights the important barrier to generic mental health care access for people who use illicit drugs, and opiates particularly.

Conversely, while in SUMHIT, we found no significant association between gender and service use, the TDI secondary analysis indicates that women were more likely to be treated in generic mental health services than men. In other respects, SUMHIT data indicated that service users who reported an unmet socio-economic need were more likely to use specialised addiction services. However, this finding was not consistent with results from the TDI data. On the one hand, according to the TDI, service users experiencing homelessness were more likely to be treated in specialised addiction services than in generic services. On the other hand, service users receiving social benefits were more likely to be treated in generic mental health services. Therefore, the association found between reporting socio-economic needs and service types needs to be interpreted with caution, although all these results indicate that there is a relation between the socio-economic situation of people and their resort to services, either generic or specialised.

D. Discussion

Foremost, the analysis of self-reported needs of service users with substance use disorders confirmed the important level of comorbidity associating mental health disorders and substance use. Those who reported an unmet need related to substance use were 5 times more likely to report and unmet need in mental health care, and those who reported an unmet need in mental health were 4 times more likely to report an unmet need in relation with substance use. More generally, mental health is a key need domain that is related to other need domains: substance use, socio-economic, relationships, and daily activity needs. We also found that a poor level of social integration was associated with more unmet needs, especially regarding mental health. This situation is likely to increase the barriers to accessing mental health care for the most deprived populations. The identification of a strong association between the type of service and substance used indicates another important barrier to accessing mental health care: the use of illicit drugs, and especially the use of opiates, is still an issue for accessing generic mental health care. People who use opiates were more likely to be treated in specialised addiction services, despite being more likely to report unmet needs related to their mental health. This can be explained by organisational mechanisms(23, 24), some of which are addressed in the subsequent chapters. This can also be related to professionals and health providers' attitudes, such as stigma(25). Overall, service users recruited from specialised addiction services had a higher prevalence of unmet socio-economic needs (41%) and of mental health care needs (37%) than those recruited in generic mental health services. We also noted the sizable proportion (27%) of service users recruited from generic mental health services who reported an unmet need related to substance use.

Another important finding is the identification of interpersonal relationships as a major area of concern for service users with substance use disorders. This finding indicates the extent to which this population suffers from social isolation. It is clearly evidenced that social isolation is strongly associated with mental illness(26, 27) as well as with the capacity of individuals to access appropriate support(28). There is, therefore, a potential gap in the support provided, particularly considering the personal recovery approach.

Finally, the study also emphasised the key role of generic social services in the support to service users with substance use disorders. This indicates the importance of socio-economic support in the recovery pathway of people with substance use disorders. So far, however, the access to generic social services, e.g. CAW, generic services offering employment or housing support, CPAS/OCMW, is still hampered, as we can see in subsequent sections of the report.

II. USERS' ACCESS TO HEALTHCARE SERVICES

A. Objectives

To complement the survey with service users, we aimed to study the accessibility of mental health care in more depth, by means of semi-structured interviews with persons with substance use problems in the five study areas, including both people with and without access to treatment services. During these interviews, service users and a smaller sample of non-users have been asked about the role of professional (mental health and substance use) treatment and care in their recovery trajectories.

B. Method

1. Participants

During the development of the final protocol, some decisions were made that deviated from the initial protocol. In the initial research design, WP4 was divided into regular interviews and a "repeated interview design". Ideally, this repeated design would be conducted with people who have stopped contacting counselling mental health services after a long follow-up period. Thus, methodologically, a certain amount of time had to elapse between interviews. However, this heightened the risk of dropout. Several test interviews indicated that the repeated interview design would challenge the feasibility of the study, as people who are not followed up by caregivers are less motivated for multiple interviews. Consequently, we instead included a timeline method in every interview, which increased their duration and depth. As it remained feasible to conduct the total number of interviews initially planned, the number of participants per region was set at nine (minimum).

We found that the distinction between "admitted" and "not admitted" to services was likely to be artificial. The field managers reported that several people would be followed up by services other than the one where admission was closed. Moreover, some practical and ethical concerns would arise in some services if the names and phone numbers of discharged users were to be provided. As a result, we decided to move away from the admitted/not-admitted status and recruited people being followed up in line with one of the care functions in Article 107 networks. Given that respondents would also reflect on completed admissions, every participant was asked to reflect on completed and actual follow-ups. To ensure maximum heterogeneity in our sample, we considered organizing recruitment based on the level of addiction severity determined by various parameters that emerged within WP2. However, this criterion appeared to complicate the task of the field workers who did the recruitment. We then decided to recruit as many participants as possible concerning the different care functions in Article 107 networks, across different regions. Again, we noticed that service users sometimes transitioned between functions seamlessly and that this distinction was rather artificial. While the severity level was not a key selection criterion, the severity level was estimated during the interview by probing around impacted life domains. When recruiting the sample, we asked services to consider the heterogeneity in impacted life domains, and where possible, to strive for gender diversity.

We also developed a recruitment strategy for clients who were not followed up by any service in order to understand why people drop out of care. The underlying reasons were diverse and included negative experiences with services, not being aware of the services on offer, or being refused assistance in the past. Participants were selected from night shelters (e.g. CAW), street work services, or other OCMW/CPAS and CAW-like services. We used snowball sampling, starting from the clients we interviewed and other gatekeepers, and including the peer-workers with whom we already had contact.

We also interviewed peer-workers themselves. The inclusion criteria for this population were the following: (1) being at least 18 years old, (2) three years without contact with a generic mental health or specialised addiction service, (3) proficiency in Dutch or French, and (4) having (self-reported) substance use and mental health needs. A single overnight stay in a PAAZ/SPHG ward within three years was not considered an exclusion criterion.

A total of 53 interviews were conducted across the five mental health areas included: 8 in Namur, 11 in Brussels, 9 in Zuid-West-Vlaanderen, 14 in Aalst-Dendermonde-Sint-Niklaas, 11 in Antwerp. All interviews were audio-recorded and transcribed verbatim.

2. Data analysis

The semi-structured interviews were analysed by means of an inductive thematic approach. In the first analysis phase, a subset of seven key interviews was selected by the research team based on the richness and diversity of the experiences they captured. Based on a thorough in-depth analysis of each key interview a mind-map with emerging superordinate themes and links between the themes was drawn up. This initial thematic structure was discussed in-depth with all involved co-researchers. In the second phase, this thematic structure was used as guiding framework for the analysis of the other interview data, leading to a fine-grained analysis of participants' experiences.

C. Results

Five main themes emerged from the data: (a) fragmentation of care and support, (b) (lack of) "really listening", (c) balancing treatment-driven and person-centred support, (d) the ambivalent role of peers, and (e) stigma. Within each theme, we captured a variety of experiences and ambivalences, confirming the idiosyncratic character of participants' needs. Therefore, to interpret the findings of this work package, we specifically applied a dynamic – rather than a static – lens to the facilitators and barriers that affect the accessibility of mental health care for persons with substance use problems. The distinguished subthemes within each theme aim to grasp these ambiguous dynamics.

1. Fragmentation of care and support

One of the incentives of the mental health reform of adult psychiatry (cf. Art. 107) was de-categorization, i.e. implementing collaborative procedures and enhancing cohesion between different services, operationalised in the creation of 20 regional mental health care networks. However, the results revealed how for persons with substance use problems, the mental health care landscape is often still experienced as a fragmented and dispersed field that is challenging to navigate (cf. KCE Report 318). In that respect, the following subthemes could be discerned in the interview data: the ripple effect of waiting lists, island logics within a network structure, accessibility of information and (more than) case management.

The ripple effect of waiting lists

The detrimental impact of long waiting lists came to the fore as a prominent theme in the interviews. It is a long-standing fact that waiting lists are a structural barrier to accessing appropriate services, both within the generic mental health care and specialised addiction treatment system. However, the experiences of the participants allowed us looking beyond this systemic reality and gaining an understanding of the rippling side effects these waiting lists caused in the recovery processes of persons with substance use problems.

Several participants explained how for them, the momentum and motivation to seek support arose in moments of crisis, when they had hit rock bottom in one or several life domains. They testified that ending up on a waiting list in such a moment of crisis can enhance feelings of desperation and can lead to dangerous situations. For example, some participants spoke about how, at a certain point, in an attempt to quit using drugs, their physical health was heavily jeopardised because they felt completely alone when physically weaning themselves off drugs[1]:

> *"Het is ook al geweest dat ik, terwijl ik op de wachtlijst sta, naar [psychiatrisch ziekenhuis] moet gaan ondertussen, omdat het zodanig… Ja, niet meer verantwoord was. Dus ik ging mezelf overdoseren of zo. Niet expres hé, maar gewoon zo… Er zijn heel veel periodes geweest in mijn leven dat ik eigenlijk echt destructief met mijn leven aan het spelen was." (male, age 30-40)*

> *"De wachtlijsten, dat is het moeilijkst. Je wil op dat moment stoppen. Je hebt er genoeg van, je wil stoppen. Maar als je dan drie maanden moet wachten, dan stop je niet. Ik heb één keer geprobeerd om af te kicken op mezelf, ik ben op spoed beland en was bijna dood. Dus dat was geen goed idee. Ik mag alleen maar stoppen met middelen onder zware begeleiding." (male, age 40-50)*

Often, the more specialised and long-term the support provided by a certain service, the longer the waiting list. In the interviews, it became clear how residential support was in especially high demand for many participants. A consequence of these waiting lists for specialised support is that other mental health services that are designed to provide ad hoc and short-term support are increasingly used by persons with substance use problems to 'patch up' – as one of the participants described it – the gaps created by the waiting lists in more specialised support settings. This was particularly the case for psychiatric wards in general hospitals, where the average duration of admission is only two to four weeks. As a survival strategy, some participants strung together several short admissions within these generic psychiatric wards to bridge the long waiting time. Another participant explained how he was lucky that the generic ward where he ended up used its discretionary space to allow him to stay for four months:

> *"Ik ben daar eigenlijk gebleven zo lang [4 maanden] omdat ik hier op de wachtlijst stond en dat ik bang was dat als ik naar huis ga, dan kom ik niet meer terug naar hier. Ik heb dat gebruikt als een lapmiddel… Allez, omdat ik het jaar ervoor… Dan hadden ze ook voorgesteld van een langdurige behandeling en toen ben ik naar huis gegaan en ben ik er niet meer op ingegaan." (female, age unknown)*

Psychiatric wards in general hospitals tend to primarily fulfil the function of being a "pit stop" in space and time, often during moments of crisis, for a wide variety of care users' profiles. Therefore, the focus is insufficiently on the long-term recovery trajectories of service users, albeit through treatment orientation elsewhere. Moreover, staff are often not specifically trained in supporting people with substance use problems.

Another ripple effect of the waiting lists is that adequate support, when it is finally available, is no longer in accord with the recovery trajectories of service users. The insights from the participants confirmed how people with substance use problems need different types of support depending on where they

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[1] In this section, the quotations are presented in their original language to preserve the nuances of the repondent's words.

find themselves in their recovery journey. When support finally becomes available and accessible but is a mismatch with one's support needs in that specific moment, the likelihood of a helpful treatment trajectory becomes considerably smaller:

> *Et à la maison, vous n'aviez pas d'infirmière? "Non, non. J'ai appelé l'assistante sociale pour lui demander si on ne pouvait pas faire une exception, qu'on vienne m'aider à faire mes repas et manger pendant 15 jours. Elle m'a dit que ça allait passer au comité trois semaines plus tard. Mais trois semaines plus tard, je n'en aurais plus besoin, donc aucune aide, encore." (female, age 50-60)*

> *"Ik sta zeven maanden op de wachtlijst, wat eigenlijk veel te lang is. Want je belt als je je slecht voelt, niet als je je goed voelt. Ik was eigenlijk al terug redelijk oké, van mijn psychose. Ik was eigenlijk terug aan het werken. Opeens bellen ze: je kunt binnen. Dus ik neem de kans, want ik geloof wel in [naam organisatie]. Ook met de dubbele diagnose, niet veel instanties doen dat. Maar de wachtlijst is gewoon verschrikkelijk lang en ik kan me heel goed voorstellen dat veel mensen afhaken. Want je belt als je je slecht voelt, niet als je je goed voelt." (male, age 30-40)*

In other words, rather than using support modalities that are the best fit with their personal needs and stage of recovery, waiting lists force service users to accept the first available service, whether this is located within the more generic mental health care or within specialised addiction treatment services. Additionally, as described above, people tend to search for alternatives to bridge the waiting period, using other resources that in turn become unavailable for those who most need them, thus further reinforcing this vicious cycle.

'Island logics' within a network structure

Since the launch of the Article-107 reform, mental health care services have been expected to actively collaborate with each other and provide treatment orientation to partners within their regional network, either as follow-up after treatment or when they cannot provide the most appropriate support themselves (e.g. due to treatment focus, waiting lists, and black lists). However, several participants experienced inadequate referrals at crucial moments in their recovery process. From their stories, it became apparent how inadequate referrals contributed to the fragmentation of support trajectories, had a demotivating effect, and even contributed to vicious cycles of problematic substance use. For example, for one participant, fragmented short psychiatric admissions became an inherent part of his recurrent pattern of problematic alcohol use:

> *Wat vind je van die PAAZ-diensten? "Dat gaat heel vlotjes, ja. Dat is... Op minder dan een week ben je daar binnen. Maar je bent ook rap buiten. Dat is maximum tien dagen daar hé. (...) Dat is spoedontwenning." En ben jij daarmee geholpen geweest? "Ja, je bent even van die ontwenningsverschijnselen vanaf hé." Dus als je dan naar buiten toe georiënteerd wordt, zie jij dan een sociale dienst? Of zeggen ze van 'ja, je gaat hier nu naar buiten?' "Terug naar huis." En wat heb jij dan thuis gedaan? "Terug beginnen drinken. (...) Dat marcheert zo hé, je wordt van het één naar het ander doorverwezen." (male, age 40-50)*

Another participant testified how, after a successful admission to a closed psychiatric ward, the limited and vague follow-up increased the vulnerability to relapse:

> *"[Nom du service] je sais que c'est un service fermé, donc on peut en parler [de drogues], je sais bien qu'on ne pourra pas aller chercher de produit. Mais quand tu es en liberté comme ça et qu'on te parle de produit, c'est normal que tu ailles directement au premier feu rouge voir si tu n'en trouves pas." (…) Et après [nom du service]? "Ça allait bien, puis je me suis dit que j'allais en fumer un pour fêter ça." Ils ne vous ont pas proposé de suivi? "Juste un coup de téléphone et puis voilà. Je devais aller voir la psychologue, voir comment ça allait. Je ne l'ai pas fait d'ailleurs, je me demandais à quoi ça servait." (male, age 40-50)*

Based on the participants' accounts, it is not clear whether these experiences of not being referred adequately specifically apply to service users with substance use problems, or if they point to a more general bottleneck in the ways services collaborate within regional mental health networks. However, the findings confirm that collaboration is an essential condition in realizing continuity of support, and how certain services, despite being embedded in a network structure, still apply 'island logics' to their daily practice. For example, one participant explained how, after being refused to a service he approached, other possible avenues of support were not even discussed:

> *"Dan hebben we samen gebeld naar [naam psychiatrische dienst] voor een koppelopname. Maar wij staan alle twee in het rood. [Dan zeggen ze] 'ah nee, je bent hier al drie keer geweest, ik denk dat onze manier van werken voor jou niet werkt. Dus zoek een andere plaats.' Dat was het hé. Niet, ga naar daar of dat of dat. Nee, dat was gewoon, nee, hier gaat het niet lukken, zoek een andere plaats. Ga zoeken op het internet." (male, age 40-50)*

This bottleneck did not only come to the fore in collaborations between (specialised) mental health care services, but was also mentioned by some participants in relation with the link between frontline workers and more specialised mental health care and addiction treatment services. For one participant, the lack of information and treatment orientation from her own GP had a very demotivating effect:

> *"De huisarts? Ik wist dat system niet. Die legt mij ook niks uit, die legt mij niks uit. Die stuurt mij gewoon weg. (…) Ze gaf mij die informatie niet. En ik hoop dat dat echt wel verandert in de toekomst. Dat ze mensen niet zomaar weg sturen. Snap je? Dat is wel heel jammer. Want ik stond wel open voor genezingen. Het is niet dat ze mij moeten dwingen of zo. Het is niet zo dat ik daar binnen ga en amok ga maken. Ik sta zo open voor genezing en toch wordt mij dat geweigerd. Dat is raar." (female, 40-50)*

Accessibility of information

Related to the above, a specific theme that came to the fore was the accessibility of information regarding treatment and support options for persons with substance use problems. On the one hand, for some participants, the multitude of treatment options and possible trajectories was experienced as overwhelming:

> *"Het is juist hetzelfde met geestelijke gezondheidszorg, daar zijn zoveel opties. Maar je weet niet hoe je… Je bevindt je in een soort van… Allez, in een soort ding dat je nog nooit… Allez, een nieuw hoofdstuk waar je niets van af weet, snap je? Je moet eerst weten wat je rechten zijn en dan kan je heel veel bereiken. Maar je weet het niet, je weet het gewoon niet." (female, age 20-30)*

It was also noteworthy that, for some participants who sought help for the first time, their initial reflex was not to talk about their motivation for change and support needs with a frontline worker, such as their GP, who could make a targeted referral to appropriate services within their own regional mental health network. Instead, they felt they were on their own to broadly search for a possible and direct entrance point to access support for their problematic substance use. One participant explained how he put himself on several waiting lists, based on an elaborate internet search with a friend:

> *"Ja, het is ook mede door mijn beste vriendin da tik hier geraakt ben of dat ik dat hier gevonden heb voor die opname. Dus zij heeft mij echt ook… Wij hebben samen aan de computer gezeten om elke soort instanties op te zoeken en te bellen en te doen en… Te kijken wat het beste is. We hebben dan de pro's en contra's gemaakt, van die instantie is beter voor dit, en dat is beter voor dat, en vergeleken. En dan gekeken van wat gaan we doen. Want dat gaat het best bij mij passen. Het is echt een goeie vriendin." (male, age 20-30)*

He also sees it as a missed opportunity to spread information regarding care and support options for persons struggling with substance use problems to a broad audience. He attributed the fact that low-threshold instances offering support for problematic substance use are advertised to a much lesser extent than organizations and helplines offering support for mental health problems, to societal stigma towards substance use problems:

> *"Je moet echt zoeken op het internet en zo. We hebben heel hard moeten… Ja, je vindt dat niet rap, de hulpverlening. Wij hebben daar echt op moeten zoeken. Dat wordt veel te weinig aangekaart. Ik vind dat dat zelfs op het nieuws mag komen. Gelijk dat die zelfmoordlijn op het nieuws komt, mag dat ook van zo'n dingen zijn vind ik. Of op televisie of… Van heb je problemen met drugs, dit zijn instanties die bestaan." (male, age 20-30)*

As will be discussed below (cf. relational continuity), the interviews made it abundantly clear that long-term and continuous professional and therapeutic relationships are near indispensable to accessing necessary information in search of a good match with one's personal support needs.

More than case management

One counterweight to the risk of fragmented support trajectories that stood out in the participants' perspectives was the indispensable and robust role of certain specific persons in their recovery pathways. These professionals were often situated at the frontline and provided tailored information, ensured consistency and coherence in participants' treatment choices, were reachable both in and outside moments of crisis, and functioned as gatekeepers. Two participants reported that their psychiatrist fulfilled this positive key role, opening doors to new treatment options and guiding towards settings tailored to their needs. For another participant, this role was fulfilled by her GP. She explained how the fact that her doctor really knew her and could situate her substance use and mental health problems within her personal life history, family situation and lifeworld, enabled that they could search for adequate support:

> *"[Mijn huisarts] is de enige die gans mijn dossier kent. (…) Dus ze kende de situatie thuis, ze kende mijn drie kinderen, ze wist al de problematiek met mijn jongste zoon, dus van de collocatie, van de drugsproblemen, van alles. (…) Zij kende de situatie." (female, age 50-60)*

In other words, participants stressed the necessity of a person (or multiple persons) taking up the role of case manager throughout their support trajectories. However, describing these actors as case managers might not sufficiently do justice to the relationships they build with service users. From the enthusiastic and whole-hearted tone participants used when talking about these pivotal professionals, it became clear how, above all, relational continuity, person-centeredness and a non-judgmental atmosphere lie at the heart of these relationships. One participant described how the continuous proximity and effort of the social worker handling his case gave him a deep feeling of being worthy of care, which was the decisive factor in accepting specialised support:

> *"Die klik is er gekomen omdat die CAW-medewerkster, die vrouw die je daarnet zag, die bleef achter mij aan. En die heeft mij gemeld bij… Hoe heet het? Bij gedwongen opname. Die heeft mij gewoon uit de put gered en bij gedwongen opname gezet. Toen schoot ik echt wakker. Die vrouw geeft echt zo veel om mij, om mij zo te komen redden. Ja, en dat is… Dat was de doorslag bij mij, van het is genoeg geweest, ik stap hieruit. (…) Wat zij mij uitlegt, had ik eigenlijk van mijn ouders moeten leren en van school." (female, age 40-50)*

In the following theme, the importance of relational continuity of support will be discussed more in-depth.

2. (Lack of) "really listening"

As the above theme made clear, relational continuity came to the fore as an essential aspect in navigating the mental health care landscape in search of appropriate support. In the same vein, another crucial factor that emerged strongly from the experiences of the participants, was the nature and dynamic of the relationships participants developed with the professionals in the services they used. Strikingly, it was often described as *"really listening"*. In what follows, we will unravel this topic of "really listening", by zooming in on two subthemes that came to the fore in participants' accounts: the importance of authentic and dialogical therapeutic relationships and the role of trauma-sensitive care and support.

Authentic and dialogical therapeutic relationships

The importance of authentic contact with professionals was prominently present in the participants' stories and proved to be a determining factor in the experienced success or failure of services used. For one of the participants, what she describes as *"the human aspect"* was more fundamental than personal comfort or the therapeutic programme:

> *"Ik moet eerlijk zeggen, als ik naar [naam organisatie] gekomen ben en ik heb daar de faciliteiten gezien, heb ik gedacht, ik blijf hier niet. (…) Maar uiteindelijk, doordat het menselijk contact daar zo goed was, ook van die verpleegkundigen… (…) Hun faciliteiten zijn ouderwets, niet veel comfort. Verschrikkelijk. Maar het menselijke erin en het hulpverleningskarakter en dan ook de therapeuten op maat en dergelijke… Die waren heel goed, ja. Die zat er echt met kop en schouders bovenuit." (female, age 50-60)*

Throughout the different interviews, participants outlined a number of characteristics and dimensions of these therapeutic relationships that have a decisive impact on the accessibility of mental health care services. Participants stressed how important it was that these relationships were rooted in sincerity and a non-judgmental atmosphere, felt authentic and were dialogical in nature. In addition, participants stressed the importance of avoiding feeling alone and that professionals should be committed to meet their needs. One of the participants summarised it strikingly in the following way:

> *"Cet endroit, je le trouve vraiment incroyable. C'est super comme endroit. Ils aident vraiment, ils sont humains, ils sont présents." (male, age 30-40)*

Another characteristic that was mentioned multiple times is the approachability of professionals with whom participants 'clicked' and had developed a relationship of trust. For example, this was illustrated by a participant describing his bond with a psychiatrist:

> *"Il y avait une psychiatre en particulier, qui m'a suivi pendant plusieurs années. Elle a vraiment été magique. Sans le savoir, on s'est suivies dans plusieurs hôpitaux, à chaque fois on s'est retrouvées donc il y a un lien qui s'est créé. Quand je l'ai eue la première fois, elle était encore assistante psychiatre, donc je suis un peu sa première patiente. Il y avait un vrai lien qui s'est construit avec elle, et en plus elle a été la première psychiatre avec qui mes parents se sont sentis à l'aise." (female, age 20-30)*

This also links to the strongly enhancing effect of relational continuity over time and across different support settings on the accessibility of mental health care for persons with substance use problems. One participant experienced how the high approachability and lasting availability of the staff members at the ward where she was formerly admitted felt like a big source of support:

> *"Het feit dat ze er waren, als er iets was, dan kon je ertegen praten. Ze hebben mij ook nooit veroordeeld, ze hebben nooit gezegd, ja je moet het maar weten. (…) Ik voelde mij veilig. Ze waren er ook dag en nacht. Zelfs na mijn opname kon ik nog opbellen als het nodig was, alhoewel ik mijn andere hulpverlening had, maar dat was in de week. Dus in het weekend als het heel moeilijk was, dan kon ik gewoon naar daar. Efkes gaan zitten. Gewoon, ze waren er voor mij en geen veroordeling. Dat was het belangrijkste." (female, age unknown)*

At the same time, participants also experienced how, in certain settings, there were factors preventing such dialogical and authentic relationships from developing. One that stood out was the role of the unequal power dynamics between professionals and service users that are unavoidably at play within treatment settings. This power imbalance was most pronounced in the contacts some participants had with their psychiatrist. For example, some participants mentioned how medication use and symptomatology often prevailed in these one-sided conversations in which stigmatizing attitudes on drug use shone through:

> *"Met psychiaters, er is zo een kloof… Die gasten doen zo uit de hoogte. Van gelijk zo, dat je zo… Je bent maar een junk en allez… Ik heb nog geen één mens tot mens gesprek gehad. Het is altijd zo… En als ik dan zou zeggen van ja, ik vermoed dat ik bipolair ben. Waarom? Waarom vermoed je dat? En ik moet daar dan on the fly symptoompjes opnoemen. En dan meestal, als je dat moet doen, ben je van euh, euh… Weet je niet goed wat je moet zeggen. En dan, ja maar ja, dat zal wel door het gebruik zijn en ze luisteren niet. Ik heb zeker al vijf psychiaters gezien in opnames en het is bijna altijd hetzelfde." (male, age 30-40)*

> *"Je suis en face d'un psychiatre, et à part tout ce qui est neuroleptique que je ne connais pas, je connais plus que lui les produits qu'ils passe sa journée à prescrire. J'ai plus d'expertise et*

> *pourtant il m'infantilise, comme toxicomane, alors que j'ai une expertise assez large." (female, age 40-50)*

Another recurring hindering factor of lasting therapeutic relationships was the financial burden of long-term outpatient support provided by psychologists. Several participants recalled positive and impactful experiences regarding the therapeutic relationships they had with their psychologist. At the same time, some participants explained how, despite the fact that they would really benefit from continued long-term and regular contact with their psychologist, they simply could not afford it financially:

> *"Je weet hoe je een kwetsuur hebt die plots zo hard kan… kwellen en opkomen dat… Ja. Je hoopt natuurlijk dat je draagkrachtig en veerkrachtig genoeg bent om stand te houden, maar je weet het niet. (…) Ik weet dat ik voor de rest van mijn leven hulp nodig heb. Maar ik weet ook dat ik ze zelf moet bekostigen. (…) Als ik zeg, ik heb alle drie weken mijn therapeut nodig om te kunnen blijven functioneren, dan zou ik dat moeten doen. Als ik dat allemaal zelf ga moeten blijven bekostigen, weet ik dat er één of andere dag gaat zijn dat ik me vrij goed voel en het niet meer nodig heb. Maar uit het verleden weet ik ook dat er dan momenten zijn dat ik het wel weer nodig heb en dat het dan te laat is." (female, age 50-60)*

Since 2021, the cost of accredited psychologists in the frontline became a lot more affordable. However, several participants did not seem to be aware of this yet. This also links to the importance of accessible and tailored information for persons with substance use problems (cf. supra).

Trauma-sensitive care and support

When participants described situations in which they felt *"really listened to"*, they often mentioned how authentic and dialogical therapeutic relationships could only be developed when professionals looked beyond the behavioural aspects of their substance use problems. Particularly, participants referred to the importance of addressing the root causes of their substance use problems, that could often traced back to adverse childhood experiences, detrimental social circumstances and trauma, amongst other things. For example, one participant explained how the active acknowledgment of these underlying factors unlocked a new phase in his recovery process:

> *"Hier, in [gespecialiseerde organisatie], was echt goed om efkes stil te staan bij wat het is en dan aan te pakken wat erachter zit. Wij hadden daar ook geen therapeut of zo. En hier heb ik nu therapeut X, en vanaf de eerste keer… Ik haat die hé. In de zin van, die weet het. Die ziet door mij heen en die snapt het gewoon. (…) Hier, ik weet niet, ik heb echt… Ja, ik heb echt geleerd om te voelen. En dat is niet gemakkelijk." (female, age 20-30)*

In some cases, the therapeutic activities provided by the mental health service simply fell short in bringing these underlying dynamics to the fore. In that respect, one of the participants reflected on the paradoxical effects of the old traumas that ultimately led to her substance use problems. Precisely these traumatic experiences made it impossible for her to take the initiative to talk about them. At the same time, she was aware that addressing them was a necessary part of her recovery process. However, the staff members in the ward where she was admitted seemed oblivious to this need. Likewise, the available therapeutic activities fell short in bringing up these traumatic experiences:

> *"Ik heb een paar keer in [naam organisatie] gezeten, psychiatrie, verslaving. Maar mensen praten niet met jou om te achterhalen wat er aan de hand is met jou. Je krijgt therapie. Je krijgt*

> *activiteit. Maar ze komen mentaal niet in je hoofd kijken. Want nu weet ik, als je met een verslavingsprobleem te maken hebt, je moet dingen in zijn hoofd… Je moet die persoon proberen wakker schudden, weet je wel? En dat deden ze niet. (…) Maar in die psychiatries had ik het gevoel van, als ik mijn eigen niet kan openen, omdat ik zoveel trauma's heb meegemaakt… Jij bent de hulpverlener, jij kan mij toch helpen om dingen te ontrafelen. Dat denk ik nu hé. Maar toen, dat was er gewoon niet, dat heb ik gemist. (…) Niemand kon weten wie ik ben of wat er met mij is gebeurd of zo. En wat ik moet doen. Vooral wat ik moet doen om eruit te geraken. (…) Mijn trauma's komen naar boven, ik zit daarmee. En die zijn als een wervelwind aan het stormen in mijn hoofd. En ik zit daar alleen met mijn gedachten." (female, age 40-50)*

Overall, the interviews revealed a high need for more trauma-sensitive support, especially in the more generic mental health care services used by persons with substance use problems. Although discussed to a lesser extent, the findings also revealed how participants did not always find their way to services that offer more specialised trauma work as important stepping stone towards recovery.

3. Balancing between treatment-driven and person-centered support

Another overarching factor that significantly impacted mental health care accessibility and retention is the extent to which service users experience a good fit between their personal support needs and what a certain service has to offer. In particular, participants spoke about the importance of a good 'match' at three levels: the intake criteria used by services, the expertise of staff regarding substance use problems and the way recovery was operationalised within services.

The (in)flexibility of intake criteria and user profiles

Both in generic mental health care and specialised addiction treatment, services often target a specific service user profile, translated into intake criteria acting as gatekeepers of the service. In the interviews, there was a diversity in participants' experiences regarding the rigour or discursive freedom with which these criteria were applied. For example, one participant experienced such a high level of inflexibility and strictness in applying the intake criteria that there was no room left for real dialogue or a person-centered exploration of his needs:

> *"Ze willen alleen maar horen wat ze willen horen. In hun boekje staat zus en zo. Je moet dat zo doen en die vraag moet je stellen en als je antwoord krijgt, dan stuur je ze maar wandelen. Dat is precies of die zijn geïndoctrineerd zo met hun vragenlijst die voor hen ligt. En o wee als er iemand afwijkend antwoordt op die vragenlijst, dan zitten ze al met de handen in het haar. Dan kunnen ze er al niet meer zelf aan uit. Dan moeten ze naar hun baas gaan vragen, van… Die zegt dat, wat moet ik daarmee doen, want dat staat niet op mijn papier. Zo komt dat voor mij over in ieder geval. (…) En dan zomaar… Ja, dat past niet bij ons en we hebben geen tijd voor u, trek uw plan." (male, age unknown)*

Some participants mentioned that substance use was an explicit exclusion criterion in some generic mental health services. For example, according to one participant, substance use was a straightforward reason to refuse access to sheltered housing, unavoidably spurring on substance use and possible relapse:

> *"J'ai eu des refus par des maisons d'accueil car ils savent que je viens de [nom du service] et que je suis consommateur. (…) Ils me disent que ça ne va pas être possible." Et quelles solutions vous*

> *proposent-ils? "Un suivi pour ma consommation. En gros on doit rester dans la rue et faire un suivi pour la consommation. Un peu compliqué quand même. (…) Parce que quand tu as un toit, c'est plus facile d'arrêter la consommation ou de commencer un suivi. Quand on est à la rue, qu'est-ce qu'on à faire? On a justement envie de consommer parce qu'on est pas bien." (male, age 40-50)*

Other participants experienced how certain general mental health care settings were not accessible, based on the criterion that they were receiving (opioid) substitution treatment at the time of intake. Whereas this might be related to the service's substance use policy, it often came across as stigmatizing. For example, one participant testified how this caused a lot of frustration and obstructed his recovery process:

> *"Ik zou gewoon ergens willen binnen geraken. Een paar weken rust en die antabuse opnieuw opstarten en ik ben 100% zeker dat ik het wel weer een jaar zal volhouden. Of langer. En het liefst voor gans mijn leven, mijn lever is er zo goed niet meer aan toe. (…) Maar ik zeg het, in die PAAZ-afdeling, omdat ik die suboxone ook pak…" Dat zorgt ervoor dat je eigenlijk geen toegang krijgt tot tal van voorzieningen die je zouden kunnen helpen? "Geen één PAAZ. Hier in [stad] sowieso niet. Omdat ik drugs en… Drank… Je moet je aanmelden op de spoed en je bent direct binnen. Maar eens je zegt van ik pak ook suboxone of er zit ook een drugsroes… Nee, ga maar naar huis." (male, age 40-50)*

The above testimony shows how support modalities rooted in a harm reduction approach and more treatment-oriented support options could simultaneously play a valuable role in one's recovery process, despite (seemingly) being located at opposing ends of the support continuum. However, from a service intake perspective, these seem to mutually exclude each other. Besides stringent intake criteria, some participants also bore witness to the lack of adequate treatment orientation after an unsuccessful intake procedure:

> *Wat waren de omstandigheden waarin je daar contact genomen had? "Ja, ik zat dan volle bak aan de drugs hé, aan de drank en… Ik voelde dat ik erdoor zat en dat ik hulp nodig had. Ik had er dan naar gebeld en ik mocht een intake gaan doen. En op die intake hebben ze uitgemaakt dat ik niet paste in hun… In het geen dat zij te bieden hadden." En weet je dan exact waarover dat gaat? "Ja, dat zeggen ze er niet bij. Nee, dat mag je niet weten." En hebben ze je toen doorverwezen naar ergens dat je wel in het profiel zou passen? "Nee, dat hebben ze niet gedaan." (male, age 40-50)*

In relation to intake criteria, some participants also mentioned the barriers caused by complex and multi-step intake procedures:

> *"Il y a des démarches. Il faut téléphoner le matin parce qu'il y a une heure bien précise pour les appeler et lancer la candidature, et à partir de là il faut mettre en place deux entretiens et y passer une soirée histoire de voir si ça peut convenir." (male, age 50-60)*

Training and expertise of staff

Another aspect that contributed to a feeling of having ended up in the 'right' or 'wrong' kind of treatment was the extent to which in-house staff members had specific expertise or sensitivity related to substance use problems. On some occasions, the fact that staff members were insufficiently trained to recognize and deal with substance use problems, enabled service users to hide or 'compartmentalise' their problems regarding substance use, which had an ambiguous effect. On the one hand, not opening up about their substance use problems made it possible to access services in the more generic mental health care system. On the other hand, however, the support they received in these places turned out to be incompatible with their specific needs. One participant explained how this 'compartmentalizing' strategy (i.e. not revealing struggles with substance use) even had a detrimental effect on his substance use problems, as it led to misdiagnosis and he was put on heavy anxiety medication with addictive effects:

> *"Ik ben daar verslaafder uitgekomen dan dat ik daar aan begonnen ben. Want ik zat daar eigenlijk voor de foute redenen. (…) Die zeiden ook, het gaat daar niet om drugs, dus ik bleef ook gewoon gebruiken en zo. Ik kwam onder invloed binnen, en die zagen dat ook niet. Dat is erg hé, ik mag daar niet mee lachen hé. (…) En ook de psychiater daar, ik vond dat eigenlijk heel frappant, want… Die stelde diagnoses op mij die eigenlijk helemaal niet waar waren. Bijvoorbeeld bipolaire stoornis. Uiteindelijk is dat helemaal niet waar nu, maar ik kreeg daar wel medicatie [benzodiazepines] voor." (female, age 20-30)*

A specific barrier that regularly came to the fore was the role that prescribed medication played in care trajectories, and the extent to which staff members were (in)sensitive towards the vulnerabilities associated with substance use problems. For example, one participant felt that staff members were 'playing' or 'testing' medication on him, whereas they were trying to find the appropriate medication:

> *"Je ne trouvais pas ça sérieux. Ils avancent un peu à l'aveuglette. 'On va essayer ça', puis 'ça ne marche pas, pas de problème, on va essayer l'autre',… Et un jour, on s'est rendu compte que pendant une hospitalisation j'avais essayé tous les médicaments de cette gamme. Tous les jours, ils ont changé. Tous les jours, un nouveau truc." (male, age 50-60)*

In the same vein, some participants reported that frontline healthcare and social professionals (e.g. GPs and social workers) were often insensitive towards, or insufficiently aware of, the effects of their attitude on service users with SUD:

> *"Elle est super ma généraliste, mais ce sont des gens qui ne connaissent pas du tout les gens qui sont addict au Tramadol. Le Tramadol c'est quelque chose qu'ils prescrivent tous les jours pour des gens qui ont des lumbagos. Je trouve ça assez épatant et bizarre parce que je connais des personnes qui, à cause de leur maladie, sont devenus accros au Tramadol. Et donc à cause de leur mal. Donc je trouve ça bizarre que les généralistes ne soient pas formés aux addictions créées par les produits qu'ils prescrivent. Ça me choque un peu". (female, age 40-50)*

> *"[La travailleuse sociale] m'a déjà supprimé deux fois mon salaire parce que je n'avais pas été à un rendez-vous. Mais quand vous êtes là-dedans [dans la consommation], il y a des fois où vous oubliez les jours; donc vous êtes déjà mal et on vous retire encore votre salaire deux fois sur l'année." (female, age 50-60)*

In fact, it became clear in many participants' accounts that they experienced a greater sense of belonging and a better alignment with their long-term and recovery-oriented support needs if services were specialised in persons with substance use problems (and co-occurring mental health problems).

For example, one participant reported how, despite the staff's good intentions, they did not have the expertise to really support his long-term recovery trajectory:

> *"Ik merkte dat in [psychiatrische afdeling], ze wouden mij zo graag helpen maar ze hadden de tools niet. En ik vond dat zo erg, ook naar hen toe, omdat ik erna direct hervallen ben. Maar dat was omdat ze er niet voor opgeleid zijn. Er was een opnameafdeling, dat was geen therapeutische afdeling. Dus die hebben mij wel mijn afkick laten doorstaan, proberen zo goed door te maken, maar daarnaast konden ze niks specifieks bieden. (…) Hier [dubbeldiagnose-afdeling] hebben ze echt kennis van beide dingen. Dat is een groot verschil eigenlijk." (male, age 40-50)*

Some participants also had doubtful experiences with (frontline) psychologist who seemed to lack specific knowledge and know-how regarding substance use problems and recovery, making them feel misunderstood:

> *"Ze werken hier [gespecialiseerd daghospitaal] puur op verslaving en wat erachter zit. En ik ging bijvoorbeeld naar een psychologe voor ik hier begon. Ik zei 'ja, ik heb een alcoholprobleem' en dan zei ze dingen, bijvoorbeeld: ja maar, je moet gewoon zeggen, één en niet meer. En dan dacht ik, ja zo gemakkelijk is dat niet. Misschien probeerden ze hun best te doen, maar hier weten ze echt waarover ze praten. Het is heel goed hier. Op een week tijd heb ik al zoveel geleerd. (female, age 30-40)*

Operationalisation of recovery

For participants, it was important that there was a good fit between their own understanding of recovery and the way recovery was operationalised in the service they used. An obvious example lies in the extent to which a service (user) puts abstinence in the foreground as core condition of recovery. For example, one participant saw abstinence as the fundamental starting point of her recovery trajectory. For her, ending up in a women's group where using substances was tolerated, was not well aligned with her personal vision of recovery:

> *"Want ik zit in een vrouwengroep, waar… Ja, een ex-verslaafde vrouwengroep. Dat is een vrouwengroep voor vrouwen van de straat. Maar daar is gebruik nog toegestaan. Dus die werking daar is mensen in gebruik toe te staan en hen daar zo in te begeleiden. Maar ik wil helemaal stoppen. Dus ik wil even afstand nemen van die vrouwengroep, want als ik naar daar ga, ik zie die mensen stoned. Dat weegt zwaar op mij." (female, age 40-50)*

Relatedly, some participants experienced that it was impossible to work on their recovery trajectory in services where recovery was operationalised through a strict (hierarchic) structure with lots of rules. Another facet related to the way recovery-oriented support takes shape is the extent to which services focus on and provide support regarding all life domains, not just the clinical and functional aspects of recovery. One of the participants explained how the help he received with his social problems during admission exceeded his expectations and had positive impact on retention in treatment:

> *"Ook omdat ik direct merkte, op [psychiatrische afdeling], de sociale dienst die erbij kwam om te kijken hoe ze mij konden helpen. Ik had ook geen mutualiteit, ik had niks hé. Niks. En daar hebben ze mij direct overal proberen in te begeleiden en… Dat is dan verder gezet geweest hier, ook met de sociale Dienst en… Zo stilletjes aan, omdat ze mij echt gesteund hebben en dat ze*

> *ook geholpen hebben om oplossingen te zoeken. Iets da tik eigenlijk niet verwacht had. Ik dacht hier van ja, ik ben hier nu en ik ga hier nu ontwennen en voor de rest, zoek het maar uit hé. Maar dat was niet." (female, age unknown)*

4. The ambivalent role of peers

Throughout participants' stories, it became apparent how peers play a unique and influential role in facilitating or hindering access to services, both through their formal presence in services as peer-workers and in informal ways.

The role of peer-workers and self-help

In several accounts, participants talked about how the presence of peer-workers in the mental health services they used was supportive and motivating. While participants valued the role of professional expertise, peer-workers were assigned a special position with a positive influence. This was mainly attributed to the fact that peer-workers, because of their experiential expertise regarding substance use problems and regarding the use of services, were able to understand what they were going through and do not have a judgmental attitude towards substance use.

> *"Die [ervaringsdeskundigen] werken anders, zij werkt echt anders. (…) Die ziet door u. (…) Die weet het echt gewoon, die weet het echt. Die kan u echt aankijken en wat je dan ook zegt, die kan zo echt lachen en dan voel je vanbinnen van 'oh fuck, ze heeft me door'. De begeleiding is goed om je op te vangen, maar ervaringsdeskundigen zijn goed om je echt efkes dat inzicht… Omdat je die ook gewoon gelooft, die weten waarover die klapt zo." (female, age 20-30)*

> *"Ik heb niks tegen al die andere mensen hé, maar dat is uit boekjes. Een ervaringsdeskundige heeft het zelf meegemaakt. Als jij met craving zit, die weet perfect wat je voelt. En dan voel ik meer begrip." (male, age 40-50)*

Although participants were not explicitly asked about (12-step) self-help programmes (e.g. Alcoholics Anonymous, Narcotics Anonymous), it was noticeable that they were mentioned to a much lesser extent in the Dutch-speaking interviews than in the French-speaking interviews. In the latter, participants mentioned how being part of a self-help programme provided them with strength and positive identification with peers. At the same time, participants reported how the strict rules regarding substance use can create an intolerant and sectarian atmosphere.

Word-of-mouth

Besides the formal presence of peer-workers in mental health care, it became clear throughout the interviews how the informal influence of peers was even stronger. Several participants mentioned the role of peers in their own near (e.g. family or close friends) or distant (e.g. people from the same neighborhood) social network who had lived experience with generic mental health care and/or specialised substance use treatment. Informally sharing these experiences between peers appears to be common and acts as a powerful word-of-mouth tool, placing services in an attractive or unattractive light depending on the experiences.

> *"Ja, er zijn veel mensen die naar het MSOC gaan omdat wij ook gezegd hebben hoe dat is. Mensen uit onze groep hé, die dat zeggen van… Die gaan… Bijvoorbeeld, iemand die werkt altijd, we hebben die verslaafd zien worden en we hebben die echt gezegd van ga naar het MSOC, zorg*

> *dat je methadon hebt, dat je kan blijven werken. Want eens dat je je werk kwijtgeraakt… Het is rap gebeurd hé." (male, age unknown)*

For some participants, this insider information also functioned as the primary source of information regarding the daily practice, characteristics and approach of services, based on which participants decided whether or not to use the service.

> *"Ik heb in andere opnames gezeten waarbij ik bij mensen zat die in [gespecialiseerde verslavingszorgafdeling] hadden gezeten. En [de afdeling] heeft een heel streng regime. Ik kon daar eigenlijk binnengaan, maar ik heb het afgewezen." Denk je dat je daar niet op je plaats zou zitten? "Tuurlijk wel. Ook omdat ik een verslaving heb. (…) Maar die regels… Je mag je gsm niet hebben. Je mag dat niet hebben. Ik heb dat ook alleen maar gehoord natuurlijk van andere mensen. Maar die mensen hebben daar gezeten dus die gaan daar niet over liegen." (male, age 30-40)*

Identification with peers: (un)safety and (lack of) belonging

An important aspect related to the role of peers is the extent to which participants identify themselves with the service user population in available services. This is also related to the above-discussed theme of peer-to-peer stigma. Consequently, while some participants have difficulties identifying themselves with the label of having mental health problems, others would rather be associated with mental health care than with specialised SUD treatment services. For people with SUD problems, mental health care services is their first encounter with persons with (severe) mental health problems, which has an estranging effect. One of the participants even described her time in a treatment ward for persons with severe mental health problems as traumatic:

> *"Ik heb daar mensen echt een overdosis weten pakken in hun kamer en zo dat ze ook zeggen 'ze zijn aan het overdrijven' en zo. Allez, of dat nu voor de show is of niet, dat is wel een kreet om aandacht, allez, dat is echt van help mij. (…) Ik vond dat vrij traumatiserend. Die kregen zo van die… Ik weet niet hoe dat noemt? Van die aanvallen dat je er helemaal paralyzed bij zat, dat je echt zo…" (female, age 20-30)*

Some participants also mentioned how fellow service users can contribute to feelings of belonging and safety within treatment settings, which positively affects retention. At the same time, participants reported how a lack of identification with fellow service users' mental health problems or lifeworlds can cause feelings of unsafety, leading to drop out or even a priori avoidance of these services. For example, one of the participants pointed out how he experienced the MSOC as a risky place to hang out, because of the presence of other persons with SUD problems:

> *"Die zijn daar bereid om jou te bestelen. En velen komen daar rustig hun medicatie halen. Maar ook meer dan de helft komt daar criminele activiteiten doen. En mensen als mij zijn gemakkelijk in de zak te zetten. Snap je?" (female, age 40-50)*

The above insights illustrate how peers play an ambiguous role in the accessibility of mental health care services for persons with substance use problems. However, to put these findings into perspective, it should be stressed that participants often expressed their desire to connect with people without substance use problems.

5. Stigma

The impact of stigma is a recurrent theme in the interviews and is also entangled with the other discussed themes. For example, in the rigid application of intake criteria in certain mental health care settings, an element of stigma might be at play, in the shape of (institutionalised) prejudices and biases. Also, the above results show how relational continuity only becomes possible in a non-judgmental environment. Throughout the experiences of the participants, the presence and role of stigma in the accessibility of adequate support came to the fore in different shapes. Three subthemes could be distinguished, related to three different dimensions in which stigma was experienced: stigma within mental health care, ambivalence towards labels and stigma within people's own social network.

Stigma within support and care

The participants' stories showed how stigma is subtly present within the mental health care system itself, having diverse effects on the ways participants experienced and used available services. Participants' accounts related to this topic were very diverse, showing how stigma comes to the fore in multifaceted ways, such as judgmental attitudes, language use, preconceived approaches to treatment planning and even engrained institutional logics. For example, related to stigma, participants had mixed experiences with psychologists, especially in outpatient (private practice) settings. Whilst some participants found a lasting and supportive connection with their psychologist, others spoke about how perceived stigma and stereotypical perspectives of problematic substance use hampered relational continuity and the possibility to openly talk about substance use. The experience of one participant showed how such relational dynamics might even trigger or reinforce feelings of shame:

> *"Ik heb bepaalde psychologen gehad die… Waarbij ik me veroordeeld voelde. Dat was gewoon zo een vibe van… Ik had het gevoel dat zij zoiets hadden van 'ja ja, dat is niet goed'. En als ik dan had gedronken, maakte ik domme fouten, overspel, dingen die ik nuchter nooit zou doen dus dan voelde ik me wel zo wat beoordeeld. Ik heb ook verschillende geprobeerd." (female, age 30-40)*

In another example, one of the participants illustrated how stigma was reflected in the low expectations that staff members had regarding the course of her treatment trajectory and her recovery process:

> *"Ze zeiden, dat is een korte opname, je moet hier weg. Maar er is afgesproken dat ik drie maanden [specifieke dienst] zou doen, om een diagnose vast te stellen en dan zou ik terugkomen naar [psychiatrische afdeling]. En ik heb dat verslag gelezen, nu. 'Ja, ze gaat naar [specifieke dienst], maar de kans zit er dik in dat ze het niet volhoudt en ja, dat het weer van dat gaat zijn.' (…) Al vooroordelen treffen voordat ik ben gegaan. 'Maar ze gaat het vast niet volhouden.' Wat die klojo's niet weten, is dat ik die klik al heb gemaakt in mijn hoofd. Ik heb die klik al gemaakt en toch gaan jullie mij veroordelen." (female, age 40-50)*

This experience shows how, in certain mental health care settings, the narrow and scientifically outdated idea of recovery as a linear process is still dominant. In reality, the recovery processes of service users with substance use problems (and co-occurring mental health problems) often have a fickle and slow course, inherently characterised by ups and downs and relapse. This makes it impossible for service users to meet this linear and abstinence-focused norm, in which substance use problems are often considered the most pressing issue to be addressed first, which unavoidably leads to experiences of feeling judged or underestimated.

In the interviews, participants were also briefly asked about their experiences with frontline mental health and social care (e.g. social counselling, the emergency ward at the hospital) and public services (e.g. the police). In this respect, the experiences of the participants were mixed. A substantial amount of participants reported largely positive experiences with frontline workers. Other participants had experienced stigma in their contacts with the frontline, as the below citation illustrates:

> *"Ik vind dat politie… heel snel ook een stempel plakt op u. Hoe moet ik dat zeggen hé. Dat ze u niet zien als een persoon met een probleem, maar als het probleem. (…) Ze zien u niet als iemand die hulp nodig heeft, maar als iemand als het probleem. Ze willen u liever weg uit de maatschappij, dan dat ze je zouden helpen, vind ik. En ze behandelen u ook naar die manier." (male, age 20-30)*

Also, anticipated stigma prevented certain participants from opening up about their substance use problems to frontline workers and had developed strategies to compartmentalize these support needs, as one of the participants explained how he interacted with the social counselor (OCMW/CPAS):

> *"Die helpen mij met mijn leefloon. En ja, daar kan ik ook altijd mee praten als er iets is. Ook gelijk [mijn vriend] zegt, niet over drugs hé. Dat is juist voor het MSOC. (…) Omdat ik dat gescheiden wil houden. (…) Ik heb daar het gevoel dat ze mij anders gaan bekijken dan. Ja, dat is zo een gevoel. (…) En dan gaan die zich automatisch op een andere manier gaan gedragen ten opzichte van ons dan dat we gewoon zijn. Automatisch." (male, age unknown)*

Ambivalence towards labels

A recurrent theme throughout the interviews was the ambiguous relationship that participants had with the labels they were given or might possibly get by using mental health care or specialised addiction treatment settings. For some participants, it was hard to identify themselves as someone with substance use problems and rather considered themselves as someone with mental health needs. This reluctance to associate themselves with their problematic substance use in favor of a psychiatric diagnosis had a paradoxically lowering effect on the threshold to more generic mental health care services. In some cases, this ambivalence towards recognizing the problematic nature of substance use was rooted in dynamics of self-stigma, as the below citation shows:

> *"Ik heb mij nooit als alcoholieker bestempeld. Je mag mij dat niet zeggen dat ik een alcoholieker ben. Dus ik ga daar niet mee akkoord. Allez ja, ik weet het wel, maar ik wil het niet weten." (female, age 50-60)*

For other participants, it was not so much self-stigma that was at play, but rather own stereotypical ideas about people with substance use problems that seemed too far-removed from their own lived experiences. Therefore, the label of being someone with an addiction simply could not be applicable to them, as one participant testified:

> *"Ik vind het een lastig onderwerp. Ik wil niet 'de verslaafde' zijn. In mijn hoofd zie ik nog altijd een verslaafde die in een kraakpand zit met een spuit in zijn arm, tegen de grond hangend. En dat is helemaal zo niet. Ik ben altijd blijven werken, ik heb nooit gedopt, ik heb twee maanden*

> *in mijn leven gedopt. Altijd blijven werken en altijd blijven gebruiken. Ik heb een dochter, ik gebruikte ook niet in haar bijzijn. Niet voor haar neus."(male, age 30-40)*

In contrast, other participants had opposing experiences with labels, as they identified themselves as someone with an addiction but preferred not to be associated with psychiatric labels. Some of these perspectives were colored by stereotypical ideas and prejudices about the daily practice of mental health care settings, significantly raising the threshold to using services situated within the 'psychiatric' support landscape. Possibly, these accounts bear witness to the fact that people with substance use problems do not have enough access to correct information about mental health care settings.

> *"Alles wat met psychiatrie en… Bekijk ik een beetje als… ja… zotten. Dus ik kan mij niet voorstellen dat ik dat zou doen. En depressies heb ik nog nooit gehad in mijn leven." (male, age 30-40)*

> *"Le problème c'est que [type de service] c'est très psychiatrique. La population est quand même très marquée, c'est compliqué de se retrouver là-dedans." Vous l'avez déjà vécu? "Oui. Se retrouver avec des gens qui étaient schizophrènes, parano, différentes maladies psychiatriques… C'est un peu compliqué de vivre ça aujourd'hui. C'est là que je me dis que quelque chose ne va pas. Je me demande ce que je fais avec des gens qui ont des problèmes psychiatriques, parce qu'au contraire ma maladie n'est pas une maladie psychiatrique." (male, age 50-60)*

The above aspects show how labeling has an ambiguous effect on the accessibility of mental health care services. From a care perspective, labels are helpful to open doors and to be introduced to certain specific forms of professional support that might be able to offer adequate and person-centered support tailored to one's needs. From a service user perspective, however, stigma in all its forms (experienced stigma, perceived stigma, anticipated stigma, self-stigma) is a powerful interfering factor that can have a threshold-raising effect in different ways. In the experiences of the participants, the notion that once you get a label, you can never get rid of it, also shone through.

Stigma within the own social network

Besides the influence of stigma stemming from within the mental health care system and rooted in participants' own ambivalence towards labels, some participants also spoke about the hampering effect of stigmatizing perceptions of substance use problems and/or mental health problems within their own close social network.

> *"Zoals mijn moeder, die denkt dat het hier een zottenkot is, terwijl dat er hier normale mensen zitten zoals jij en ik. (…) Het was vooral moeilijk, werk en gezin dan, om te zeggen 'dat is er aan de hand'. Ik heb dan ook gezegd 'ik zit met psychose', omdat ik dat toch minder erg klinken vind dan 'ik zit met een verslaving'. (…) Mensen hebben een heel slecht idee van wat verslaving is. Of een psychische ziekte is. Ook over depressies wordt er heel veel gezegd. (…) Het is helemaal niet leuk om te horen. Zeker mensen die het niet snappen of daarmee lachen. Ik heb een collega en die lacht ermee: 'sessietjes, groepsknuffeltjes geven'. Lachen dan wel maar mee, maar vanbinnen denk je: moest je eens weten, gezien hebben…" (male, age 30-40)*

Also at the level of the participants' wider social community, stigma can have a strong influence on participants' decisional processes in seeking access to specialised mental health care services. For one of the participants, witnessing how community gossip was set in motion after her dentist sought help for his problematic alcohol use, caused fear and contributed significantly to her decision not to seek support in specialised addition treatment herself:

> *"De dag dat ik zeg 'ik stop ermee', dan kijken ze naar u. Ah ja, maar ze weet van de drank. Dan krijg je wel een vinger van die gasten hé. Ik heb het gezien met de tandarts, hoe ze hem behandelen. Het is een dronkaard. Maar we waren allemaal even grote dronkaards, maar hij krijgt wel die stempel. Het is daarmee dat ik niet naar een verslavingsafdeling wil. (…) Want er zat iemand in [psychiatrische afdeling] met iemand waarmee ik goed overeenkwam, en die heeft de verslavingsafdeling wel gedaan. (…) En toch voelt dat aan bij mij van, amai, jij hebt wel iets gedaan… Je hebt je toch wel een stempel laten zetten." (female, age 50-60)*

D. Discussion

The aim of this part of the study was to discern the lived experiences of persons with substance use problems regarding the accessibility of mental health care. Throughout 53 in-depth interviews with a diverse participant sample, five multifaceted themes came to the fore: (a) fragmentation of care and support, (b) (lack of) "really listening", (c) balancing between treatment-driven and person-centered support, (d) the ambivalent role of peers, and (e) stigma.

Overall, the findings show how persons with substance use problems often still experience their mental health care trajectories as fragmented and challenging to navigate, despite the mental health reform towards a network-based support system. In that sense, the mental health care system is rather experienced as a collection of 'islands in the stream'. Just as islands may vary in size and resources, mental health care services differ in terms of accessibility (e.g. due to waiting lists), extent of expertise regarding substance use problems, vision of recovery, proximity to other 'islands' and infrastructure, amongst other aspects. Participants reported feeling lost within these loose networks, struggling to access the right services at the right time and tailored to their specific substance use-related needs. More precisely, the results pointed towards a number of challenges and tensions regarding the accessibility of adequate mental health care for persons with substance use problems, which we briefly address below.

1. Breaking the vicious cycles of waiting lists

The findings showed that waiting lists jeopardize the accessibility of generic mental health care for persons with substance use problems in more complex ways than just 'standing in line' for appropriate support. The described rippling effects of waiting lists cause a clogged up mental health system in which, on the one hand, persons with substance use problems are not able to access the most appropriate services when they need them, whilst, on the other hand, persons who have endured lengthy waiting periods may occupy spaces that are not aligned with their current needs, driven by a sense of desperation to secure any available spot. Exemplary of this are the generic psychiatric wards of general hospitals, which are increasingly used as a temporary patchwork solution whilst waiting for more appropriate and actively recovery-promoting support options. As a result, persons who are in greatest need of a 'pit stop' at such a ward, struggle to find access. At the same time, the findings also bore witness to the fact that, as a response to the waiting lists, services are positively challenged to maximize the use of their discretionary space in accommodating to persons' needs. To further reflect on this, it proves helpful to apply Delespaul's metaphor of ecosystems(29). The metaphor illustrates how in a well-functioning mental health ecosystem, all involved services and actors have specific characteristics and expertise, and fulfill unique and complementary roles. From that perspective, the strength of mental health networks as a whole depends, amongst other things, on the extent to which services are able to take on their core role. However, as described above, the ripple effects caused by the waiting lists directly affect and change the services' daily practice. In the same vein, waiting lists put considerable pressure on (the possibility of) collaborative – or potentially even symbiotic – interactions between different services within these ecosystems. In short, the results confirm that waiting lists disrupt the homeostasis of ecosystems, resulting in loose networks that are hard to navigate for persons with substance use problems(30). Tackling (the ripple effects of) waiting lists is a wicked problem that requires action from high-level actors, transcending the level of individual services and even the level of mental health networks as a whole.

2. Organizing relational case management

In the participants' accounts, positive experiences of navigating the mental health care landscape were almost always related to the long-standing and continuous support of a key figure (e.g. general practitioner, psychiatrist, social counselor) across different (mental health, specialised addiction and social) services and throughout different stages of recovery, informally taking on the role of case manager. Despite the positive, pivotal and threshold-lowering impact these key actors have on service users' care trajectories, case management is currently not structurally or formally provided in the mental health care networks. Whilst the results clearly indicate a need to facilitate and formalize this role, they also point us to a number of critical questions that need to be addressed. First, it is likely that the positive impact of the relationships service users develop with these key actors is largely related to their highly person-centered (*"they know me"*) character. In other words, providing relational continuity is (one of) the central function(s) these informal case managers fulfil(31). The personal and often spontaneous nature of these relationships point to the question to what extent it is possible to organize or reproduce this relational continuity in a formal way for all service users (e.g. by appointing each service user to a case manager). A second question to address is whether it is desirable to organize case management as a separate profession within the regional networks. In the participants' accounts, these key actors were always very actively involved in the actual care provision of service users and considered the more administrative case management aspects (e.g. organizing referrals) an inherent part of their job. In other accounts where participants did not have these long-standing case management-like relationships, they often also reported a general lack of feeling listened to and a lack of being adequately referred by services, having a directly detrimental effect on their care trajectories. In short, providing relational continuity is pivotal to enhance the accessibility of generic mental health care for persons with substance use problems. A fundamental critical question underlying the above reflections is whether realizing relational continuity should be a collective responsibility to strive for, instead of being allocated to individual case managers who risk being burdened with the uncomfortable and unattainable duty of both bridging between different service providers in a fragmented care landscape and providing relational continuity to service users. Furthermore, whilst case management has proven to strengthen treatment linking and retention for persons with substance use problems(32), research has also shown that implementing case management in itself no guarantee for a better relational continuity(33). The Belgian system might benefit from structurally integrating a Flexible Assertive Community treatment approach(34), in which principles of flexibility and continuity are combined.

3. Tackling stigma and centralizing lived experience

The results showed how barriers to appropriate support, whether located within generic or more specialised services, are also related to (self-)stigmatizing assumptions and attitudes in many ways, both subtle and more explicit. Participants explained how aspects such as stereotypical ideas about psychiatry from their family members, own stigmatizing ideas about other people with substance use problems, judgmental attitudes from service providers, complex relationships with psychiatric labels and ambiguous attitudes towards peers, amongst other things, all affected the extent to which they experienced a sense of belonging or a 'good fit' with the services they used. In essence, stigma towards people with substance use problems and/or mental health problems is a complex societal problem. However, at the level of services and mental health care networks, there are number of actions that can be undertaken to counteract the ways stigma affects and carries over into mental health service provision. A first issue to tackle are the ways in which labels, both psychiatric diagnoses and substance use-related labels, are used within the mental health services and networks. Whilst labels, both explicitly and implicitly, function as 'entrance tickets' to certain services, service users also identify themselves with their own labels in highly ambivalent ways (e.g. denial of one's own problem, preferring being labeled as someone with addiction rather than mental health problems and vice versa, experiencing a label as an awakening). This struggle with label identification and acceptation, described in the literature(35) often remains under the radar of service providers. Even more so, service users' own stereotypical ideas sometimes get reinforced, for example when they are denied access to a generic mental health care service based on their label of having substance use problems. Specific staff training regarding substance use problems could enhance service providers' sensitivity towards the ambiguous ways in which that label affects service users' navigation of the mental health care landscape.

Second, based on both participants' positive experiences and existing scientific evidence, we assert that peer-workers have a key contribution to make to the daily practice of generic and specialised mental health services. Although there already is an increasing awareness for and deployment of peer-workers in the mental health care landscape, the representation of peer-workers with specific lived experience of substance use problems in generic mental health care remains scarce, as in other countries(36). However, our findings as well as other existing studies show that involving peer-workers in service delivery effectively lowers barriers to appropriate support and care. Involving more peer-workers with lived experience of substance use problems might help service users overcome self-stigma, as their hopeful presence makes it easier to associate themselves with a certain service or label(37, 38). At the same time, peer-workers can bring important expertise regarding living with and recovering from substance use problems into mental health teams. An essential prerequisite of this is that they are given a fully equal position within those teams, in which their views can co-exist and weigh as much as the (often still overly medicalised) perspective of powerful actors such as psychiatrists. Third, despite existing efforts and good practices that aim to involve family members in the care trajectories of service users and the general consensus that family is an important recovery resource, there remains a high need for their participation. Besides the fact that this could debunk family members' stereotypical beliefs about psychiatry and psychiatric labels, family involvement also makes it possible to recognize their own lived experiences, to provide tailored support for them, and to value their expertise in the recovery trajectories of their loved one.

4. Fostering recovery-promoting collaborations

From the start of the mental health reform incited by Article 107, recovery was used as underpinning and guiding framework, rooted in the idea that every person has a highly personal and unique meaning of what recovery entails(39). Simultaneously, the concept of recovery also gained a lot of momentum in the field of addiction treatment during the last decade(40). Because of this parallel development, recovery is often put forward as a bridging framework to foster collaborations between generic mental health care and specialised addiction treatment services, especially in favor of persons with co-occurring mental health and substance use problems. However, in contrast to the person-centered nature of the recovery philosophy, the participants' experiences reveal that generic mental health care services are often still characterised by quite rigid and narrow views of addiction recovery, in which (maintained) abstinence is usually put forward as the (only) starting point or form of recovery. Such narrow views also feed into the assumption that substance use problems are the fundamental issue that need to be addressed first before mental health issues can be addressed. Existing research has shown that sequential treatment approaches, in which addiction is treated as the priority, are not effective(41, 42). The above-described dynamics have a significant threshold-raising effect on the accessibility of generic mental health care, in several ways. First of all, several participants had encounters with service providers (both in generic mental health care and at the frontline) who held stigmatizing views regarding their substance use problems or meaning of recovery. Other participants had developed strategies to cover up their substance use problems in an attempt to anticipate exclusion mechanisms. Stigmatizing attitudes regarding substance use (recovery) were at times even institutionalised, as they became tangible in the intake questionnaires and strict sanctions regarding drug use during admission, amongst other things.

It is evidenced that persons in recovery need different types of support at different moments in their recovery process, aligned with their evolving support needs(43). In that respect, since the mental health networks hold a large diversity of services, they hold great potential to provide support tailored to service users' own meanings of mental health and addiction recovery. However, to fully realize this potential, more productive collaboration between generic mental health care and specialised addiction treatment services need to be fostered. First, there is a fundamental need for a shared vision between all partners in these networks on mental health and addiction recovery. Such a vision should foster pixelated and multifaceted meanings of recovery, in which controlled substance use is widely recognised as a valuable pathway to recovery alongside more abstinence-oriented interpretations of recovery. Additionally, specialised SUD services should be better integrated within these mental health networks, enabling more adequate referrals, co-development of support trajectories and a continuous exchange of expertise.

E. Conclusion

If we want to transform mental health care networks from 'islands in the stream' to more cohesive and collaborative ecosystems, the above-described critical points can be considered as crucial areas to start this transformation. An important concluding reflection is that these critical tensions not just point to specific challenges related to the accessibility of mental health care for persons with substance use problems, but are also symptomatic of more fundamental and underlying issues regarding the current functioning of mental health networks that affect all service users, not just persons with substance use problems. In that respect, within well-functioning ecosystems, persons with substance use problems should not be treated as a separate or especially complex category of service users, but as a heterogeneous group with equally diverse needs and visions of recovery as all other service users. We hope that our analysis and recommendations lead to actions that positively impact mental health care delivery for all service users, not least for persons with substance use problems.

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CARE PROFESSIONALS’ EXPERIENCE AND PRACTICE

I. CARE PROFESSIONAL'S EXPERIENCE OF THE BARRIERS ENCOUNTERED BY USERS IN ACCESSING SERVICES

A. Objectives

This section of the research aimed to uncover the experiences of care professionals and experts by experience with respect to the issue of mental health care accessibility and the barriers identified by people with SUD both in generic and specialised SUD services. It also aimed to explore possible ideas or solutions to overcome these barriers. To this end, we organised group discussions following a specific methodology, i.e. the GPS Brainstorm.

B. Method

Initially, the research proposal was suggesting the organisation of two distinct focus groups within each of the five catchment area, the first dedicated to uncovering barriers and accessibility issues, and the second focusing on exploring ideas and solutions. However, conducting two separate focus groups with the same participants proved to be not feasible, and we decided to consolidate the two separate focus groups into a single extended session, using the GPS Brainstorm method. The *GPS Brainstormkit* is a structural method that was developed by Flanders DC, the Flemish organization for entrepreneurial creativity (http://www.flandersdc.be/gps). We used this method to delve deeper into the findings from the previous work packages and to facilitate a brainstorming session in order to explore potential strategies for addressing the challenges and barriers identified. The insights generated from this integrated focus group were subsequently leveraged to facilitate two cross-regional focus group sessions, one in French and one in Dutch, incorporating participants operating at management and/or policy levels. These two regional focus groups were used in the co-construction of the recommendations of the study.

1. Participants

In order to create a well-rounded sample from each of the five catchment areas, we aimed to involve six care professionals and six experts by experience. The latter were recruited within the mental health care (MHC) services that participated in the survey on services (see section on "Networks and the care system"). We received valuable assistance from the mental health care network coordinators in recruiting these key care professionals. Subsequently, these key care professionals drew up a list of experts by experience who met our specific criteria, i.e. (1) being at least 18 years old, (2) self-reporting a substance use disorder (SUD) involving any substance, (3) having undergone multiple treatment experiences within the past five years, or (4) being a relative of someone in recovery. Table 7 indicates the name of the services that sent a participant in the discussion groups with professionals. In total, 40 professional care workers and experts by experience participated in one of the five focus groups.

Table 7: Focus group participants per catchment area and MHC or SUD service

Antwerpen	Aalst-Dendermonde-Sint-Niklaas	Zuid-West Vlaanderen	Namur	Brussels
Generic mental health services				
ZNA (Mobiel Psychiatrisch Team)	CAW	De Bolster (Beschut wonen)	CHU Godinne (psychosomatic medicine unit)	En Route asbl x2
ZNA (Psychose zorg)	Cliëntenbureau PAKT		Relais Santé Namur	Mobile crisis team (Bxl Est)
Multiversum Dagziekenhuis	Herstelacademie		Housing First	
SARA netwerk	CGG Mandel en Leie		IHP L'Espoir	
	Similes		Expert by experience, unknown service	
	Sint Hiëronymus (verslavingszorg)			
Specialised addiction services				
Bethanië (verslavingszorg) x2	St Lucia (verslavingszorg)	PZ Heilige Familie (afd. Verslavingszorg)	CNP Saint-Martin (unit Revivo) x2	MASS x2
Free Clinic (MSOC)	PC Ariadne (verslavingzorg)	Kompas x2	Beauvallon (specialised unit) x2	Transit (outreach)
Multiversum (dubbele dignose)		PC Menen (afd. Verslavingszorg)		Transit (crisis centre)
Multiversum (verslavingzorg)				Le Pélican x2
PAAZ AZ Klina				Gate (DCR)
Total number of participants				
10	8	5	7	10

2. GPS brainstorming method

Structured GPS brainstorming was used to generate ideas and solutions aimed at improving the accessibility and availability of MHC services for individuals with SUD. Building on the findings from the survey on user's needs and use of services (See section "Users' needs and access to care services"), the research team selected five major challenges to discuss:

1. How to prevent the negative effects of waiting lists?
2. How to use intake criteria in order to reach alignment with the user's personal needs and support rather than raising the threshold of access?
3. How to respect the preferences of users even if they differ from what the care professionals believe being "the most appropriate course"?
4. How to avoid remaining on an island as care professionals? How to create or strengthen the support network with and around a user?
5. How to provide more trauma-sensitive care?

At the outset of the brainstorming session, the researcher explained the rationale behind each challenge.

Waiting lists

Rationale: Waiting lists have commonly been reported by users as a major barrier to care access. Waiting lists jeopardize the accessibility of generic mental health care for persons with substance use problems in more complex ways than just 'standing in line' for appropriate support. In fact, waiting lists create a bottleneck in the mental health system. On one hand, people with substance use issues cannot access the services they require in a timely manner. On the other hand, those who have endured extended waiting times may occupy treatment slots elsewhere that are less appropriate to their current needs, as they feel compelled by desperation to secure any available opening. Some waiting lists might, however, be evitable. And when waiting lists are inevitable, one should think about how to provide continuity of contact while waiting for admission or how to prevent further deterioration.

Intake criteria

Rationale: There are very diverse views of recovery among both clients and support services. The goal should be to get individuals with mental health/addiction issues "to the right place" according to the person's situation, resources, and preferences as quickly and efficiently as possible. However, intake interviews are generally provided as a one-way communication, to assess the extent to which the person in need of care or support fits within the setting of a service.

Respecting client's choices

Rationale: Professionals may sometimes have a representation in mind of what *"a good patient"* is, i.e. the ideal care user's profile in the view of the professional(1). Obviously, reel clients do not always conform to such representation, and usually have other preferences than what professionals expect. This is usually not strongly expressed to the client but a subtle form of condemnation sometimes lurks in nuances of reporting, among other things. This is also linked to the sometimes lack of belief in the success of a sometimes erratic recovery process. In such a recovery-oriented approach, however, care should be based on the person's preferences, and clients should get the opportunity to experience their expectations. In addition, hope should be supported(2).

Building networks around the client

Rationale: This is about exploring what social and care professionals themselves can incorporate to establish or strengthen working network around a client consisting out of professionals and non-professionals. We found that many clients felt socially isolated. But it is also about how one can give the client and his/her informal network a real active-determining role without getting bogged down in a "do-it-yourself" situation.

Trauma-sensitive care

Rationale: In nearly every interview, trauma has been identified as one of the root causes of addiction or mental health issues, but it is noted that addressing trauma is not consistently integrated into treatment. Moreover, not everyone necessarily wishes to delve into trauma as part of the treatment process.

Researchers subsequently invited participants to suggest additional barriers if they felt any were missing. Then, participants were paired, each pair consisting of one care professional and one expert by experience, preferably from distinct services.

In the first step, each group was given time to generate concrete ideas or solutions for each of the challenges. These ideas were subsequently grouped and classified based on their similarities.

The second step involved prioritizing solutions and ideas. Each group received eight stickers (four red and four yellow) to vote for the ideas they would like to see implemented. Red stickers were for creative ideas that were deemed feasible in the short term, and yellow stickers for those considered feasible in the longer term. Groups were required to use all stickers but could place a maximum of two on a single idea.

In the third step, researchers displayed all ideas and solutions with three or more votes (red and/or yellow stickers) on a blackboard or flip chart. Selected ideas were subsequently presented. Participants were given the option to use a "joker" if they believed a non-selected idea should be kept. Researchers and participants then assessed whether some ideas could be merged into ideas that were more comprehensive. Subsequently, all ideas were numbered, and participants were asked to select their top three ideas. The researcher marked these choices, visually presenting the top ideas through the marked selections.

Finally, each group of participants was asked to create a project card with one of the ideas selected. This card included a description of the idea, its pros and cons, proposed solutions, expected impact, and the key parties involved. Subsequently, each group presented their detailed project to the entire group.

All qualitative information provided by the participants, including data from post-it notes, flip-over charts, and verbal input, was recorded, photographed or transcribed and utilised to address the research questions, as summarised in the results section.

C. Results

Table 8 presents a ranking of ideas provided and prioritised by the participants in each catchment area. To enhance the visual interpretation of the data, we used a code of colours to indicate commonalities and differences between catchment areas. The use of colours serves as a visual aid to quickly identify patterns and trends within the data. Commonalities are represented by the same colour across different catchment areas, while differences are denoted by variations in colour. This can be particularly helpful for identifying key insights and areas in further analysis.

Table 8: Ranking of the most voted ideas for solutions to overcome care barriers in the five catchment areas, results from the GPS brainstorming method (n = 40)[a]

	Bruxelles	Namur	Antwerp	ADS	ZWV
1.	4/Mapping users' social network	4/Networking concertation meeting	1/As a care professional, being well informed about the complete range of services and initiatives in order to make appropriate referrals	3/2/ Choosing a holistic and client-centred approach rather than a medically-oriented focus	3/2/ Respecting the goals and choices of the client by communicating more and reflecting more on the care programme
2.	3/Being in line with users' time frames	1/2/ Setting up services to analyse demand and provide better referrals	2/Making accurate referrals while meeting the expectations of both parties	1/Being proactive by maintaining contact and cooperation with street outreach workers, mobile teams, and home care services	1/ Setting up a "central access point" or "central gateway"
3.	3/Replacing users in the centre and meeting their objectives	4/ ***Peer-workers*** in teams and discussion groups	4/Guaranteeing continuity of care by appointing a key figure e.g. case manager	2/ Triage at the network level, with the coordinator serving a dispatch function	(2)6/ Providing more attention to people's grieving process and loneliness while fostering connections, working on social recovery
4.	2/Lowering the access threshold	2/ Training and sensibilization of professionals to dual disorders	3/Adjust the treatment process to the pace, expectations, and insights of the client	4/ Involving family during intake, treatment and aftercare	4/ Working with other care facilities and informing the client about available care
5.	1/Removing waiting lists	4/ Involvement of "policymakers" in network meetings (psychiatrists, directors, politicians)	1/ Striving for a good collaboration with outreach and primary care providers	3/6/ Using motivational interview techniques	4/ Working on all life domains.
6.	4/2/Sharing users' files	5/ Formation of care professionals to trauma-sensitive care	1/Keeping contact with the client to ensure continuity, e.g. outreach, with the help of an ***expert by experience***, connecting client to a buddy involving the mobile team	5/ Having a trauma expert in the service or the network	1/During waiting times, keeping contact with client when no other care is available
7.	1/ Hospitalization First	5/ Bypassing trauma through symptoms	2/Referral trough a central multidisciplinary intake team/ or cross-point.	1/Inform the client about existing agencies in the network during the intake.	5/ Focus on the therapeutic relationship

8.	4/Improving professionals' knowledge of existing care supply	2/ A preparatory meeting to provide information to users (to ensure an informed decision)	5/Being aware of existing traumas and handling them appropriately	4/Starting from the client's needs	
9.	2/Combining institutional and outreach intake, "getting out of our office"	1/ Users' roadmap	4/ Involving the GP and organising evenings with the family	1/ start with an ambulant pre-care group	
10.	4/ Supervision/intervision	3/Being in line with users' time frames	4/**Aftercare:** Keeping in contact by organising self-help groups or come back days	6/ **Aftercare** is important and necessary. Organising aftercare in own unit	
11.	4/ Networking consultation with users	5/ Involving ***peer-workers*** in trauma care	3/ Improving users' knowledge about available care supply	2/Having a comprehensive range of services within the mental health care network	
12.	3/ Improving primary care access for vulnerable people		3/ reframe from talking about care trajectories as 'succeeded' or 'failed'. It's about recovery trajectory, not the goal	4/Within a therapeutic program, addressing goals in various life domains	
13.	2/ Improving users' knowledge about available care supply		1/ Extending the duration of residential treatment to facilitate a seamless transition to another care facility		
14.	1/ Rethinking admission procedures		3/ Residential care have other agreements due to the group cohabitation		

[a] Legend: Cells with the same colour denote ideas that are intrinsically related to each other

🟩	Person-centred care, focusing care on the needs of individual. Ensuring that people's preferences, needs, and values guide clinical decisions; providing care that is respectful of and responsive to individuals
🟧	Ensuring continuity of care
🟨	Streamlining access enabled through the implementation of central entry points
⬜	Social recovery and connectedness, e.g. rebuild social connections, support networks, and relationships that may have been strained or affected by addiction or mental health issues. The emphasis on involving family, utilizing peer workers, outreach strategies, mapping social networks, and addressing loneliness all highlight the importance of social connections in the recovery process
🟦	Collaborating or working within a network involving different types of stakeholders (users, policymakers, …)
🟦	Involvement of outreach or primary care to support individuals before, during, and after a treatment episode

🟪	Information and (psycho-)education for service users
🟨	Related to trauma-sensitive care
The text is underlined when it mentioned the idea of encompassing all life domains **The text in bold** refers to aftercare ***The text in italic bold*** refers to peer-workers	

3. Common key priorities

We identified three overarching issues that appear to be important across all five catchment areas: “Person-Centred Care”, “Streamlining access to services”, and “Enhancing client information and education”.

“Person-centred care”

Each idea presented by the participants highlighted the importance of prioritizing the client's needs, goals, autonomy, and preferences in the decision-making and treatment process. The ideas also echoed the core concept of person-centred care, emphasizing the importance of empowering clients and of understanding and incorporating the client's goals and wishes into the care plan.

This point was designated as a priority in three of the five catchment areas —Brussels, ADS, and ZWV— Specifically, in the priority lists of ADS and ZWV, person-centred care underlie the ideas mentioned in numerous ways. Conversely, this point received less attention in Namur.

“Streamlining access”

The ideas prompted by the participants in the five catchment areas focus on optimizing the process of accessing services, whether through a central access point, a triage at the level of the network, multidisciplinary teams for intake and admission, and specific services for analysing care demands and referrals. The overarching theme in these ideas was to elaborate efficient and effective pathways to care for individuals in order to facilitate access and support to the most appropriate services.

This theme was a top-three priority in Namur, Antwerp, ADS, and ZWV. It was less a priority in Brussels.

“Informing and educating clients”

Each idea emphasizes the importance of providing clients with comprehensive and clear information about the available care supply or services. This approach aims to empower clients by making them more informed about the possible care options and enabling them to make well-informed decisions about their care and support. Except in ZWV, this idea was not top ranked. However, in two areas (Namur and ADS) the idea was further elaborated with, e.g. preparatory meetings and intakes in order to ensure that service users are aware of the resources and options available to them.

4. Diverging priorities

Despite commonalities, there were also diverging priorities indicating that each region has also a distinct picture of issues and possible solutions. In the French-speaking region, i.e. in Namur and in Brussels, there was a strong emphasis put on aligning care with the users' temporality, recognizing the evolving pattern of the process of recovery. This element was more explicitly stressed compared to Flanders. Additionally, in both French-speaking areas, the significance of collaboration within the network was put forward. Participants in Namur emphasised the importance of collaborating with "policymakers" about networks, while in Brussels, participants mentioned the need of networking consultations with users. These concepts indicated a commitment to involving various stakeholders in the care process.

In the Flemish-speaking catchment areas, however, participants placed a significantly greater emphasis on ensuring continuity of care before intake, during the waiting list period, as well as during aftercare. A distinctive feature in the Flemish areas ADS and ZWV was the emphasis put on addressing all aspects of clients' life domains and not only focusing on substance use.

Participants in Brussels, Antwerp, and ADS also shared the idea of a proactive partnership between generic mental health and specialised substance use disorder services, and possibly additional care resources (e.g. self-help groups, families, clients' personal networks, buddies) and primary care professionals (e.g. GPs, outreach workers, street workers, mobile teams, and home care services).

Finally, participants in Brussels and Antwerp stressed the importance that all care professionals should be well informed about the complete range of existing services and initiatives in order to make appropriate referrals.

5. Local Specificities

Some priorities emerged only in one area. In Brussels, participants specifically emphasised the need to get a better knowledge of the resources of the people in need of care, particularly their social network, and mentioned the idea of mapping the users' social network as their first priority. In addition, participants in Brussels also considered the need of a better collaboration between in- and outpatient care providers.

In Namur, a strong emphasis was put on the significance of peer-workers in supporting clients, in particular when it came to trauma-sensitive care. It was also the only area that mentioned the idea of training and sensitizing professionals to dual disorders.

Antwerp's participants placed a greater focus on continuity of care with primary care workers than the participants in other areas.

In ADS, the family and an expanded role for family involvement before, during, and after treatment was emphasised. Lastly, in ZWV, participants gave importance to addressing the grieving process and loneliness experienced by clients with substance use disorders.

6. Solutions suggested

In this subsection, we will elaborate some more on the practical solutions and actions suggested regarding the common key priorities that emerged in the focus groups.

Person-centred care

Participants in the focus groups put forward that a person-centred care approach should contribute to improved availability and accessibility of MHC for individuals with SUD. In particular, a person-centred approach would help combat stigma, smoothen intake and referral processes, and lay the foundation for a comprehensive continuity of care that covers the whole recovery journey. In the view of most participants across groups, such a change of perspective requires modifying the dialogue between clients and professionals. In general, participants claimed that it requires appropriate training for most of the professional disciplines. Although ad hoc training programmes can sometimes be found, such an approach should be integrated in the basic education of medicine, psychology, social work, and the many other disciplines that are bound to work with clients in need of care and support. In addition, several participants argued that person-centred care could constitute a common ground across professions and, hence, could facilitate further collaboration thanks to the sharing of objectives and principles.

However, some other actions might be required at other organisational levels. For instance, participants in the ADS group mentioned the need to:

- Amend the regulatory framework of some services so that a DSM diagnosis is no longer mandatory in order to access treatment.
- Conduct more research and establish working groups for the implementation of a holistic approach in practice.
- Offer network-wide training and oversight sessions, including peer supervision, related to recovery and the person-centred care approach, engaging all pertinent partners in the network.

Participants in Antwerp also mentioned the need to involve the client in establishing a support plan.

Streamlining access and ensuring continuity of care

The second idea favoured by all focus groups addressing the accessibility of MHC services for clients with SUD was the *"streamlining of clients intake process and treatment referral*". In most focus groups, this streamlining was thought to be enabled through the implementation of "a central entry point". To designate this type of intervention, participants employed various terms like "central gateway", "triage", "dispatch", "central multidisciplinary intake team", and "frontline intersection", among others. There was a consensus among participants that such approach would serve as a potential solution to address waiting lists and to align referrals with the client's preferred and recovery path and timeline. Experiences in that logic do actually exist in Belgium. Participants in Namur mentioned *"La Canopée"*, a service organised by one of the psychiatric hospitals, which provides reception and orientation for any type of mental health problem in the area. Participants in Antwerp also emphasised the role that specific primary care services can take on to organise the intake and referral process. They draw their inspiration from established "frontline intersections", referred to as *kruispunten*. Such services, issued from the collaboration between organizations in different sectors, offer easy access to mental health support in a specific area. A team of frontline care professionals work alongside clients to identify the necessary steps for them to regain control of their lives, and possibly to orient them towards appropriate support. These *kruispunten* exist in Antwerp and in Mechelen, and were mentioned as examples of good practice by the participants in Brussels.

In addition to a form of central entry point, another idea further developed by the participants in the ADS focus group was the assignment of *"a mental health care network coordinator as care dispatcher",* i.e. a form of case management. Participants described several advantages to this intervention. They also suggested a practical action plan to implement this initiative, which considers:

- A centralised intake, referral, and follow-up.
- A dialogue with authorities in order to secure a long-term vision and financial sustainability for the project.
- A comprehensive job description, which could be standardised across all networks in Flanders.
- The need of a flowchart outlining the roles and responsibilities of all involved parties.
- The need of continuous communication with ambulant psychologists, psychiatrists, and therapists.
- Regular inter-vision sessions between the care coordinator and various stakeholders.

However, as indicated earlier in this study, there are different understandings of the role and the way of organising case management. The literature and experiments conducted elsewhere raised specific organisational issues that were not mentioned by the participants. For instance, questions are raised regarding the relationship that a case manager has with the individual in need of care and support: does the case manager works with care needs (for example within a care plan elaborated by professionals) or is the case manager supporting the user's preferences within a personal-recovery approach? Is the case manager one of the (usual) care professionals of the individual involved or an additional resource coordinating the other care professionals in times of crisis? What would be the intensity of the support, e.g. during crisis episodes? The discussion in the ADS group, as well as in other areas, indicates, however, that a common practice of reception and orientation within the network is requested, but insufficiently implemented.

Some participants also emphasised the crucial role that general practitioners (GPs) could take on, for example as case managers. Nevertheless, experience reveals that GPs often lack vital information about the available services. In addition, they generally have little time available to take on the case management role.

Participants in ADS also underscored the crucial role of the VAD (www.vad.be) in order to ensure the timely and precise referral of clients with SUD by primary care services. According to their suggestions, the VAD should take the lead in training, educating, and familiarizing primary care workers about individuals with SUD and other mental health problems, as well as with the broader (mental) healthcare system. They also suggested that VAD should be responsible for bringing together the different mental healthcare networks. Another option suggested in ADS was the involvement of peer-workers in primary care in order to orient clients towards the appropriate service and treatment.

All these suggestions indicate a lack of information and training felt from some participants about mental illness and substance-related issues and the existing care resources available. This interpretation is confirmed by participants in Antwerp who were convinced that swift intakes and timely referrals would be possible if care professionals were better educated about available initiatives and overall treatment supply available in the area. This entails that care professionals should look for different ways to get and share information, i.e. visiting other services, inviting professionals from other services, access online information, etc.).

Informing and educating clients

Although this third concept was discussed across all five catchment areas, participants did not elaborate about how to achieve this idea in practice. Across groups, it was unclear whether the topic only encompassed knowledge about existing resources available or went beyond to some form of psychoeducation. From the literature, we can emphasize the interest of Recovery Colleges(3-5). The Recovery College model proposes a psychoeducational approach where people, either people in need for care or relatives and professionals, can access training and information on mental health and recovery(4). Courses are usually co-designed and co-facilitated by professionals and experts by experience, and allow participants strengthening their knowledge and skills on mental health, recovery process, self-management of issues, and existing resources. Recovery colleges are deemed to improve the recovery strength of people with mental issues, to strengthen social inclusion, and to reduce stigma(6). It also reduces service use.

II. RECOVERY-SUPPORTIVE INTERVENTIONS FOR PEOPLE WITH SUBSTANCE USE DISORDERS

Considering the experience of care professionals and experts by experience reported in the previous section, we wanted to explore how similar issues were addressed elsewhere, as they are reported in the literature. Therefore, we carried out a scoping review of the literature about interventions for people with substance use disorders that were deemed effective, in particular those interventions embedded in a personal recovery approach that were likely to address the issues discussed earlier, e.g. the focus on users' choices and preferences in the specific context of people who use substances, the management of organisational features such as waiting lists and fragmentation across care providers, stigma, trust, and trauma, among others. The results of the literature review are presented hereunder.

A. Background and objective

A central concern of professionals who work within the substance use treatment arena has been the development of effective strategies and interventions to promote recovery. Research indicates that, as compared to other services, recovery-supportive interventions and strategies (from hereon recovery-supportive interventions) explicitly value the inclusion of experts by experience, prioritize independence, self-determination, empowerment, and regard for service users to yield improved outcomes (e.g. substance use, supportive relationships, social functioning, and well-being)(7-9). The change toward recovery-supportive interventions necessitates the preparation of the mental health and addiction's workforce with recovery-based clinical skills and tools, mechanisms, and structures(10, 11). However, while the knowledge base on recovery-supportive interventions continues to expand, there exists a gap between recommendations and practice(12).

As recovery-supportive interventions operate within complex systems, determining the scope of the related literature is a much-needed step toward encouraging greater adoption and offering practice recommendations to address barriers to recovery. While researchers have recently sought to synthesize research on recovery-supportive interventions for individuals with substance use disorder(13), the scope was limited in terms of disciplinary focus (nursing), time range (2010 – 2019), and review methodology (narrative review).

Consequently, we sought to synthesize the available literature on recovery-supportive interventions for adults who use substances using a scoping review methodology. Scoping reviews offer an overview of a particular area, examining the extent, nature, and range of research activity and summarising and disseminating research(14). Exploring extant literature has important implications for re-envisioning existing systems of care and promoting the transformation toward recovery-focused practice.

B. Methods

We applied Arksey and O'Malley's methodological framework to guide this scoping review(14). When reporting on the review the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist was followed(15).

The research question guiding this review was: what is the scope of the available literature on recovery-supportive interventions for people with substance use disorders?

The databases were selected in consultation with the literature. We conducted a preliminary search to identify search terms and subsequently searched Scopus, Web of Science, and PubMed for English-language articles published between January 2000 and July 2023. We repeated our search in October 2023. No restrictions were placed on the study design. The two sets of search terms used were "recovery-oriented intervention", "recovery-oriented approach", "recovery-oriented practice", "recovery-oriented care", "recovery-oriented service", "recovery-oriented model", "recovery-supportive" and "substance use", "substance misuse", "substance abuse", "substance dependence", "substance use disorder". The included studies were reference mined to identify additional pertinent studies. We focused on publications that reported on recovery-supportive interventions for persons who use substances and persons with co-occurring mental health and substance use disorders. Only adult samples (aged 18 and older) were eligible. We included only scientific research articles; books, chapters, editorials, conference presentations, commentaries, literature reviews, and grey literature were excluded. The study selection process entailed screening titles and abstracts and reviewing full texts. The initial search yielded 147 potential publications across all databases (PubMed = 45; Scopus = 49, and Web of Science = 53). Following title and abstract screening for relevance, 48 studies remained from which 13 duplicates were removed (n = 35). A further 11 articles were identified through reference mining (n = 46). In all, 122 articles were excluded and 25 publications were retained for review, published between 2005 and 2022. The data extraction categories were: country, study aim, focus (substance use or co-occurring disorders), method, and key findings. Data were synthesised using textual narrative synthesis(16).

C. Results

1. Sample

The majority of studies were from the United States(17-25) and two were cross-national covering the USA and UK(26) and the USA, England, Scotland, the Republic of Ireland, Denmark, and New Zealand(27). Five studies emanated from Norway(11, 12, 28-30), two from Belgium(31, 32) and a third based on data from Belgium and the Netherlands(33). Two studies originated in Australia(34, 35), while single studies emerged from France(36), Canada(37), Denmark(38) and Sweden(39). A third of the studies (n=8) addressed substance use recovery while two-thirds (n=17) addressed co-occurring disorders.

2. Methodological features of the studies

Most studies were qualitative in design (n = 17; 68%), 5 were quantitative (20%), 2 were theoretical (8%) and 1 (4%) was a policy analysis (another qualitative study had a policy analysis component). The qualitative studies were predominantly underpinned by individual interviews as a data source(22, 23, 25, 29-31, 35, 39); three studies employed focus group discussions(11, 12, 33, 38). One study utilised both interviews and focus groups(33).

The key themes to emerge from this scoping review pertained to recovery-oriented policy; the treatment system and service dynamics (e.g. trust, collaboration); and recovery capital (housing, employment, recovery-supportive networks).

3. Recovery-oriented policies

Three studies(26, 33, 34) foregrounded the importance of recovery-oriented policies as fundamental in delivering recovery-supportive interventions. In an analysis of addiction sector policy in Flanders (Belgium) and the Netherlands, Bellaert and colleagues(33) found that beneath the rhetoric of recovery, there were deficits in structural implementation, funding allocations, and methodical evaluation of recovery-oriented policies. Thus, they advocate for the inclusion of experts by experience and the alignment of funding and policies. In a study contrasting the USA and UK's recovery-oriented policy and care systems(26), it was revealed that the USA dedicates significant funding in support of pro-recovery treatment system transformation and towards recovery community organizations whereas, in the UK, much of the recovery-supportive interventions were yet to be evaluated. The available robust research indicated that recovery-supportive interventions cost-effectively improve substance use and health outcomes(26). Authors referred here to recovery housing interventions, e.g. Oxford Houses, a type of peer-run communal housing(40), and supported housing(41); programs that facilitate 12-step mutual aid engagement, and the expansion of peer support within formal treatment programs. In another study, Isaacs and Firdous(34) advocated that, in the design of recovery-oriented services, a care coordination model could facilitate interagency collaboration. Their model, emanating from Australia's Partners in Recovery initiative employed a care coordinator to serve as the point of contact between service users and service providers, resulting in a stronger therapeutic alliance and a more holistic approach.

4. Principles of recovery-oriented services

Five studies addressed aspects of the treatment system, treatment service, and/or service provider factors in the provision of recovery-supportive interventions. An analysis of recovery-oriented practice guidance from six countries identified four practice domains, namely the need to advance citizenship and reintegration into society to live as equal citizens, commitment from organizations to a conducive work environment and service structure, supporting individuals' recovery goals, and a working relationship that demonstrates genuine support and partnership(27). A case study illustrates how a recovery orientation can develop personal responsibility within the service user for the benefit of recovery(35). One service user was interviewed during three separate admissions to a residential mental health unit. Impactful attributes of the service that were instrumental in fostering their recovery were tailored clinical support, assistance with meeting practical needs, participation in therapeutic groups, social interaction with fellow service users and staff, and support in developing self-management capacities.

Challenges encountered when implementing oriented-recovery practices

In a Norwegian study with service providers from a mental health and substance use unit, Kvia and colleagues(11) concluded that although they understood the tenets of recovery, there was uncertainty about the practical steps to be taken toward transformation to a recovery-supportive model. Although participants reflected on their actions and attitudes, reflection did not extend beyond existing practice to ways in which positive changes could be made. Another prominent theme was the failure to involve service users in organizing their care. Relatedly, service providers recognised the tension between acting paternalistically and the need to support service user autonomy and empowerment. As a result, structures, tools, and mechanisms are needed for practical guidance. In a qualitative study of Norwegian service providers(12), the challenges inherent in delivering recovery-oriented care to people with co-occurring disorders were explored. Dilemmas included 'balancing mastery and helplessness' (the tension between helping and infringing on service users' responsibility; guarding against disempowering service users while ensuring they do not hinder change efforts), 'balancing directiveness and a non-judgmental attitude' (basing treatment goals on what is important for help-seekers without judging how people live their lives, or being indifferent to their decisions; adopting a non-judgmental attitude), and 'balancing total abstinence and the acceptance of substance use' (adopting a professional, non-moralistic attitude, remaining supportive and hopeful amidst relapse). Attending to these dilemmas will necessitate innovative approaches to practice development. Lastly, Salyers and Tsemberis(17) offer four recommendations to establish recovery-oriented assertive community treatment (ACT) practices: integrating other evidence-based practices; monitoring recovery orientation; providing recovery-oriented work training and supervision, and hiring service users to join as staff.

Relationships with service providers characterised by trust

Another aspect of a recovery orientation was the need for a trusting relationship between service providers and service users. Martin and colleagues(25) conducted interviews with nine providers from an outpatient addiction clinic and 12 women receiving treatment for an opioid use disorder to identify influential factors in the pregnancy to postpartum transition that promote or hinder recovery. Stigma and mistrust by child welfare and healthcare providers challenged recovery and provided insight into how recovery-oriented care can be promoted for families affected by opioid use disorder. Jørgensen, Hansen, and Karlsson's(38) study with healthcare professionals rendering care to service users experiencing co-occurring disorders emphasised the need to balance forming trusting relationships, hopefulness about service users' futures, time spent with service users, and respecting their life experiences and knowledge with their role of stabilizing health and realizing self-care. Another study on recovery from co-occurring substance use and mental health disorders explored eight peer support workers (with lived experience) behaviors and attributes(30). Trust was a cross-cutting factor in the identified themes. Trust was established and maintained when helping people with co-occurring disorders through hopefulness and loving concern (professionals expressing faith in a better future life which helped participants reclaim hope for change), commitment (ongoing, long-term relationships with professionals leading to mutual trust and honesty), direct honesty and expectation (professionals' frankness, expressed concern, and advice for change enabled participants to understand the severity of their situation and need for change), and action and courage (participants appreciated professionals urging them to be more active and initially accompanying them to activities, enabling them to learn new skills, gain confidence, and avoid loneliness).

Service user-service provider collaboration

Four studies highlighted the collaborative relationship between service users and service providers as underpinning recovery-oriented practices. One statewide survey of 78 mental health and addiction programs administered the novel Recovery Self Assessment measure to multiple participant groups, including agency directors, service providers, people in recovery, their families, and significant others to assess the degree to which respondents perceived recovery-oriented practices were being implemented. Although the highest-rated items related to services support of service users' aspirations and interests beyond symptom alleviation, services were rated lowest on items concerning service user engagement in the design, management, and delivery of services(18). Another study focused on the challenge of developing more recovery-oriented practices(28) compared supported housing provision within an ongoing collaborative recovery-oriented practice development initiative (n = 7) to a reference group following practice as usual (n = 21). Findings reveal that residents at the project site exposed to the recovery-oriented practice development reported a significant increase in the recovery domain of willingness to ask for help. The authors contend that such a collaborative approach can support the recovery and protect residents' citizenship in supported housing. According to Khoury(37), service provider-service user interactions grounded in positive and egalitarian relations facilitate the co-construction of innovative practice approaches and signal the potential for recovery-supportive interventions. In Felton and colleagues' US study(19), ACT team members expressed that challenging recovery-oriented tasks were the following: aligning system-centered and service-user goals, developing collaborative relationships with service users, and applying a recovery orientation during service user crisis or denial of their illness. A sample of people with co-occurring mental health and substance use disorders typified recovery-promoting care as offering empowerment and in so doing, increasing their motivation and capacity to actively engage in their recovery journey(39).

5. Recovery Capital

Recovery capital refers to the personal, social, and community resources that are the basis for personal recovery and the “resources and capacities that enable growth and human flourishing”(42). Sub-themes that emerged from the analysis included recovery-supportive networks and employment and housing.

Recovery-supportive networks

Five diverse studies discussed the value of recovery-supportive networks for recovery. In a study of Narcotics Anonymous members, Connectedness (in the context of the CHIME-D personal recovery framework, Connectedness, Hope, Identity, Meaning in life, Empowerment, and Difficulties) emerged as the leading recovery-supportive element of the fellowship. Connectedness was underpinned by the fellowship members’ non-judgmental approach and mutual understanding. Connectedness was central to establishing a social network(31). It has been argued that peer-based addiction recovery support (e.g. Alcoholics or Narcotics Anonymous) can be beneficial for people with mental health disorders particularly when accepting of psychiatric medications(24).

Francis et al.(22) delved into the experiences of 88 women in the year after their intake into treatment, to reveal that, “disconnecting or limiting contact with recovery-endangering people and adding recovery-supportive people to their networks” was necessary to maintain recovery (p. 122). As women are said to find it especially challenging to develop recovery-supportive networks, these findings are beneficial for service providers who seek community integration for these service users. In the only study to explore the recovery experiences of migrants and ethnic minorities(32), the development of recovery-oriented systems of care was said to be contingent on the provision of culturally competent services, efforts to ameliorate structural barriers and, notwithstanding the many universal elements of recovery capital, the recognition that access to recovery resources are intertwined with migration status. Environments that optimize opportunities to build culturally sensitive community recovery capital, and meaningful social networks (social recovery capital) were considered essential for promoting an enduring recovery. Likewise, Bergman and co-authors(20) highlight community recovery capital in their assertion that active participation in 12-step mutual aid groups and involvement with recovery-supportive, professional services that forge linkages with such community-based resources potentially enhance the gains of residential treatment.

Employment and Housing

The practical need for employment and housing was identified as a key priority for recovery-oriented systems and services. Insights from 356 people at various stages of recovery demonstrate that, while housing, education, and family/social relations remain challenging long after attaining abstinence, employment remains the leading priority regardless of the recovery stage(23). Similarly, in a study on the recovery orientation of services in a district of Norway, financial difficulties (with limited potential solutions) and precarious and inadequate housing were identified as threats to recovery among people with co-occurring substance use and mental health disorders. The articulated dimensions of recovery were less tangible: cultivating self-love, feeling accepted by and useful to fellow citizens, gaining mastery over one’s life, and the emergence of the self. The findings suggest that services should be designed so as to allow for integrated health care, social services, and inter-service collaboration(29).

Tsai and Rosenheck's(21) study investigated the outcomes of a 'group intensive peer-support model of case management for supported housing', finding that as compared to the reference sites group intensive peer-support implementation was linked to a larger increase in rating on social integration, more case management services, and faster procurement of housing vouchers once admitted to the program.

The one randomised control trial included in this review focused on homeless individuals with mental health disorders(36). Follow-up of the sample revealed improvements in personal recovery outcomes, higher housing stability, independence, and lower use of hospital services compared to the treatment-as-usual group, but, enduring issues with alcohol(36). Findings speak to the long-term benefits of this intervention for this population.

D. Discussion

1. Summary of findings

This scoping review has identified and analysed 25 studies on recovery-supportive interventions published between 2005 - 2022. The most prominent research avenues appear to concern recovery-oriented policy; treatment services (including provider-related trust and collaboration), and recovery capital (particularly recovery-supportive networks, employment, and housing). Most studies were from the United States, and we found a peak in publication frequency in 2018–2022 (n = 13) relative to other years. Seventeen studies addressed co-occurring disorders, and eight addressed substance use recovery.

The emphasis on recovery-oriented policies, their structural implementation, the need for systematic evaluation, intra-agency collaboration, and the inclusion of experts by experience, and funding allocations(26, 33, 34) is borne out in the literature. The included studies underscore that countries differ in their policies and practices for attending to mental health disorders and substance use, and recovery orientation. As Humphreys and McLellan(42) accentuate, "how treatment systems are structured, organised, staffed and supported fiscally varies enormously throughout the world, such that a service improvement strategy that works well in one country may be ineffectual in another" (p. 2064). This suggests that the actions needed to orient services toward recovery must be designed for the target treatment system and that service goals may best be assessed therein.

A recovery orientation requires that service providers approach their tasks and interactions with the service user in a particular manner. Certain dilemmas that have arisen for service providers include finding a balance between helping and supporting and disempowering service users, being led by service users in setting treatment and recovery goals, and adopting a professional, supportive, and hopeful attitude amidst relapse(12). While the principles of recovery were understood, translation, or how to practically approach the transformation towards a recovery orientation could be unclear(11) and practical guidance on good practice was needed(12). Our finding that collaboration and trust are two key elements in the delivery of recovery-supportive interventions is congruent with the literature(43). It remains challenging for service providers to forge collaborative relationships with service users. The service provider has been described as "walking alongside" service users and their families when collaborating with them. Such collaboration necessitates that service providers are led by the service user concerning their recovery goals and aspirations and that a working relationship is negotiated(44). Moreover, as partnerships are collaborative, recovery-oriented professionals take on the complexities and the uniqueness of the change process. Another aspect of cooperation with service users is to hire them as staff(17).

Recovery-supportive interventions also centered around the development or growth of recovery capital. Recovery capital is known to accrue and deplete during 'active addiction' such that "most clients entering addiction treatment have never had much recovery capital or have dramatically depleted such capital by the time they seek help"(45). In particular, housing, employment, and recovery-supportive networks were the focus of several interventions. The studies included in this review reinforce that these three areas of functioning remain a priority across recovery stages(23). Best(45) reports on the "Jobs, Friends and Houses (JFH)" project which seeks to support an enduring recovery by focusing on these same elements of recovery capital. These findings are echoed in a more recent study where stable housing, access to peer-support, and care coordination were instrumental in building recovery capital, promoting recovery, and decreasing reoffending(46). Therefore, we invite clinicians, care professionals, health care managers, and providers to re-center their activity towards recovery/social capital as a priority alongside medical and psychological treatment.

2. Limitations of this review

Notwithstanding the strengths of this review, some of its limitations should be addressed. First, the exclusive inclusion of English-language studies may have eliminated important findings. Second, with its focus on published scientific articles, there is a risk of publication bias. Lastly, and in keeping with the indications for a scoping review, we focused on understanding the potential scope of the available literature rather than assessing the quality of studies(46). A high priority for future research is to explore the system-level barriers that may impede professionals from developing activities in a recovery orientation and to understand how care systems could better support recovery-oriented care. Furthermore, given the emphasis on the relationship between the service user and provider, and the known stigma that has been directed at people with substance use disorders, exploring the recovery orientation of care for various sub-groups of people with SUD (e.g., prisoners or offenders with mental health disorders deemed not criminally responsible), is an important avenue for further inquiry.

3. Conclusions

Taken together, these studies demonstrate a growing interest in recovery-supportive interventions in the scholarly literature. To advance the field, more context-specific studies are required on supporting peer professionals, (including enabling cooperation with service users, and hiring experts by experience as staff), and training of professionals (e.g., nurses, psychologists, social workers, physicians) in the principles of recovery. However, even when professionals are well-trained and committed to the tenets of recovery, the treatment system's structure and policies must also support the effective implementation of recovery-supportive interventions.

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NETWORKS AND THE CARE SYSTEM

I. CARE PROVISION FOR PEOPLE WITH MENTAL HEALTH AND SUBSTANCE USE DISORDERS

A. Objective

In this part of the study, we aimed to investigate the care supply available for people with substance use and mental disorders in the five study areas. In particular, we aimed to understand how care was organised and made available to users. To this end, we will first report a description of the care provision in the five areas. In a second section, we will examine the relationships that exist within care networks, with a specific attention to the position of specialised addiction services in the networks. Globally, we hypothesised that the care supply and the structure of relationships have an influence on the accessibility of services and the capacity of services and networks to address the needs of the users.

B. Methods

Data was collected with the help of an online survey to services. The survey was addressed to both generic mental health and specialised addiction services, either members of the established networks in the study areas, or having their activity in the network area. Services were selected based on network service lists that we already had from previous studies. The lists were updated and reviewed by the network coordinators. We also asked coordinators to identify the key services in their network, i.e. generic mental health services that were considered as regularly involved in the network activities (work groups, meetings, …). Specialised addiction services, even if they were not recognised as formal members of the network, were also considered key given the objective of the research. As a rule of thumb, we aimed to include at least 50% of the key services in the study.

The services that agreed to participate designated a contact person who was responsible for survey completion. The research team had contacts with the contact representative of the services in order to guarantee the accurate understanding of the survey items and overall data quality. The survey consisted in an online questionnaire divided in several sections. It was adapted from a service questionnaire that was used in previous research(1-3), including during the evaluation of the 'Article 107' reform(4-7). The first section included the service and respondent identity, as well as the section about referrals and clinical contacts between services. This information was used to analyse the structure of the relationships within networks (See p. 102). The second section was about financial and administrative information. The third section included information about the organisation and functioning of the service, i.e. the target group of users, service capacity, service accessibility, inclusion and exclusion criteria, and the interventions offered. That section also contained the Recovery Self-Assessment Scale for providers(8-10), a validated measure of services' orientation towards personal recovery. Finally, a fourth section included a classification strategy that was adapted from the European Service Mapping Schedule(11, 12). Data was collected between July 2022 and February 2023. As expected, the participation rate among key services in each network reached at least 50%, except in the *Réseau Santé Namur* where it stayed just below, at 49.3%. Differences across network areas, service types, and care functions for the variables examined were tested with Chi-square, Fisher's, Mann-Whitnet U, and Kruskall-Wallis tests, depending on the type of variable (quantitative or qualitative), variable modalities, and whether the distribution followed a parametric or non-parametric pattern.

C. Results

1. Service types

Tables 9a and 9b show the composition of the sample of participating services in terms of service type compared to the proportion of service types among network key services, i.e. the services that were expected to participate. In total, 194 services participated in the survey. Globally, three-quarters of the sample was composed of generic mental health services (74%). The proportion varied from 62 to 90%, the lowest proportions being found in the large urban areas, i.e. Brussels and Antwerp. The overall sample was also composed of 56% outpatient services. However, in two networks (Antwerp and Zuid-West Vlaanderen), the proportion of inpatient services was higher than the proportion of outpatient services. In order to assess the validity of the sample, we compared the sample of participating services with the set of key services identified in each network. As reported in the table, we found significant differences for the two networks of the large urban areas, Brussels and Antwerp. In SaRA, i.e. the network in Antwerp, we had a higher proportion of inpatient services and a lower proportion of generic outpatient services among participants than in the network of key services. In Brussels, there was a higher proportion of specialised outpatient services but a lower proportion of generic outpatient services among participants than in the network of key services.

Table 9a: Service type repartition across the five network areas

	Total	ADS			ZWV			SaRA		
		Sample	Key services	Fisher test	Sample	Key services	Fisher test	Sample	Key services	Fisher test
	n = 194[1]	n = 29[1]	n = 50[1]		n = 27[1]	n = 35[1]		n = 24[1]	n = 42[1]	
Service type										
Specialised addiction services	51 (26%)	3 (10%)	7 (14%)		4 (15%)	6 (18%)		9 (38%)	10 (23%)	
Generic mental health services	143 (74%)	26 (90%)	43 (86%)		23 (85%)	29 (82%)		15 (62%)	32 (77%)	
Outpatient services	109 (56%)	14 (48%)	32 (65%)	NS	13 (48%)	23 (67%)	NS	10 (42%)	30 (72%)	***
Inpatient services	85 (44%)	15 (52%)	18 (35%)		14 (52%)	12 (33%)		14 (58%)	12 (28%)	

[1] n (%),*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

Table 9b: Service type repartition across the five network areas

	Total	Bxl			RSN		
		Sample	Key services	Fisher test	Sample	Key services	Fisher test
	N = 194[1]	N = 78[1]	N = 148[1]		N = 36[1]	N = 74[1]	
Service type							
Specialised services	51 (26%)	26 (33%)	15 (10%)	***	9 (25%)	14 (19%)	NS
Generic services	143 (74%)	52 (67%)	133 (90%)		27 (75%)	60 (81%)	
Outpatient services	109 (56%)	49 (63%)	124 (84%)		23 (64%)	53 (72%)	
Inpatient services	85 (44%)	29 (37%)	24 (16%)		13 (36%)	21 (28%)	

[1] n (%),*** p<0.01 **p<0.05 *p<0.1 significance level(α)=0.05

The 'Article 107' reform defined five basic care functions in networks. The five care functions are: (1) prevention and early detection of mental health disorders, (2) outreach, (3) recovery and social rehabilitation of users, (4) intensive residential treatment for acute cases, and (5) specific housing and long-term care facilities[13, 14]. Services had the opportunity to report the care functions in which they were involved (participants could choose several care functions). As reported in Table 10, the five functions were more or less equally represented overall. However, function 1 (primary mental health) was underrepresented in SaRA, counterbalancing the overrepresentation of services involved in function 4, i.e. mainly hospital units. Function 3 (rehabilitation) was also slightly overrepresented in Zuid-West Vlaanderen, while Function 5 (long-term inpatient facilities) was slightly more represented in ADS.

Table 10: Care function repartition across participating services in the five network areas

	Total n = 194[1]	ADS n = 29[1]	ZWV n = 27[1]	SaRA n = 24[1]	Bxl n = 78[1]	RSN n = 36[1]
Care function						
Function 1	40 (21%)	6 (21%)	6 (22%)	2 (8.3%)	18 (23%)	8 (22%)
Function 2	43 (22%)	4 (14%)	5 (19%)	3 (12%)	20 (26%)	11 (31%)
Function 3	56 (29%)	7 (24%)	10 (37%)	4 (17%)	24 (31%)	11 (31%)
Function 4	45 (23%)	6 (21%)	8 (30%)	12 (50%)	13 (17%)	6 (17%)
Function 5	39 (20%)	10 (34%)	6 (22%)	5 (21%)	10 (13%)	8 (22%)

[1] n (%)

The basic information regarding care functions can be compared with the service categories emerging from the ESMS classification tree[11, 12]. Figures 3a to 3f display these classification trees in total and for each network. Overall, 142 services out of the 194 that participated in the survey identified themselves as generic services (73%), and 51 as specialised addiction services (26%) (one service did not complete this section). The self-classification and hetero-classification of services were almost identical. Across specialisation, however, 73 services identified themselves as inpatient while, in hetero-classification, the figure was 85. There were most probably some hospital services acting as outpatient services that were hetero-classified as inpatient. It must be noted that semi-residential services, which were very few, were re-classified. In generic services, semi-residential services were day centres and were placed, therefore, in the outpatient branch. There was one semi-residential, specialised service, and it was considered as residential as it shared residential features.

Among generic services, mental health is unsurprisingly the most represented domain in our sample, while the justice sector was not represented at all. Among specialised services, primary prevention services were not represented in our sample. More strikingly, there was no outreach service involved in tertiary prevention, i.e. harm reduction. It is possible that this service type faced difficulties for classifying themselves in secondary or tertiary prevention as main activity. But it may also denote a possible gap in the provision of care. In any case, we recruited only four specialised outreach teams, and they all belonged to the Brussels network. Self-help services, whether generic or specialised, were also poorly represented, and again, only in Brussels. At a further level of detail, 55% of specialised addiction services were providing substitution treatment, and 38% of generic mental health inpatient services were providing acute care. The interest of the ESMS tree classification is to provide care providers in a catchment area, e.g. network coordinators, with information about the diversity and global comprehensiveness of the care supply in the area at the population level. Although we cannot analyse further the care supply in the five areas, we invite stakeholders, and network coordinators more particularly, to look carefully to the tree corresponding to their area in order to assess the type of care that might be lacking in their network.

Figure 3a: Overall classification of participating services (n = 194)[1]

Generic services (142)	Outpatient (64)	*General health*	**4** (2.1%)
		Mental health	**55** (28%)
		Social	**5** (2.6%)
	Outreach (22)	*General health*	**1** (0.5%)
		Mental health	**18** (9.3%)
		Social	**3** (1.6%)
	Inpatient (55)	*Education*	**2** (1.0%)
		General health	**2** (1.0%)
		Mental health	**45** (23%)
		Social	**6** (3.1%)
	Self-help		**1** (0.5%)
Specialised addiction services (51)	Outpatient (29)	*Secondary prevention*	**25** (13%)
		Tertiary prevention	**4** (2.1%)
	Outreach	*Secondary prevention*	**4** (2.1%)
	Inpatient (17)	*High intensity*	**12** (6.2%)
		Low intensity	**5** (2.6%)
	Self-help	*Tertiary prevention*	**1** (0.5%)
		Unknown	**1**

[1] n (%)

Figure 3b: Classification of participating services in Netwerk GGZ-ADS (n = 29)[1]

Generic services (26)	Outpatient (14)	*General health*	0
		Mental health	13
		Social	1
	Outreach (3)	*General health*	0
		Mental health	3
		Social	0
	Inpatient (9)	*Education*	0
		General health	0
		Mental health	9
		Social	0
	Self-help		0
Specialised addiction services (3)	Outpatient (2)	*Secondary prevention*	1
		Tertiary prevention	1
	Outreach	*Secondary prevention*	0
	Inpatient (1)	*High intensity*	1
		Low intensity	0
	Self-help	*Tertiary prevention*	0
		Unknown	0

[1] n (%)

Figure 3c: Classification of participating services in Netwerk GGZ Zuid-West Vlaanderen (n = 27)[1]

Generic services (23)	Outpatient (14)	*General health*	0
		Mental health	14
		Social	0
	Outreach (1)	*General health*	0
		Mental health	1
		Social	0
	Inpatient (8)	*Education*	0
		General health	0
		Mental health	6
		Social	2
	Self-help		0
Specialised addictionservices (4)	Outpatient (1)	*Secondary prevention*	1
		Tertiary prevention	0
	Outreach	*Secondary prevention*	0
	Inpatient (3)	*High intensity*	3
		Low intensity	0
	Self-help	*Tertiary prevention*	0
		Unknown	0

[1] n (%)

Figure 3d: Classification of participating services in Netwerk SaRA (n = 24)[1]

Generic services (14)	Outpatient (2)	*General health*	0
		Mental health	2
		Social	0
	Outreach (4)	*General health*	0
		Mental health	3
		Social	1
	Inpatient (8)	*Education*	0
		General health	0
		Mental health	8
		Social	0
	Self-help		0
Specialised addiction services (9)	Outpatient (4)	*Secondary prevention*	3
		Tertiary prevention	1
	Outreach	*Secondary prevention*	0
	Inpatient (5)	*High intensity*	3
		Low intensity	2
	Self-help	*Tertiary prevention*	0
		Unknown	1

[1] n (%)

Figure 3e: Classification of participating services in Brumenta (Brussels Network) (n = 78)[1]

Generic services (52)	Outpatient (23)	*General health*	3
		Mental health	17
		Social	3
	Outreach (10)	*General health*	0
		Mental health	8
		Social	2
	Inpatient (18)	*Education*	1
		General health	1
		Mental health	14
		Social	2
	Self-help		1
Specialised addiction services (26)	Outpatient (14)	*Secondary prevention*	13
		Tertiary prevention	1
	Outreach	*Secondary prevention*	4
	Inpatient (7)	*High intensity*	4
		Low intensity	3
	Self-help	*Tertiary prevention*	1
		Unknown	0

[1] n (%)

Figure 3f: Classification of participating services in Réseau Santé Namur (n = 36)[1]

Generic services (27)	Outpatient (11)	*General health*	1
		Mental health	9
		Social	1
	Outreach (4)	*General health*	1
		Mental health	3
		Social	0
	Inpatient (12)	*Education*	1
		General health	1
		Mental health	8
		Social	2
	Self-help		0
Specialised addiction services (9)	Outpatient (8)	*Secondary prevention*	7
		Tertiary prevention	1
	Outreach	*Secondary prevention*	0
	Inpatient (1)	*High intensity*	1
		Low intensity	0
	Self-help	*Tertiary prevention*	0
		Unknown	0

[1] n (%)

We also aimed to describe the services according to the professional disciplines of their staff. However, most services were unable to provide us with an exact number of Full Time Equivalents (FTE) per professional category. The services that provided the information had a mean of 12 FTE. Specialised addiction services were smaller (9 FTE on average) than generic mental health services (14 FTE on average). The number of hospital units in the sample most probably determined these values. Indeed, the number of average FTE was 17 in inpatient services, and 9 in outpatient services. On average, 86% of services reported having staff with a background related to the psychology field (mainly psychologists, psychiatrists, and some orthopedagogists); 86% also had staff with a social work background, and 67% had staff with a medical background other than psychiatry. There was no significant variation across service types (generic mental health versus specialised addiction and inpatient versus outpatient), except for the medical staff who were more present in inpatient services (84%) than in outpatient services (54%). The vast majority of services had multidisciplinary teams. Only 13 out of the 194 services reported only one professional category: 6 social services, 5 psychological services, and 2 medical services. Half of these services were found in the Brussels network. Finally, 55 out of the 194 participating services (28%) reported having at least one peer-worker, the highest proportion being found in Antwerp and the lowest in Brussels. 28% of the generic mental health services and 30% of the specialised addiction services reported having at least one peer-worker. There were 31% of outpatient services that reported a peer-worker, and 25% among inpatient services. These small differences were not significant. In addition, these proportions, need to be interpreted with caution as they are related to the number and type of participating services.

2. Service users with SUD

One key question addressed in the survey on services was the extent to which people with SUD utilise non-specialised services. To this aim, we calculated the share of service users with SUD among the total number of service users in each service. Results are presented in Table 11a and Table 11b. Overall, participating services had 53% of users with SUD. Obviously, the share was very high in specialised addiction services (91%). Yet, generic mental health care services reported having 31% of users with SUD. In particular, among the 143 generic mental health care services, 17 reported having more than 50% of users with SUD. It is worth noting, however, that 71 services out of the 194 (37%) were unable to provide this information.

Table 11a: Share of users with SUD within services according to network

	Network					
	Total N = 194[1]	ADS N = 29[1]	ZWV N = 27[1]	SARA N = 24[1]	Bxl N = 78[1]	RSN N = 36[1]
Share of users with SUD	0.53 (0.40)	0.39 (0.38)	0.55 (0.38)	0.58 (0.42)	0.58 (0.40)	0.47 (0.41)
Unknown	71	10	9	6	33	13

[1] Mean (SD)

Table 11b: Share of users with SUD within services according to service type

	Service type				
	Outpatient N = 109[1]	Inpatient N = 85[1]		Specialised addiction services N = 51[1]	Generic mental health services N = 143[1]
Share of users with SUD	0.58 (0.41)	0.46 (0.37)		0.91 (0.19)	0.31 (0.31)
Unknown	41	30		7	64

[1] Mean (SD)

3. Accessibility of services

Accessibility of services is a multidimensional concept. Several organisational features are likely to affect service's accessibility, e.g. geographical location, cost, opening hours, service's capacity (number of beds or caseload), admission process, and inclusion/exclusion criteria among others. The service survey included several items related to these features. In particular, services were asked about their possible limited capacity, opening hours, whether there were out-of-pocket payments to access the service (i.e. an amount of money that clients had to pay without any insurance coverage), and access modalities. The latter indicator consisted in an index ranging from 1 (easy access) to 4 (restrictive access). Walk-in services received a score of 1, services for which an appointment has to be made received a score of 2, services for which there was an admission process (i.e. examination of the request of admission) received a score of 3, and services for which the admission process was conditioned by a waiting list received a score of 4. Services having multiple access modalities were not considered on this topic.

Results on these items are presented in Tables 12a and 12b. On average, 68% of services reported having a limited capacity. The information was easier to collect from inpatient services, which have a determined number of beds, than from outpatient services, which in many cases have no clear measurement of their capacity unless it is related to their funding mechanism. Therefore, almost all the inpatient services reported a limited capacity, but only 44% in outpatient services. Such difference was statistically significant ($\chi^2 = 63.1$, $p < 0.001$). The proportion of services reporting a limited capacity was also significantly lower in specialised addiction services ($\chi^2 = 4.7$, $p = 0.02$), and was also lower in the French-speaking networks. However, differences across networks were not statistically significant and were mainly related to the difference of proportion of in- and outpatient services in the sample, inpatient services having more participated in Flanders.

One fifth of services reported being open out of office hours. The proportion reached one third in Antwerp and was lower in the French-speaking networks. Proportions were higher in specialised addiction services than in generic mental health care services and in outpatient than in inpatient services. Only the last difference was statistically significant ($\chi^2 = 5.7$, $p = 0.02$). Yet, one third of services reported being open 24/7. This seems related to inpatient services, which are actually open 24/7, although it does not mean that they are accessible in plain conditions out of office hours. Only three outpatient services reported being open 24/7. In other respects, almost half of the sample of services reported being contactable to provide information on available services when they are closed.

The mean access modality score was 2.91. There was no significant difference in the access modality score across networks, but well across service types. Outpatient services were less restrictive in access than inpatient services ($W = 2137$, $p < 0.001$), which is rather obvious. However, generic mental health care services were also significantly more restrictive than specialised addiction services ($W = 1777$, $p = 0.047$).

In addition, the access modality score was significantly and positively associated with out-of-pocket payments ($W = 1470$, $p < 0.001$), as well as with reporting a service's limited capacity ($W = 3428$, $p < 0.001$). In addition, there was a significant positive correlation between the access modality score and the number of exclusion criteria ($S = 435666$, $p < 0.001$). We will comment these in the next section. Therefore, there was an association between organisational mechanisms such as funding schemes and accessibility.

Table 12a: Service accessibility according to network

	Network					
	Total, N = 194	ADS, N = 29	ZWV, N = 27	SARA, N = 24	Bxl, N = 78	RSN, N = 36
Payments[1]						
Out-of-pocket payment	104 (57%)	16 (67%)	17 (68%)	16 (73%)	34 (45%)	21 (60%)
Unknown	13	5	2	2	3	1
Capacity[1]						
Limited capacity	129 (68%)	21 (78%)	19 (70%)	19 (86%)	48 (62%)	22 (61%)
Unknown	5	2	0	2	1	0
Opening hours[1]						
Open out of office hours	43 (22%)	8 (28%)	6 (22%)	8 (33%)	15 (19%)	6 (17%)
Open 24/7	64 (33%)	12 (41%)	10 (37%)	11 (46%)	19 (24%)	12 (33%)
Contactable if closed	88 (47%)	15 (58%)	14 (54%)	15 (65%)	28 (37%)	16 (44%)
Unknown	7	3	1	1	2	0
Access modality score[2]	2.91 (1.05)	2.84 (0.94)	2.57 (1.03)	2.95 (0.78)	2.94 (1.13)	3.10 (1.09)
Unknown	36	4	6	5	15	6

[1] n (%) [2] Mean (SD)

Table 12b: Service accessibility according to service type

	Service type				
	Specialised addiction, N = 51	Generic MH, N = 143		Outpatient, N = 109	Inpatient, N = 85
Payments					
Out of pocket payment	23 (48%)	81 (61%)		41 (39%)	63 (84%)
Unknown	3	10		3	10
Capacity					
Limited capacity	28 (56%)	101 (73%)		47 (44%)	82 (99%)
Unknown	1	4		3	2
Opening hours					
Open out of office hours	15 (29%)	28 (20%)		31 (28%)	12 (14%)
Open 24/7	13 (25%)	51 (36%)		3 (2.8%)	61 (72%)
Contactable if closed	22 (44%)	66 (48%)		25 (23%)	63 (79%)
Unknown	1	6		2	5
Access modality score	2.62 (1.04)	2.99 (1.04)		2.67 (0.96)	3.18 (1.08)
Unknown	14	22		23	13

[1] n (%) [2] Mean (SD)

We also explored services’ inclusion and exclusion criteria. The survey included an item with 9 domains of possible exclusion criteria: insurability, language command, use of substances (in general), use of substances or deal within the service, relapse, motivation to treatment, aggressive or violent behaviour, specific health conditions (physical or mental), and other. We calculated the number of exclusion criteria reported. Results are presented in Table 13. Overall, services reported 3.1 exclusion criteria on average. We investigated differences according to the main care function of services and found significant differences (Kruskall-Wallis $\chi^2 = 33.9$, $p < 0.001$): services mainly active in Function 1 (primary mental health care) and 2 (outreach) had significantly less exclusion criteria than services in Function 3, 4, and 5; the latter function including the services with the highest number of exclusion criteria. Whilst it is understandable that inpatient services (i.e. in Function 4 and 5) have more exclusion criteria than outpatient services, the figure is worth remarkable in the case of the rehabilitation services in Function 3. Specialised addiction services tended to have less exclusion criteria than generic mental health care services, but such difference was not significant.

Table 13: Average number of exclusion criteria according to care function and service type

	Care function						Service type	
	Total, N = 194[1]	F1, N = 40[1]	F2, N = 29[1]	F3, N = 46[1]	F4, N = 36[1]	F5, N = 25[1]	Specialised addiction, N = 51[1]	Generic MH, N = 143[1]
Number of exclusion criteria	3.10 (2.13)	1.98 (1.73)	1.97 (1.80)	3.89 (2.26)	3.50 (1.90)	4.16 (1.84)	2.80 (1.74)	3.10 (2.18)

[1]Mean (SD)

We also specifically explored the specific case of substance use as exclusion criterion. The criterion encompassed the use of substances in general (alcohol and illicit drugs) as an exclusion criterion to enter the service and start a treatment. It did not apply to the use of substances or deal within the premices of the service, which was measured separately. The distribution of services that reported substance use as an exclusion criterion is presented in Table 14a and 14b. On average, 41% of the participating services reported substance use as an exclusion criterion. Services in Flemish networks reported this criterion significantly more often ($\chi^2 = 38.6$, $p < 0.001$). We also found that the care function was significantly associated with this criterion ($\chi^2 = 24.4$, $p < 0.001$): inpatient services (functions 4 and 5) reported more often substance use as an exclusion criterion than outpatient services (functions 1 and 2). More than the half of rehabilitation services in Function 3 also had this exclusion criterion. It is worth noting that substance use was an exclusion criterion for almost half of the generic mental health services, and even for almost one third of specialised addiction services, hence services working within a drug-free approach, i.e. caring for people who were not using substances anymore at the time of starting and following the treatment. The difference between generic mental health care and specialised addiction services was statistically significant ($\chi^2 = 4.0$, $p = 0.046$).

Table 14a: Services with refusal for substance use according to network

		Network				
	Total, N = 194[1]	ADS, N = 29[1]	ZWV, N = 27[1]	SARA, N = 24[1]	Bxl, N = 78[1]	RSN, N = 36[1]
Refusal for substance use	80 (41%)	24 (83%)	14 (52%)	14 (58%)	17 (22%)	11 (31%)

[1] n (%)

Table 14b: Services with refusal for substance use according to care function and service type

	Function					Service type	
	F1, N = 40[1]	F2, N = 29[1]	F3, N = 46[1]	F4, N = 36[1]	F5, N = 25[1]	Specialised addiction N = 51[1]	Generic MH N = 143[1]
Refusal for substance use	10 (25%)	5 (17%)	24 (52%)	21 (58%)	17 (68%)	15 (29%)	65 (45%)

[1] n (%)

II. EVALUATION OF THE TDI REGISTRATION COVERAGE, SECONDARY ANALYSIS

A. Objective

The objective of this analysis was to evaluate the extent of the coverage of the current TDI registration. The TDI database contains information about people entering a new treatment episode for SUD. The TDI registration is organised in all member states of the European Union. In Belgium, since 2011, it has been collected in a wide range of treatment units. These units may be specialised addiction services or not, medicalised or not, and may offer residential or ambulatory care. In some cases, the participation in the TDI registration is mandatory through funding agreements that include that condition. In some other cases, registration is encouraged with a financial incentive. And in some cases, registration is simply based on the service's good will. Because of such variety of conditions, it is likely that some important care providers receiving people with SUD are missed. However, since the beginning of the TDI registration, an assessment of the TDI coverage was never conducted. Therefore, since a survey with services in five mental health care networks within SUMHIT, it was a good opportunity to carry out such assessment.

B. Results

1. Identification of services currently participating in the TDI

Among the 194 services that participated in the SUMHIT survey on services, we identified 75 services that also participated in the TDI registration in 2022. Therefore, there were 119 services that completed the SUMHIT survey, i.e. potentially offering care to people with SUD, which were not included in the TDI registration.

2. Criteria to identify new potential TDI services

Based on the questions addressed in the survey, we wanted to identify the services that are actually providing care for people with SUD and could, therefore, join the TDI registration. We used two inclusion criteria to identify such services: first, the service had to provide treatment, and second, they had to support people with SUD. Two items of the SUMHIT survey on services were used:

- One item asked services about the yearly number of users with SUD. At least one user had to be reported.
- Another item allowed respondents reporting all types of support provided. For the present analysis, we considered individual psychoanalytic psychotherapy, individual cognitive-behavioural psychotherapy, individual psychotherapy with a systemic orientation, individual psychotherapy with another orientation, group therapy and other discussion groups, substitution treatment, pharmaceutical treatment for addiction, and acute withdrawal. At least one of these treatment modalities had to be reported.

3. Criteria validation on the current services in the TDI registration

Fifty out of the 75 services units participating in the TDI registration fulfilled both criteria. As answers were not mandatory, however, several services did not report the information. Yet, the information provided in SUMHIT allowed checking the classification in the TDI that was correct for 48 services out of the 50 (96%). Therefore, two services did not report any treatment provision despite actually providing it. The two services were removed from subsequent analyses. The two criteria made it possible to identify correctly services of interest.

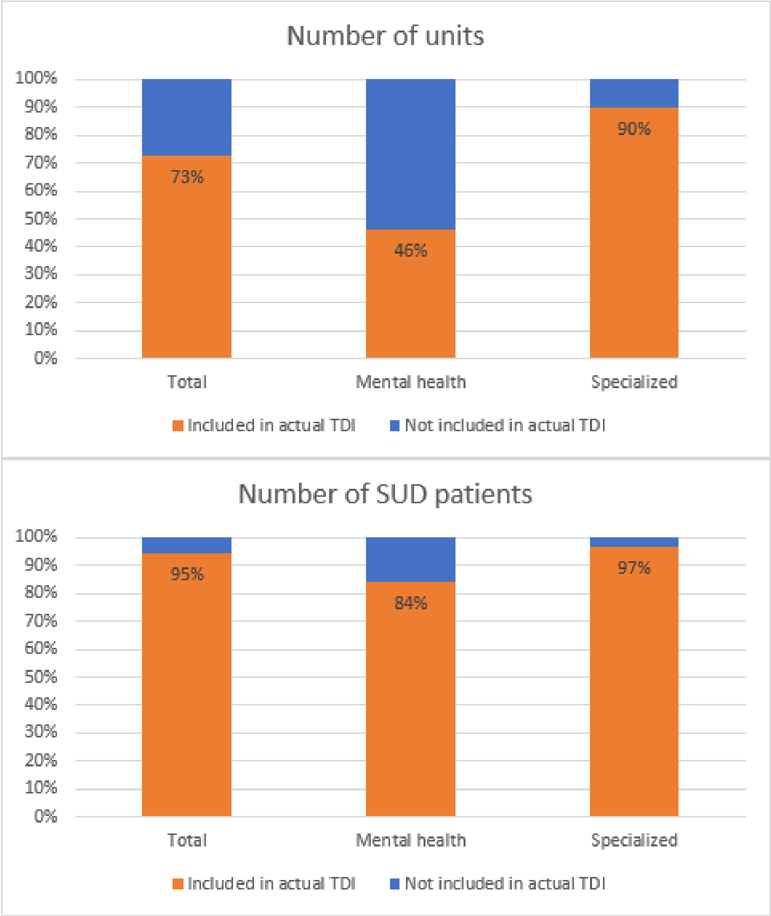
4. Coverage extent of the TDI registration

When we applied the inclusion criteria to all the services that answered the two questions (n=121), we came out with 66 services that met the criteria and can, therefore, be classified as eligible for the TDI registration.

Given the 48 services that actually participate in the TDI registration, we estimate a coverage rate of 73% (48/66). The coverage rate is lower in generic mental health services (46%) than in specialised addiction services (90%).

Looking at the number of yearly users with SUD reported by services in SUMHIT, we can estimate that there would be 20,027 users with treatment episodes corresponding to the TDI registration. Actually, 18,978 users are reported in the services participating in the TDI registration. Therefore, at the level of users, we estimate that the TDI has a 95% coverage rate (84% in generic mental health services and 97% in specialised addiction services).

Figure 4: TDI registration coverage in terms of number of services and number of service users with SUD



C. Discussion

These estimates are the first to allow an assessment of the coverage rate of the TDI registration in 5 mental health network areas. In terms of services, 3 out of 4 treatment units are captured in the TDI registration in the study area. In terms of users, the largest services contribute to the registration of 95% of people with SUD currently in treatment. Therefore, we can consider, that the services missed by the TDI registration are small or that they receive a limited number of people with SUD.

Although these data are based on a limited number of services coming from a small part of the country, they present the advantage of coming from a uniform collection tool and setting applied to a broad range of diverse service types. In addition, the network areas were selected in the three regions with a view to capture diversity, e.g. in terms of care supply and urban and semi-urban areas. It is reasonable to think that this sample can be generalised to the whole country. This hypothesis is confirmed by the consistence of the data collected in SUMHIT at the level of users with the TDI data (see appendix II, p. 140).

The two criteria used to identify TDI potential services are relatively strong regarding the 96% level of sensitivity. However, we do not have information on the specificity of these criteria. This means that we do not know whether these criteria might also apply to services that should not be covered by the TDI. It is likely, therefore, that coverage rates are underestimated.

In other respects, the two items that were used as inclusion criteria were not related to each other. In other terms, we identified services providing treatment and services receiving people with SUD, although we did not know whether these services were providing treatment for people with SUD. It might be that small mental health services, providing treatment, nevertheless refer people with SUD to other, specialised services. This inaccuracy would again drive us to underestimate the coverage rate.

Another limit to the coverage estimation is related to the response rate of 50% of key services on average in each network. This once again means that we may have missed services, both participants and non-participants to the TDI registration. This situation makes it difficult, therefore, to capture whether we have been under- or overestimating the TDI coverage rate. However, in principle, most services providing treatment and caring for people with SUD were considered key. The only category of services that we may have missed are primary care services, which are not considered sufficiently in some service networks.

Finally, general practitioners, psychologists, and psychiatrists or other specialty physicians in private practice who care for people with SUD are largely missed in both the TDI and the SUMHIT survey. To estimate the number of these professionals providing care to people with SUD and the number of treatment episodes or users utilising these professionals, a specific study would be required.

III. THE STRUCTURE OF COLLABORATION BETWEEN GENERIC MENTAL HEALTH AND SPECIALISED ADDICTION SERVICES IN MENTAL HEALTH SERVICE NETWORKS

A. Background and objectives

This part of the study aimed to investigate the structure of the relationships that exist between the generic mental health and the specialised addiction services in the service networks that are active in the five study areas. An important challenge of care integration is that there is no "one-size-fits-all solution". Various forms of care integration are needed in practice, depending on users' needs. More particularly, in a seminal article about care integration between different sectors, Leutz identified three structural forms for carrying out care integration: linkage, coordination, and full integration(15). *Linkage* is a structural form of integration in which all stakeholders e.g. care providers and services, tend to be linked to each other. It requires a relatively low level of formalisation and all stakeholders tend to be equal in the relationships. However, according to Leutz, this form of integration is suited for people with mild to moderate needs, as well as for simple care operations, such as information exchange and early detection of cases on a delimited territory. As for care delivery, it requires that users have sufficient autonomy and command of the care supply to navigate between services. The second form, *coordination*, is based on a structure where one stakeholder is in a central position and mediates the relationships that exist between other stakeholders, specifically when these stakeholders belong to different sectors. It requires more formalisation, as stakeholders are not in an equal relationship, and one stakeholder is responsible for the contacts that rely on it. This form of integration is intended for people with moderate to severe disorders, and is more suited for users who cannot navigate the network by themselves. It also allows more complex operations, such as care planning, treatment decision-making, and fund sharing. Finally, the third form of integration is full integration, in which all care is provided within a merged organisation. The old psychiatric asylums were fully integrated, as they were able to provide all type of care and support to their users. However, full integration strongly reduces the autonomy of users. Therefore, full integration is only recommended for a small group of users who have the most severe needs and the least capacity for navigating across care services. Previous research has been investigating the structure of relationships, in particular within the mental health service networks established in Belgium (7, 16, 17). We therefore took the opportunity of SUMHIT to explore further the structure of relationships within service networks. In this case, we applied network analysis techniques to investigate the structure of relationships that exist between generic mental health care services and specialised addiction services, as well as the structural position of the latter in the networks.

B. Method

Data on regular contacts about users and referrals between services was collected within the survey on services (see "Networks and the care system", p. 86). Services were presented with a roster that included the names of all the services in their network. Services were asked to tick all the services with which they had regular contacts for exchanging information about a specific user or for referral. In addition, services had the opportunity to add up three other services.

Data was analysed using Social Network Analysis (SNA)(18). Most particularly, graphs displaying the structure of relationships within the whole network were produced, and several network indicators were calculated for the five study areas (Tables 15 to 19). These network indicators were chosen in order to assess the main structural forms of integration described above, i.e. linkage or coordination, as well as the structural positioning of specialised addiction services within the network of connections with generic mental health care services and the other services members of the networks. More specifically, at the whole network level, each network was appraised by its size (i.e. the number of services) and its composition (service types). Each time a service declared a contact with another service, a tie was drawn. For each network, we calculated its density of ties, i.e. the proportion of actual ties declared on the maximum possible ties in a network. The value of network density is, therefore, a proportion ranging from 0 (no ties declared) to 1 (all ties are realised, meaning that all services declared being in contact with all the other services in the network). Hence, density is a key measure of linkage.

Each service in the network was characterised by its degree, i.e. the number of ties that connect it to other services. The connection may result from the service declaring contacts with other services. In this case, the service is sending out ties to other services, and the number of such ties is measured with the out-degree. The connection may also result from another service declaring a contact. In this case, the tie is received from another service and measured with the in-degree. Therefore, an average degree (and average in- or out-degree) can be calculated for a group of services, e.g. per service types, and at the level of the whole network level. A service or group of services having a high degree is more central in the network, while a low degree indicates that the service or group of services is more peripheral in the network structure.

By extension, degree centralisation can be calculated. Degree centralization indicates the extent to which services in a network are unequal regarding their number of ties. It is based on a proportion, and ranges from 0 (all services have the same number of ties) to 1 (one service is the only one connected to all the other services). Centralisation measured with degrees indicates that one or some services tend to be much more involved within the structure of contacts.

Another measure of centralisation is betweenness centralisation. Betweenness is based on the number of times a service is in the path connecting two other services. If service A sent out a tie to service B but not to service C, and service B sent out a tie to service C, service A and C are connected via the in-between position of service B. Considering all the paths of possible connection between two services, betweenness is the proportion of paths in which a service is in-between two other services. Betweenness centralisation is an extension of that measure. It indicates the extent to which services in a network are unequal regarding their betweenness. Therefore, it ranges from 0 (all services having the same betweenness value, e.g. in a circle network, see Figure 5), to 1 (one service is in-between all the paths connecting services in the network, e.g. in a star network, see Figure 5). Hence, betweenness centralization is a structural measure of coordination.

Figure 5: model of circle network (left) and star network (right)

In the circle network, all services are equally in-between the other services. Therefore, betweenness centralisation = 0

In the star network, one service is in-between all the other services, while these are not connected to each other. Therefore, betweenness centralisation = 1

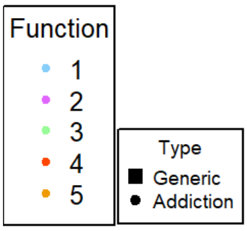
The third type of measure used was Coleman's indicator of **homophily/heterophily**$^{(19)}$. Homophily is the tendency of services to have contacts with other services of the same type, e.g. generic mental health services with other generic mental health services. The opposite tendency is called heterophily.

Coleman’s homophily index ranges from -1 (maximal heterophily; negative values indicate a tendency to heterophily) to 1 (maximal homophily; positive values indicate a tendency to homophily).

In the following section, we present the structural characteristics of each network. For each network, we present two graphs. In graphs, generic mental health services are represented by squares and specialised addiction services are represented by circles. Different colours were used according to the main care function of the services. Ties are drawn between them according to the contacts declared. In the first graph, the size of services is related to their indegree (i.e. the number of times they were cited by other services). Therefore, the bigger the service, the higher its degree centrality. The second graph depicts the same network but laid out differently. Generic mental health services are situated in the left side of the graph and specialised addiction services in the right side. Ties across these two groups (heterophilous ties) are drawn in grey, while ties within groups (homophilous ties) are drawn in red. For each network, we provide the values of the network indicators calculated and we comment these values.

C. Results

1. Structure of the network of contacts in SaRA



The size of symbols represents degree centrality

Figure 6a: Contacts among services within SaRA mental health network

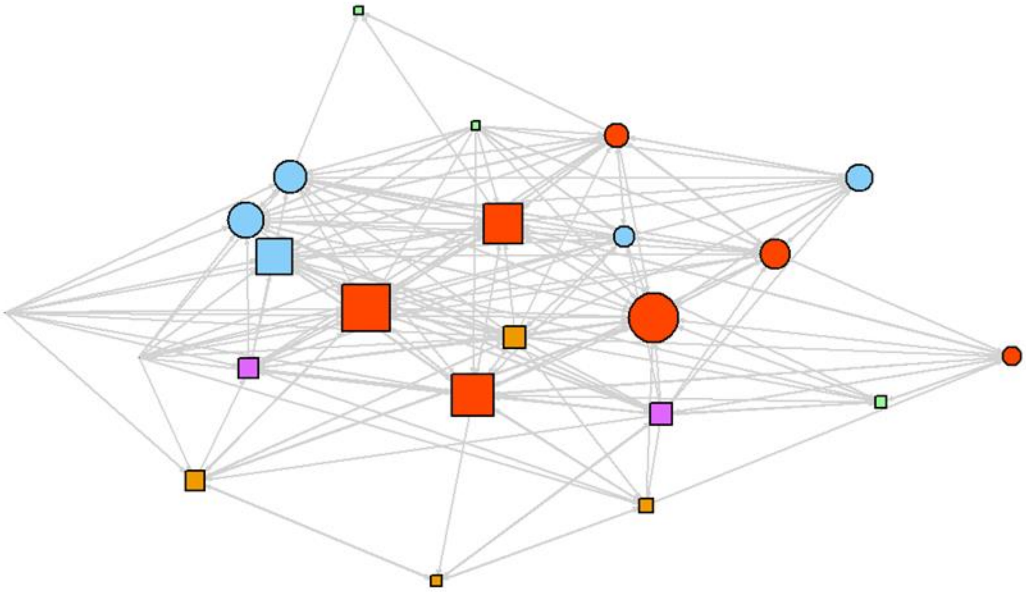


Figure 6b: Contact among services within SaRA mental health network with service type homophily

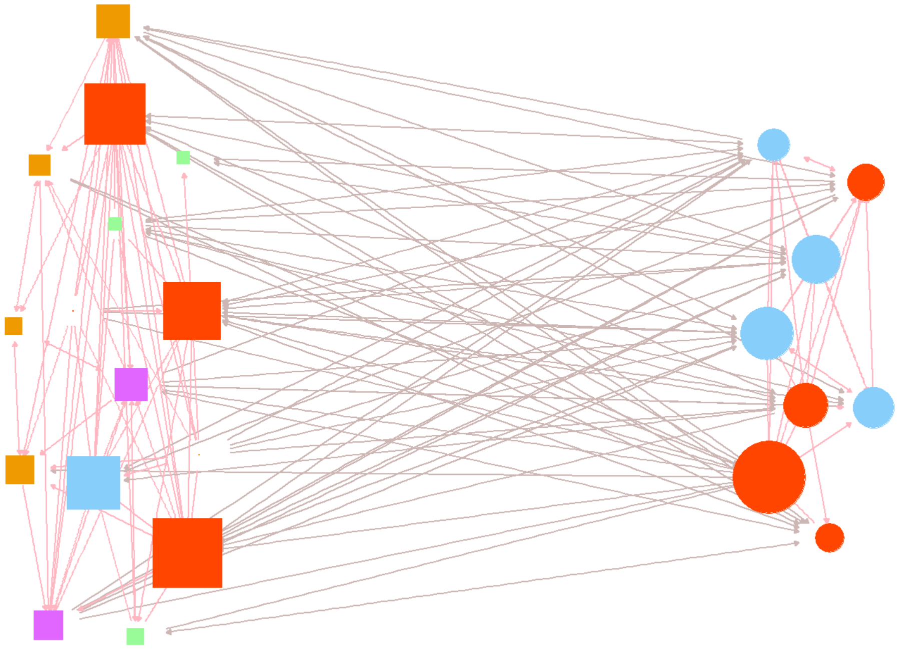
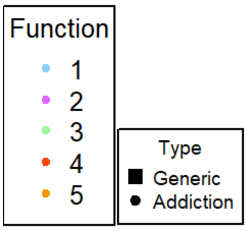


Table 15: Network indicators for SaRA mental health network

Indicator	Value
Number of services	23
Density	0.39
Indegree centralisation	0.43
Betweenness centralisation	0.09
Average indegree by service specialisation	
Generic services	7.20
Specialised services	11.00
Homophily on specialisation	
Generic services	-0.05
Specialised services	0.33

23 services from SaRA participated in the survey. All functions were represented in the sample. However, services from Function 4 were more numerous. Density (0.39) and in-degree centralisation (0.43) were high, indicating that the participating services provided numerous citations, therefore favouring a linkage model of network. The first graph shows that the most central services in terms of citations were mainly inpatient services active in Function 4, i.e. hospital units, with three generic psychiatric units and one unit specialised in addiction. However, the average indegree of generic services was lower than the average indegree of specialised addiction services, possibly because there were less specialised services in the sample, although they had a high level of centrality. By contrast, betweenness centralisation was low, indicating that the network was not structurally composed for coordination. Generic mental health services were neither homo- or heterophilous (Coleman's homophily = -0.05), while specialised addiction services were homophilous, i.e. declaring more contacts with other specialised addiction services.

2. Structure of the network of contacts in GGZ-ADS



The size of symbols represents degree centrality

Figure 7a: Contacts among services within GGZ-ADS mental health network

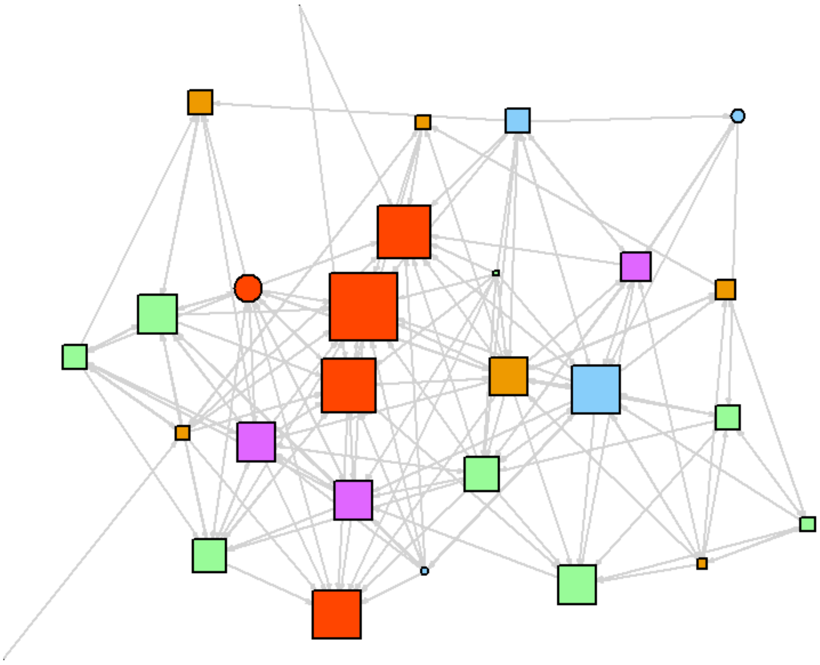


Figure 7b: Contacts among services within GGZ-ADS mental health network with service type homophily

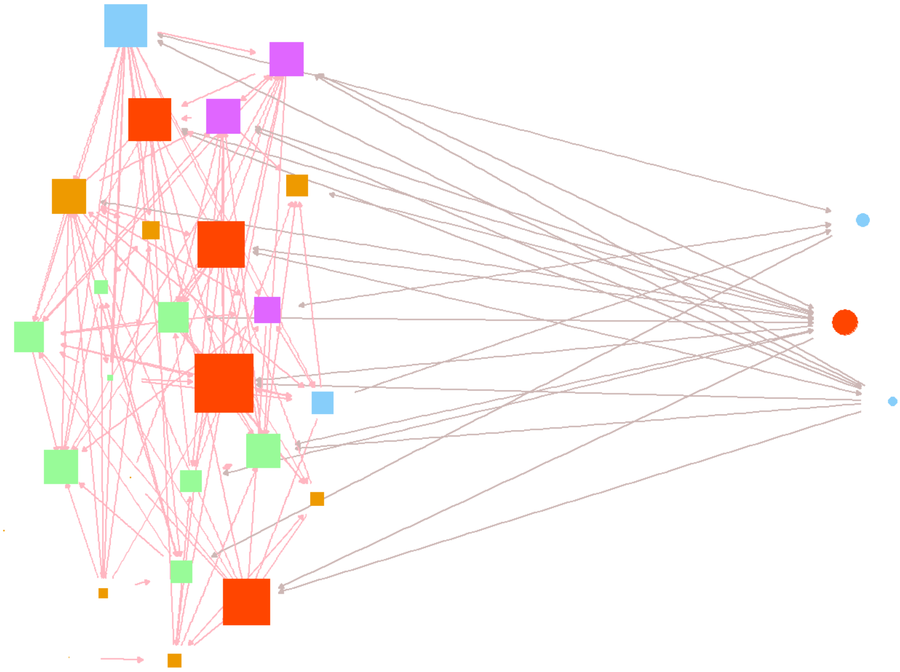
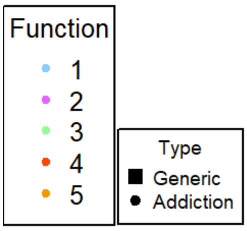


Table 16: Network indicators for GGZ-ADS mental health network

Indicator	Value
Number of services	29
Density	0.20
Indegree centralisation	0.30
Betweenness centralisation	0.19
Average indegree by service specialisation	
Generic services	5.85
Specialised services	3.67
Homophily on service specialisation	
Generic services	0.27
Addiction services	-1

29 services from ADS network participated in the survey. Most were generic mental health services, with only three specialised addiction services that were included in the sample. Density (0.20) and indegree centralisation (0.30) were moderate, and the average indegree in generic mental health services was higher than in specialised addiction services. As the first graph displayed, there were services from all the care functions with a significant level of indegree centrality, although the most central were hospital units. One specialised addiction service with a significant level of centrality was also a hospital unit. By contrast, betweenness centralization was relatively high (0.19) indicating a trend towards a structural model based on coordination. The three specialised addiction services did not declare contacts with each other, therefore they were completely heterophilous, while generic mental health services tended to be homophilous. Therefore, in this network, specialised addiction services tended to be more peripheral.

3. Structure of the network of contacts in GGZ Zuid-West Vlaanderen



The size of symbols represents degree centrality

Figure 8a: Contacts among services within GGZ-Zuid-West Vlaanderen mental health network

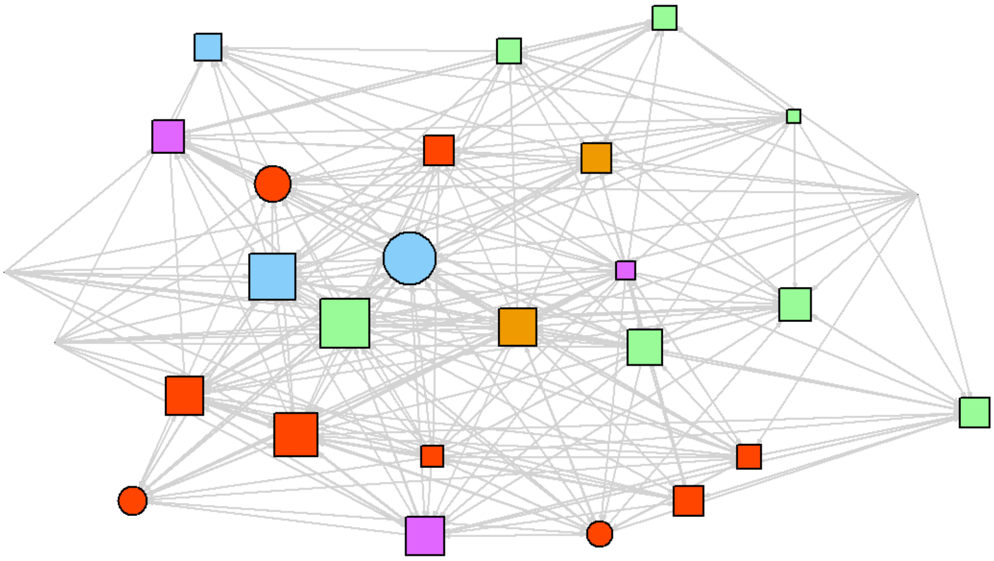


Figure 8b: Contacts among services within GGZ-Zuid-West Vlaanderen mental health network with service type homophily

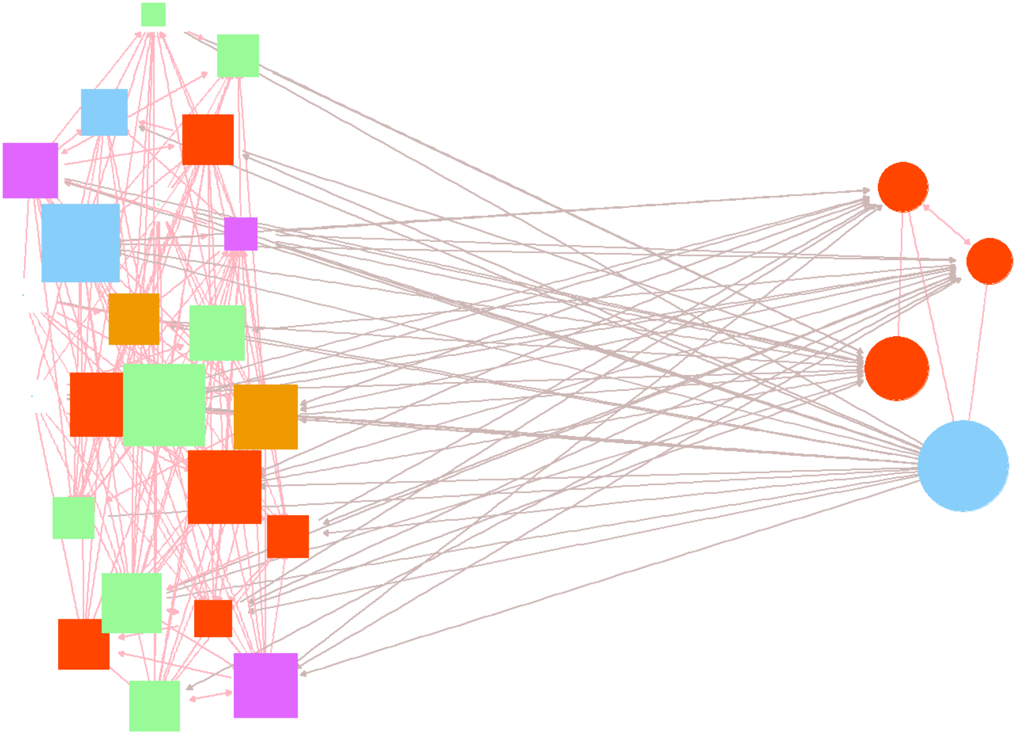
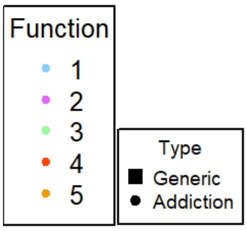


Table 17: Network indicators for GGZ-Zuid-West Vlanderen mental health network

Indicator	Value
Number of services	27
Density	0.41
Indegree centralisation	0.36
Betweenness centralisation	0.04
Average indegree by service specialisation	
Generic services	10.04
Specialised services	13.80
Homophily on specialisation	
Generic services	-0.04
Specialised services	0.10

27 services from Zuid-West Vlanderen participated in the survey. Most were generic mental health services, with only four specialised addiction services that were included in the sample. Three out of the four specialised addiction services were hospital units. These three units had a high indegree, i.e. they were cited many times by other services, whilst the fourth service had a high outdegree, i.e. citing many other (generic mental health) services. Density (0.41) and indegree centralisation (0.36) were high, the average indegree being higher in specialised addiction services than in generic mental health services. As the first graph displayed, there were services from all the care functions with a significant level of indegree centrality, the most central being services from Function 1 and 3. There was one specialised addiction service among the services with high centrality. Betweenness centralisation was very low. Therefore, this network favoured a linkage model of integration. Values of homophily/heterophily were low.

4. Structure of the network of contacts in Réseau Santé Namur



The size of symbols represents degree centrality

Figure 9a: Contacts among services within Réseau Santé Namur

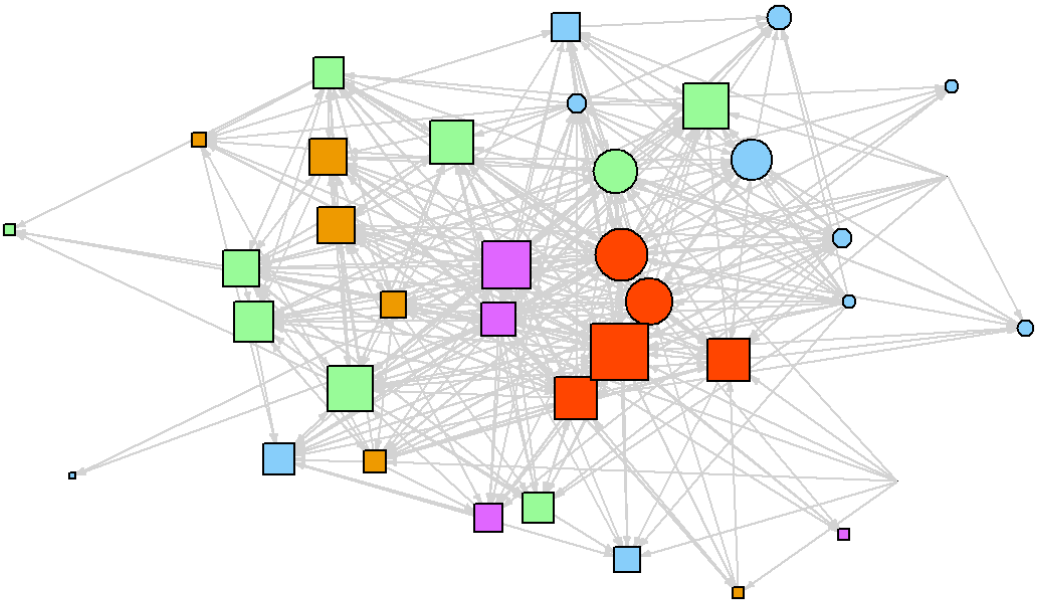


Figure 9b: Contacts among services within Réseau Santé Namur with service type homophily

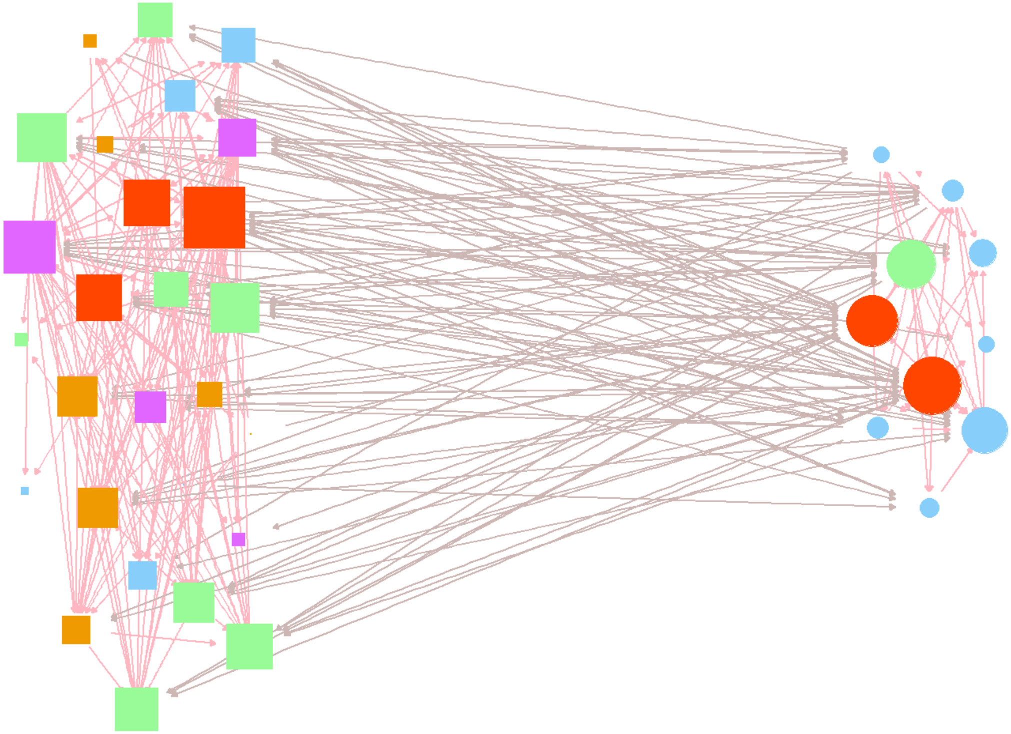


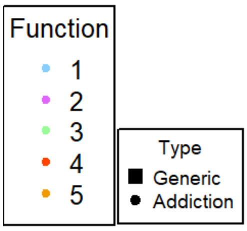
Table 18: Network indicators for Réseau Santé Namur mental health network

Indicator	Value
Number of services	37
Density	0.28
Indegree centralisation	0.27
Betweenness centralisation	0.07
Average indegree by service specialisation	
Generic services	10.25
Addiction services	10.60
Homophily on service specialisation	
Generic services	0.12
Addiction services	0.13

37 services from the *"Réseau Santé Namur"* participated in the survey, with a good repartition between generic mental health and specialised addiction services, as well as between care functions. Density was moderate (0.28) as well as indegree centralisation (0.27). Generic mental health and specialised addiction services had similar average indegree, indicating that these two types of services were not more central or more peripheral in the network. Betweenness centralisation was low. Therefore, this network had a structure moderately oriented towards linkage. Globally, however, the most central services were a group of hospital units (Function 4), either generic or specialised, and a series of generic services from Function 3. Both groups of services had a slight tendency towards homophily, although there were many ties reported across groups.

5. Structure of the network of contacts in Brussels

The network in Brussels displays a specific structure because of its large number of services, and its organisation in 4 sub-networks. 77 services from Brussels participated in the survey. In the first graph, the four sub-networks are displayed, with *Norwest* in the upper left corner, *Hermes+* in the upper right corner, *Brussels-East* in the bottom right corner, and *Rézone* in the bottom left. In the middle of the graph, there are a few services that did not report membership to a sub-network. We observed that services had slightly more connections with services from the same sub-network, although there were quite a lot of connections between different sub-networks. Indeed, Coleman's homophily was 0.11 for Norwest, 0.14 for Hermes+, 0.15 for Brussels-East and 0.24 for Rézone. Globally, density (0.13) and indegree centralisation (0.24) were weak. Betweenness centralisation was also weak in the global network. Generic mental health services had a slightly higher average indegree than specialised addiction services, indicating that the latter were somewhat more peripheral. Both service types were homophilous, as the second graph illustrates. Looking more specifically at the four sub-networks, Rézone was the network with the highest number of participating services. Two hospital units, one generic and one specialised, had the highest indegree, followed by several specialised services active in Function 3. The two groups of service types in Rézone were homophilous. By contrast, Norwest had the lowest number of participating services, yet with the highest density. It also had the highest betweenness centralization. One generic mental health service active in Function 3 appeared to be the most central service in the sub-network. While specialised addiction services in the area were heterophilous, generic mental health services were highly homophilous. These values tend to indicate that specialised addiction services were rather peripheral in the sub-network, although these values may be the result of the low number of services included. However, the sub-network tended to follow a coordination model of integration. In both Hermes+ and Brussels-East, services active in outreach, i.e. mobile teams, had a high indegree centrality. Similarly, in both sub-networks, density and indegree centralisation were moderate, with generic mental health services being more central than specialised addiction services. Clearly, in these two sub-networks, specialised addiction services appear to be peripheral. Hermes+ had, however, a higher betweenness centralisation, being therefore more organised with a coordination structure.



The size of symbols represents degree centrality

Figure 10a: Contacts among services within Brussels mental health network

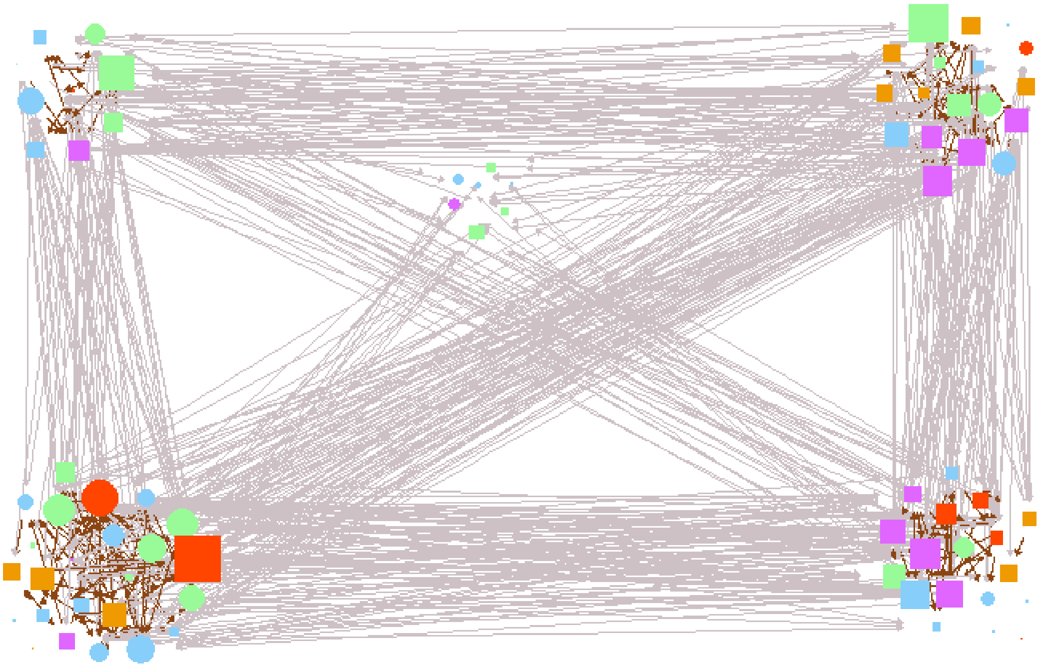


Figure 10b: Contacts among services within Brussels mental health network with service type homphily

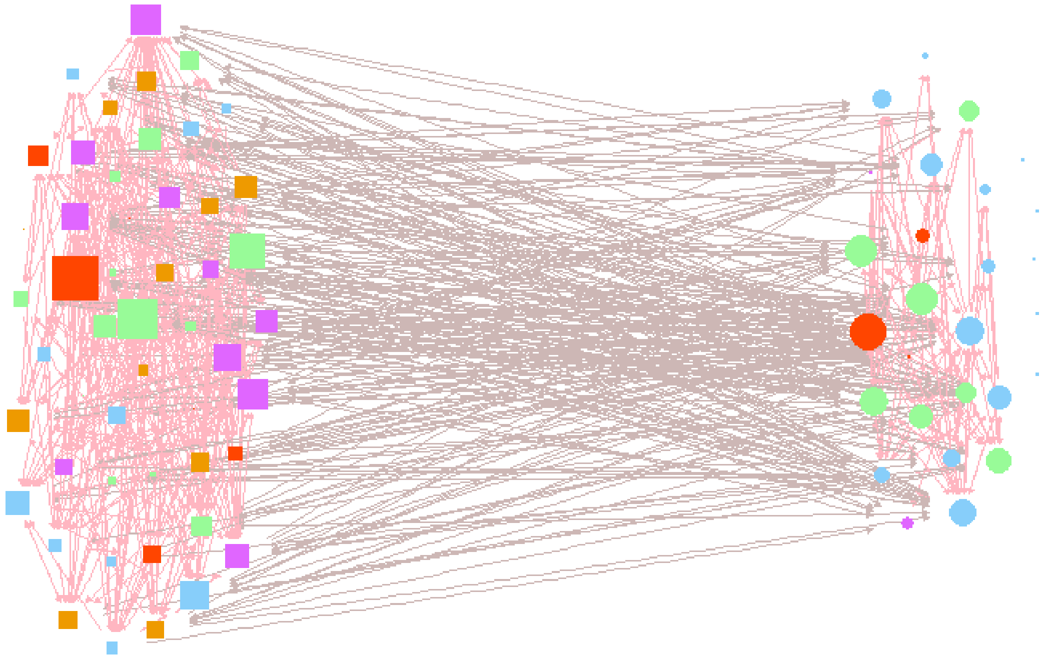


Table 19: Network indicators for the Brussels mental health network

Indicator	Value
Number of services	77
Density	0.13
Indegree centralisation	0.24
Betweenness centralisation	0.05
Average indegree by service specialisation	
Generic services	10.74
Specialised services	9.96
Homophily on specialisation	
Generic services	0.30
Specialised services	0.26

Table 20 presents the SNA metrics for each sub-network within the Brussels network.

Table 20: Network indicators for the four Brussels' subnetworks

Norwest		Hermes+		Bruxelles-Est		Rézone	
Indicator	Value	Indicator	Value	Indicator	Value	Indicator	Value
Number of services	9	Number of services	18	Number of services	18	Number of services	25
Density	0.36	Density	0.24	Density	0.22	Density	0.20
Indegree centralization	0.51	Indegree centralization	0.23	Indegree centralization	0.19	Indegree centralization	0.21
Betweenness centralization	0.26	Betweenness centralization	0.16	Betweenness centralization	0.05	Betweenness centralization	0.07
Mean indegree by specialization		Mean indegree by specialization		Mean indegree by specialization		Mean indegree by specialization	
Generic services	10.83	Generic services	12.85	Generic services	11.07	Generic services	9.07
Specialised services	10.00	Specialised services	9.75	Specialised services	5.5	Specialised services	13.5
Homophily on specialization		Homophily on specialization		Homophily on specialization		Homophily on specialization	
Generic services	0.67	Generic services	0.73	Generic services	0.68	Generic services	0.38
Specialised services	-0.2	Specialised services	-0.2	Specialised services	/	Specialised services	0.38

D. Discussion

Globally, the sample of services in the five network areas was composed of about three quarters of generic services and one quarter of specialised addiction services. These include, however, specialised units in psychiatric hospitals. Specialised addiction services were more numerous in the larger urban areas, i.e. in Antwerp and Brussels. Globally, the sample was composed of more than half outpatient services, although these were less numerous in proportion in some networks. It indicates that participation in the survey was possibly easier in inpatient services. We had significant differences in the proportion of participating services compared to the whole set of services in the two larger urban areas, Antwerp and Brussels. More particularly, in Antwerp, there have been significantly more inpatient services than in the whole network, while in Brussels, there have been more specialised addiction services and less outpatient mental health services in the sample than in the network. Hetero-classification (our classification of services) was highly consistent with self-classification, and participation has been sufficient to allow for the validity and reliability of the results.

While, unsurprisingly, specialised addiction services reported having more than 90% of the users with SUD, the proportion was still 31% in generic mental health services, which is high and confirms the importance of the prevalence of co-occurring disorders, even if the proportion may have been somewhat overestimated. In terms of accessibility, outpatient services were less restrictive in access than inpatient services, but generic mental health care services were significantly more restrictive than specialised addiction services. In particular, substance use to start a treatment was an exclusion criterion for 41% of services globally, and 45% in generic mental health services. It is questionable whether this exclusion criterion is always appropriate, e.g. with regard to the therapeutic programme of the service. For example, while this proportion was the highest in inpatient services, it was also high (52%) in services active in Function 3, i.e. rehabilitation services. We recommend directors and network coordinators to examine whether this criterion is appropriate, as it constitutes an important barrier to service access for people with SUD. In addition, we found that restrictive access was also associated with some organisational mechanisms, such as services applying out-of-pocket payments. These services are generally services having a strong medical care supply. Once again, while it is understandable that inpatient services are more restrictive, being secondary care services, the question needs to be raised for what concerns outpatient and primary care services.

Another important finding was that 28% of the generic mental health services and 30% of the specialised addiction services reported having at least one peer-worker. This information is key to favour access to services in a personal recovery approach.

The examination of the structure of contacts and referrals across services also had some interesting findings. We hypothesised that specialised addiction services would be more peripheral in the networks and that the structure of contacts would reveal a tendency to work in silos, i.e. a tendency to homophily, in network analysis terms. Our results, however, did not show such tendency. In some networks, there have been few specialised addiction services participating and, therefore, it was not possible to measure clearly a trend towards homophily in this type of service. Globally, however, homophily was low in many networks, and tended to be more noticeable across specialised addiction services than across generic mental health care services. In addition, there were many contacts across service types. We cannot rule out, however, that results may be overestimated as possibly the services that participated in the survey were the most involved in care for people with SUD. The structure of contacts is not sufficient to capture the process of care integration. However, the exploratory examination of the structure showed that, in general, specialised addiction services were not more peripheral in their network. In most networks, the structure of contacts showed a certain trend towards a linkage model of integration, which is based on multiple contacts across all service types. Also, generally, inpatient units were central. While the global centrality of specialised addiction services should favour better access to mental health care for people with SUD, this type of structure, however, indicates that some networks remain centred on hospitals. This structure also does not favour coordination. Although these results need to be interpreted at the local level, linkage is more favourable to primary care operations, while the organisation of care for people with moderate to severe disorders and complex situation might deserve a structure more oriented towards coordination. We therefore recommend network coordinators to reflect on the opportunity to develop formalised care pathways for these subgroups of users with higher needs.

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GENERAL DISCUSSION AND RECOMMENDATIONS

I. GENERAL DISCUSSION

The research question underlying SUMHIT addressed the current level of collaboration and integration between the generic mental health and the specialised substance use disorder care sectors. It examined how integration could be improved effectively. To this end, we assessed various aspects of the phenomenon at the level of care users, the level of professionals and services, and the level of the service networks and the care system, using both quantitative and qualitative methods.

The study confirmed the high prevalence of the **comorbidity that associates substance use related disorders and other mental disorders** in relative terms. The study was not designed to assess the prevalence of comorbidity in absolute terms, i.e. the estimation of the rate of comorbidity in the general population. However, several findings of SUMHIT clearly confirmed the strength of the association between mental disorders and substance use. The examination of the care needs of service users who are using substances, both in the generic mental health care and the specialised addiction care sectors, indicated that users having an unmet care need in mental health were five times more likely to also have an unmet need regarding substance use, and vice-versa. When the need of mental health care was met, however, the need of care related to substance use was significantly three to four times lower.

The experience reported by these care users indicated the extent to which this comorbidity raised specific **barriers to care access** in both generic mental health and specialised addiction care sectors. Not only did the study confirm the high prevalence of this comorbidity, it also highlighted **the numerous care needs** that are associated with it, such as socio-economic, daily activity, and relationship needs. The latter, particularly, appeared to be an unmet care need domain for the majority of users, including for the class of care users reporting a lower number of care needs. This finding indicates the extent to which this population suffers from **social isolation.** It is clearly evidenced in the scientific literature that social isolation and connectedness have a major impact on mental health(1-3) as well as on the capacity of individuals to access appropriate support(4).

The study also indicates that the care needs of people with mental and substance-related comorbidity do not affect both genders similarly. Women were significantly associated with the class of care users reporting mainly met care needs compared to the two other classes, i.e. users with few needs and users with many unmet needs. Therefore, women tended to report more care needs, although they did not report a higher number of unmet care needs. It is known, in the literature, that women tend to have less access to specialised addiction services and inpatient psychiatric services, although they would access more outpatient mental health services than men(5-7). Further research should investigate this phenomenon in more detail, but these findings indicate that **gender is a factor that requires specific attention** and different care access mechanisms(8).

SUMHIT also indicated that, according to services, **31% of care users in generic mental health services were identified as having a substance use related disorder.** This rate might be somewhat overestimated in relation with participation in the survey, but remains significant. A majority of service users, recruited either in generic mental health or specialised addiction services, had their needs met in the specific domain of the service, i.e. mental health or addiction. However, users recruited in generic mental health services were more likely to report unmet needs regarding substance use, while users recruited in specialised addiction services were more likely to report unmet needs in mental health as well as socio-economic needs. The study identified several determinants of care needs and indicated that access to services was not only driven by such needs. We observed that the number of care needs, in particular **the number of unmet care needs, was associated with lower social integration and lower quality of life**. We also noted that having more unmet care needs was associated **with the use of multiple substances**. Care users who use illicit drugs, in particular opiates, were more likely to be treated in specialised addiction rather than in generic mental health care services, despite also being more likely to report unmet needs related to their mental health. However, results show that care users who had **contacts with generic social services had a significantly lower number of unmet needs.** The most deprived population likely has limited access to generic mental health care, in particular people who use opiates and multiple substances, and even less to the most generic types of services, e.g. social services.

Barriers to care are clearly experienced and reported by care users. The results can be put in perspective with the high number of services (41%) that declared **substance use as an exclusion criterion to start treatment.** Whilst it can be understandable that the use of substances can be an adverse condition for several therapeutic programmes at the individual level, this criterion is a barrier to care at the population level and affects other needs and conditions of care users. At the level of networks, the full range of care supply should be available to care users within a determined catchment area. We used an adapted version of the ESMS classification tree(9, 10) in order to describe with more detail the care supply in the five study areas. From a population point of view, the presence of drug-free services, i.e. services supplying therapeutic programmes in which the use of substances is not allowed, either generic or specific, should be complemented in the care supply with **other services that are available to people who use drugs** and who follow another pathway to recovery. We, therefore, recommend that network coordinators look more closely at the range of care supply available in their area and within the network so that there is sufficient care supply available for people who use drugs.

In the qualitative interviews, care users also reported experiences of **stigma, particularly regarding substance use in the generic services.** Care users described how stigma could be a barrier accessing appropriate information on care options and treatment. They specifically pointed to insufficient attention to the trauma that many of them experienced in their life or care trajectory, and the feeling of not being really listened to. This feeling strengthens their global impression of care fragmentation, with care professionals and services being unable to communicate information with each other and unable to adapt care to the individual needs and situations. A textbook example of such incapacity is reflected in the phenomenon of waiting lists. Most services manage their caseload with such waiting lists, which may have a significant impact on the global care trajectory of care users with substance use disorders, perhaps more so than on other care users given the importance of motivation for behaviour change. Whilst **waiting lists** are mainly the consequence of organisational features, they are perceived by care users as a **mark of fragmentation and silo working**, as many services apply lengthy admission processes. Care users still point to the importance of some individual care providers who can also have a great impact on the care trajectory. Trust towards professionals is of utmost importance and care users report good practice examples of key professionals that were "really listening" and caring, although these encounters tended to occur by chance. Care users felt the importance of such encounters in their care trajectory and claimed for some form of case management that would be based on principles of mutual trust (e.g. strengths-based case management(11)). Care users also pointed to the importance of peer workers for the establishment of such mutual trusting relationships. In the survey of services, we found that across service types and networks, about **30% of services reported having at least one peer-worker**.

Other results from the survey on services, however, only confirmed partially the users' experience. On the one hand, waiting lists and the experience of restricted access to some services is consistent with the results of the survey on services indicating that **generic mental health care services, in particular inpatient services and rehabilitation services have significantly more restrictive access conditions.** While it is also understandable that inpatient services have more restrictive access conditions, this appears to be counterproductive for rehabilitation and generic outpatient mental health care services in general. On the other hand, however, silos, i.e. the tendency to favour collaboration with other services in the same sector, were not clearly reflected in the structure of contacts existing between services. **Homophily, which is the measure of such tendency of services to refer care users to services of the same type (i.e. within generic mental health or within specialised addiction services) was low in many networks,** and tended to be more noticeable across specialised addiction services than across generic mental health care services, with the exception of some sub-networks in Brussels. This result has to be interpreted with caution, however, given the specific characteristics of the network in Brussels in terms of size and subnetworks. Nor do specialised addiction services appear to be more peripheral in the network than generic mental health services. We must admit, however, that participation in the service survey may have been driven by the topic of the study and, hence, that the services that were more involved in care for people with substance use disorders may have been more actively participating in the survey.

Nevertheless, the structure of contacts between services may not sufficiently capture the content of the care process for users. It remains interesting to note, however, that **the existing structure of contacts between services allows for collaboration and possible coordination.** In several networks, there exist many contacts and referrals between services and across service types. In many cases, however, the structural model of integration that emerged from contacts is **favourable to *linkage,*** i.e. numerous links between all services in a network, which allows for primary integrated operations and responds to the mild needs of care users. In several networks, the services with higher centrality were hospital units. Within a personal recovery approach, however, a higher centrality of outpatient services would be expected. Likewise, more complex needs and formalised operations of integration might require more *coordination,* which is found in networks with higher centralisation.

Results from the literature review indicate that **most of the issues identified in SUMHIT are also topics of debate elsewhere.** Several studies point to the need for more recovery-oriented policies, appropriate training of professionals, and adapted organisational frameworks. In addition, studies highlight the necessity for professionals to support care users' recovery capital, i.e. not only providing medical and psychological treatment but also addressing elements related to their social inclusion, like housing and employment. While it is not possible to provide a global recommendation for networks, as the structural features of a network need to be tailored to the local needs and situation, we can recommend that network coordinators examine their local context and service supply more carefully based on the findings emanating from SUMHIT.

All studies have their limitations, and SUMHIT is no exception. One of the main limitations of the study was that we only had limited access to office-based care providers, such as GPs, psychiatrists, and psychologists. These care professionals, however, take on an important role in care delivery for the target group of people with mental and substance use disorders in Belgium. For instance, SUMHIT found that most care users recruited into the study reported at least one contact with a GP during the year before the survey. In other respects, recent policy measures allowed for the reimbursement of up to twenty yearly visits to a psychologist who is registered with a mental health network. It is possible, therefore, that some specific care users' profiles were not covered in the study. Likewise, it is possible that we missed a part of the care supply. In the qualitative interviews, we also tried to include people who had no access to care services, although even people who had least contacts with the care system were, to some extent, in contact with some type of care provider, e.g. with low-threshold programmes, outreach teams, or the so-called *'lieux de liens',* i.e. peer-run services aiming at socialisation, as found in Brussels and Wallonia. We cannot rule out the fact that some severely deprived populations with the highest level of needs were missed.

Other limitations are related to the participation rates in the surveys. We know that some care sectors were highly reluctant to participate, either because they did not feel concerned about the topic, or because they considered that they had insufficient resources to participate. Regarding the latter limitation, we recommend that more support is given to services so that they can be fully involved in research projects that aim to improve care effectiveness.

II. RECOMMENDATIONS

Based on SUMHIT findings, we formulate several recommendations for policy authorities as well as for local care providers and network coordinators. Several of these recommendations were discussed during two focus groups, one in each linguistic community. For each recommendation, we briefly outline the supporting key findings and how these findings may relate to other parts of the study. We also indicate the stakeholders for whom the recommendation has implications and provide examples and avenues of how to operationalise it in practice. Recommendations are presented at the macro- (networks and care system) and meso- (services and care professionals) levels.

A. Recommendations at the macro level

Recommendation 1: Personal recovery is an evidence-based approach to mental health care and care for substance use disorders. Principles of personal recovery should be considered in the general organisation of care in mental health and in specialised care for people who have substance use disorders, as well at the level of organisational mechanisms (funding, provision, governance) as at the level of services, individual care professionals, and interventions.

Stakeholders involved: All policy authorities with competence in health care (Federal and federated entities), network coordinators and service managers, individual care professionals

Examples and avenues for action: This is an overarching recommendation. See the following recommendations for examples and avenues for action.

Personal recovery principles are evidenced and implemented in the organisation and delivery of care in most high-income countries*(12-15)*. These principles have also been suggested as the guiding framework for better coordination and integration of care in mental health and care for substance use disorders(16-21). The main features of the personal recovery approach are the support for the person's strengths and own preferences for recovery, with an emphasis on social integration, opportunity for maximum social participation, and rehabilitation as the priority objectives of each individual's journey to recovery. It is, therefore, based on sense of self, social connection and supportive relationships, continuous support of hope for change, empowerment, and support of coping skills. People with mental or substance use disorders have the capacity to develop a meaningful life despite the possible impairments engendered by illness. It requires reducing stigma and actively creating meaningful perceived positions from the side of the society. Recovery, sometimes designated as 'clinical recovery', i.e. in the limited sense of decreasing symptoms of mental illness or change in substance consumption behaviour, is only one possible pathway to care and can be a consequence of personal recovery rather than a precondition for personal recovery to occur(22).

Personal recovery was also the theoretical postulate underpinning SUMHIT and, therefore, the support for the personal recovery approach is not a result of the study per se. However, several findings of the study are consistent with the need to strengthen this approach in the organisation of care supply in Belgium. It supposes giving priority to objectives of social inclusion and quality of life, working with the care users' preferences, providing users with all the information required so that they can chose their preferred care options and reducing barriers to care access. Several interventions at the micro-level can be envisaged, such as working with peer-workers or providing flexible care-management based on care users' preferences. At the meso-level, service managers and network coordinators need to organise themselves to provide the full range of care supply at the network level so that all care options, including for instance harm-reduction oriented services, are available and users are provided with the information required. At the macro level, provision and funding schemes are expected to facilitate contacts and information exchange across services. For instance, findings from SUMHIT indicated that accessibility was significantly more restrictive in services that apply out-of-pocket payments. Several suggestions are further developed in the following recommendations.

Recommendation 2: Personal recovery is a novel approach that should ground care and social support for people with mental and substance use disorders. As such, principles of the personal recovery approach should be included in the basic education and training of social and care professionals. In addition, continuous training in the personal recovery approach should be made available to social and care professionals.

Stakeholders involved: Policy authorities with competence in health care (Federal and federated entities), policy authorities in the federated entities with competence in education, authorities responsible for university and high school teaching programmes, network coordinators and service managers, organisations providing continuous training to social and care professionals.

Examples and avenues for action: Inclusion of lectures and course modules on personal recovery and rehabilitation in university programmes in medicine, particularly in specialisation programmes for general medicine and psychiatry; inclusion of lectures and course modules on personal recovery and rehabilitation in university programmes in clinical psychology and orthopedagogy; Inclusion of lectures and course modules on personal recovery and rehabilitation in high school programmes in social work, nursing, special needs education, and any other professional training oriented towards care and social support; organisation of continuous training modules centred on personal recovery and rehabilitation; providing financial incentives for the organisation of such programmes; providing incentives (e.g. in the form of accreditation points) to professionals attending lectures and course programmes on personal recovery and rehabilitation.

Although care professionals reported being supportive of interventions that are in line with personal recovery principles, results of SUMHIT indicate that there are some misunderstandings about what personal recovery means and about how to implement it in everyday practice. These arguments are also found elsewhere, as reported in the literature(15), and professionals identify the need for more training. Changes in the current care practice and organisation have not led to sufficient updates of education and training programmes. Personal recovery skills should be integrated in the most generic education programmes, and not only in modules for specialisation.

Recommendation 3: The inclusion of peer-workers in care teams is an evidence-based method that facilitates the personal recovery approach, both in generic mental health care and specialised care for people with substance use disorders. In line with the previous recommendation, more training programmes for peer-workers are required.

Stakeholders involved: Policy authorities with competence in health care (Federal and federated entities), policy authorities in the federated entities with competence in education, network coordinators and service managers, organisations providing continuous training to social and care professionals.

Examples and avenues for action: Establishment of training programmes for peer-workers at professional and academic level.

The inclusion of peer-workers in the staff of services is one of the evidence-based interventions in support of the personal recovery approach(23-32). Peer-work is a twofold intervention, as it supports care delivery and also has a positive influence on the own recovery journey of peers(33). Findings from SUMHIT indicate that peer-workers are active in about one third of the services. The value of employing peer-workers is recognised by most professionals with experience of working with them, and they are also in demand by service users. It is not always easy, however, to find and include peer-workers in care staff. Whilst working with peer-workers can be included in training programmes for professionals, there is also a need to prepare, support, and supervise peer-workers. A few training programmes for peer-workers exist and were praised by professionals in SUMHIT. Therefore, these programmes should be extended and made available to a larger number of care users.

Recommendation 4: Network coordinators and service managers should establish specific care circuits for people with support needs related to substance use disorders, as care circuits could be established for other multiple and complex needs. Care circuits for people with support needs related to substance use disorders should not be limited to generic mental health and specialised addiction services, but include any type of health and social care and act in stepped-care logic, i.e. providing the most generic care as first option.

Stakeholders involved: All policy authorities with competence in health care (Federal and federated entities), with a particular attention to the Federal authorities managing mental health networks; network coordinators and service managers.

Examples and avenues for action: (a) At the macro-level: facilitating mechanisms for pooled funding; (b) at the meso-level: establishment of central primary care entry points (e.g. *Kruispunten*), personal-recovery-oriented case-management for care users without sufficient capacity for navigating the care system; (c) at the micro-level: access priority to accommodation or crisis services for users who registered for a care plan, financial incentives for services that collaborate with other services in the network based on a care plan for a care user (pay-for-performance).

The mental-health reform policy that has been implemented since 2010 (‘Article 107’) was based on the establishment of service networks and care circuits. While service networks were implemented, care circuits have been disregarded. Care circuits are not specific to people with mental illness and substance use disorders. There could be care circuits for any complex need. A care circuit is a bundled care package defined for a specific target group of care users, with the objective to improve care coordination and continuity of care(34). It may include specific access criteria to services, dedicated information exchange tools, and specific mechanisms for allocating resources and financing interventions and services. Several examples of forms of care circuits exist in other care systems abroad, either public (e.g. clustering, or Payment by Results in the UK(35, 36)) or private (e.g. within managed care in the USA(37, 38)). A care circuit does not imply a defined care trajectory nor any predefined care objective. The suggestion is based on organisational arrangements for people and services participating voluntarily. For such a group of care users and services, specific mechanisms may apply, e.g. at the micro-level, the definition of a care plan for participants, access to specific interventions such as case-management; at the meso-level, priority access rules to specific services, such as crisis centres, for participants; and at the macro-level, specific funding mechanisms (pooled funding or pay-for-performance incentives) supporting the care circuit. There are many options that can be included in the care circuit, and it is up to stakeholders to discuss and agree on the most appropriate interventions and mechanisms to be included. Yet, care organisation needs to be considered at the area and population level, and not only at the individual level.

Findings from SUMHIT indicate that the structure of contacts between services makes it possible to develop more linkage and coordination options. However, there is a slight trend towards homophily, more particularly from the part of specialised addiction services. Nonetheless, even when a specific care circuit is not defined, as far as people with substance use disorders are concerned, there should be more collaboration mechanisms that associate both generic mental health care and specialised addiction services and that aim to provide care beyond substance management.

Recommendation 5: Personal recovery requires higher social inclusion and social support and to tackle stigma regarding people who have needs with mental health and substance-related issues. Actions are therefore needed to decrease stigmatisation towards people with care needs in mental health and substance use disorders in the general society as well as among care professionals and services.

Stakeholders involved: All policy authorities, with a specific attention to authorities with competence in health care (Federal and federated entities); network coordinators and service managers.

Examples and avenues for action: Information and prevention actions against stigma, information diffusion about positive mental health; inclusion of the topic of stigma in education and training for care professionals, in particular towards professionals who are not specialised in mental health and in addiction, such as primary care and social support professionals.

The main finding supporting this recommendation stem from qualitative interviews with care users, who repeatedly reported how they felt stigmatised in society and services and experienced the consequences of stigma, particularly people using substances in generic services. A textbook example of stigma, reported by care users, was the lack of capacity of professionals to cope with trauma. Stigma was, to some extent, also reflected in the high proportion of services (41%) who reported substance use as an exclusion criterion to start treatment. This proportion was high in services delivering rehabilitation programmes. A sizable proportion of services apply this exclusion criterion in line with a drug-free therapeutic programme, i.e. not allowing substance use in order to follow their care programme, particularly inpatient services. Globally, however, this criterion constitutes an organisational barrier to care access, in particular when no alternative service is available in the catchment area of the network. Therefore, the recommendation is twofold: on the one hand, network coordinators and service managers are invited to reconsider the rationale behind this exclusion criterion; on the other hand, network coordinators and service managers are also invited to consider the care supply available at the area level, so that alternative services are made available.

Stigma may also result from limited knowledge about specific disorders and needs. Therefore, network coordinators, service managers, and individual care professionals are encouraged to develop awareness about stigma mechanisms and consider tackling stigma in their everyday, routine practice. It is worth noting that hope for change and mobilising the care user’s resources are key principles of personal recovery(14, 22). Stigma may result from a priori, unconscious beliefs that care users have no chance to progress in their recovery journey or that they do not have sufficient resources and capacity to apply for some intervention or care option. These attitudes are not consistent with evidence indicating that recovery is possible, and should be avoided.

B. Recommendations at the meso level

Recommendation 6: Care supply and availability of services and interventions should be examined at the area level, i.e. network, so that the full range of services and interventions is made available to care users. Therefore, the role and mission of generic mental health and specialised addiction services should be clarified at the network-level.

Stakeholders involved: Policy authorities regulating services (Federal and federated entities); network coordinators and service managers.

Examples and avenues for action: Update of care directories that include a refined typology of service types, collaborative setting of inclusion and exclusion criteria in services, any initiative aiming to improve mutual knowledge, trust, and information exchange across services within the network.

Findings in SUMHIT indicate that the care supply is spread unevenly across catchment areas, i.e. service networks. Several barriers reported by care users are related to waiting lists, long and burdensome processes for accessing care, and lack of information exchange across services. The survey on services also indicated that networks were very different in size and composition, with several service types and interventions being unevenly distributed. Each service defines its own inclusion and exclusion criteria. In order to avoid these barriers, the care supply should be considered at the area and population levels, so that individual service rules and therapeutic programmes can be compensated by alternative services available elsewhere in the network. A clarification of the care supply that is available should be considered at the network level, including more efficient tools for referral and information exchange, including with primary care, self-help, and low threshold services that can enhance social connection and continuity of care(39).

Recommendation 7: In line with the previous recommendation, information exchange between services in networks should be improved.

Stakeholders involved: Policy authorities regulating services (Federal and federated entities); network coordinators and service managers.

Examples and avenues for action: Implementation of shared information systems across services.

This recommendation has been repeatedly formulated in care evaluation research. Yet, lack of information exchange is still an issue at both the micro-level, i.e. between professionals involved in the care delivery of individuals with multiple care needs, and at the meso-level, i.e. across services concerning their care supply and target groups. Several tools for data collection and information exchange exist at both levels. Several authorities in Belgium have recommended the implementation of the Bel-RAI suite of assessment tools (See: https://belrai.org). Since the use of the Bel-RAI was not examined within SUMHIT, we are unable to determine whether this tool is helpful to address the issue of information exchange between services. Other tools also exist or are being tested. Yet, shared tools and instruments are surely required. Tools should also contribute to assess user-reported information and experience (PROMs and PREMs)(40), particularly at the local level. Authorities should also offer support to services in order to test and assess the tool’s implementation. Support can take the form of training and financial or material resources, but can also consist in more coherence in the tools used for information sharing. For example, several services and professionals are requested to collect administrative information with different tools making data collection a burdensome task to carry out, resulting in data that can be hardly compared.

Recommendation 8: Network-level interventions should be considered and implemented more systematically to support care users navigating services according to their care needs and preferences. This may include, but is not limited to, case management, central primary care points, outreaching, and peer-support.

Stakeholders involved: Policy authorities regulating services (Federal and federated entities); network coordinators and service managers.

Examples and avenues for action: Establishment of central primary care points (e.g. *Kruispunten*) where any type of care need can be assessed and where information about appropriate care options is found; care users are oriented and supported to access appropriate care resources. Implementation of recovery-oriented case-management, i.e. an intervention for people who are unable to navigate the care system, in which a case manager can help orienting the user according to care needs, preferences, and strengths, in collaboration with usual social and care professionals; inclusion of the identification of any type of care need as part of the tasks of outreach workers and adequate referral; broader inclusion of peers within services.

Several network-level interventions were considered in SUMHIT. In particular, case-management was discussed on several occasions. There were, however, different views on the objectives and principles of case-management. For instance, case-management in addiction has sometimes been implemented with a view to orient care users with substance use disorders in a care pathway towards abstinence. In mental health care, there are different variants of case-management, e.g. with case-managers being one of the professionals caring for the care user, or being a broker between different professionals. Case-management is also sometimes seen as a long-term intervention while, in other forms it is offered as a crisis or time-limited intervention (e.g. Critical Time Intervention)(11). In the Netherlands, the model of Flexible Assertive Community Treatment (F-ACT) tries to combine several models(41-45). While within SUMHIT, we cannot conclude whether a case-management model is more appropriate to care users and services involved in networks, it appears that the interest of a case-management intervention is deemed useful for people who are, temporarily or more definitely, unable to find their way in the care system and across available resources. Relational continuity was reported as a priority. Therefore, case management needs to be implemented at the network-level, in support to the care supply. Some local care providers warned against an overly instrumental, brokerage interpretation of case management, and argued that case-managers should explicitly focus on further developing the clients' natural network and context. Such form of case-management can also contribute to counteract social isolation (See Recommendation 10). Evidence supports the interest of the F-ACT model(46, 47). Nonetheless, in line with other recommendations, case-management should be carried out according to personal recovery principles(11, 48).

Other interventions aiming to support collaboration within networks can be envisaged. Another intervention that was supported during focus groups with professionals and decision-makers were central primary care points, e.g. *Kruispunten* (i.e. Crossroads). The role of outreach teams can be strengthened to support navigating the network, in combination with case-management. The role of peer-support has also been emphasized earlier. Still other interventions can be mentioned. Authorities are recommended to facilitate and support the implementation of such interventions, for instance by providing the appropriate funding and governance mechanisms. Indeed, individual service funding and Fee-For-Service (i.e. funding according to the number of care acts provided), which are the most utilised funding mechanisms in the Belgian care system, do not favour collaboration and referrals across services(49, 50), nor do they facilitate interventions that are not related to an individual service. As recommended earlier, pooled funding, episode-based funding, and incentives related to the registration to a care circuits or elements of Pay-For-Performance (i.e. funding based on the achievement of determined objectives) based on objectives of social integration of care users might be preferable. Funding mechanisms in care systems are, however, a complex and sensitive topic. The recommendation is not pointing to a specific mechanism, but rather reconsidering funding mechanisms alongside care provision and innovative interventions.

Recommendation 9: In line with the previous recommendation, interventions and organisational mechanisms should be implemented to reduce and avoid the resort to waiting lists.

Stakeholders involved: Policy authorities regulating services (Federal and federated entities); network coordinators and service managers.

Examples and avenues for action: The examples provided for recommendation 8 also apply to recommendation 9: establishment of central primary care points (e.g. *Kruispunten*) where any type of care need can be assessed and where information about appropriate care options is found; care users are oriented and supported to access appropriate care resources. Implementation of recovery-oriented case-management, i.e. an intervention for people who are unable to navigate the care system, in which a case manager can help orienting the user according to care needs, preferences, and strengths, in collaboration with usual social and care professionals; inclusion of the identification of any type of care need as part of the tasks of outreach workers and adequate referral; broader inclusion of peers within services.

Waiting lists to access services have repeatedly been identified as a counterproductive mechanism. In SUMHIT, care users also emphasised the extent to which waiting lists were detrimental to an effective journey towards recovery. Perhaps waiting lists are even more detrimental for people with substance use disorders as motivation for change plays a key role in the recovery journey of these care users. Waiting lists are usually related to a lack of sufficient resources to address all the care demands. However, waiting lists may also be related to the lengthy, sometimes burdensome, process of admission applied in many services. Findings in SUMHIT indicated that this type of admission process was more frequent in generic mental health and inpatient services. Some admission processes could be avoided or substantially reduced if they were conducted at the network-level (See previous recommendation) or if there was more accurate information exchange across services at the time of referral. All network-level interventions are supposed to reduce the adverse effect of admission procedures, including the resort to waiting lists.

Recommendation 10: Trauma-informed care is an important approach for people with substance use disorders, both in generic mental health care and in specialised care settings. Additional knowledge training and structural embedding of trauma-informed principles are suggested.

Stakeholders involved: network coordinators and service managers, individual caregivers and therapists, organisations providing specific training to social and care professionals.

Examples and avenues for action: Establishment of specific training programmes for reference workers.

Evidence shows that coping with traumatic experiences is an essential part of the recovery journey of many people with SUD(51, 52). In SUMHIT, care users reported needs that can be addressed with more trauma-sensitive care. Many service users experienced that care professionals too often focused on here-and-now issues, whereby working with a traumatic past may remain under the radar. Trauma-informed care requires focus on mutual connection, safety, and attention to the impact of profound childhood experiences and their effects on the brain, emotions, thought patterns, and eventual behaviour. An important prerequisite is acknowledging and resisting stigma(53).

Because trauma-informed care requires a systematic approach, it is important that it is embedded in a supported vision of services. In the focus groups with professionals and peer workers, participants acknowledged the lack of trauma-informed care, even if they did not clearly suggest how to operationalise this approach in the existing care supply. Training of professionals and attention to this topic from peer workers, however, are indicated. We recommend that stakeholders reflect further on this topic. Qualified and mandated reference persons can play a pivotal role here.

Recommendation 11: Social isolation and loneliness should receive higher priority in care interventions for the target population.

Stakeholders involved: Network coordinators and service managers, individual care professionals.

Examples and avenues for action: Assess and adress the social support (network) of care users; inclusion of peers, friends, relatives, and carers in interventions as a standard practice; establishing social integration as a priority objective when working with care users with mental illness and substance use disorders.

One of the major findings of the SUMHIT study on users' care needs was the high level of unmet needs regarding care users' social relationships in terms of intimate relationships, friendship, sexual relationships, and company. On the one hand, this finding is consistent with results reported in the literature(54). On the other hand, this finding is also highly consistent with the general recommendation to support connectedness and the social integration of care users in a personal recovery approach(14). It is likely that care professionals insufficiently address issues related to all levels of social contacts (from generic social support to intimate and sexual relationships) because they tend to address issues at the individual level, somewhat disregarding the social context in which these issues arise. It is also likely that they may lack tools and interventions to address the most intimate needs. Yet, the literature clearly indicates that loneliness is a powerful predictor and determinant of mental illness, in particular regarding psychosis(55, 56), mood(57-59), and substance use disorders(60-64). Effects of loneliness on mental health were strongly exacerbated during the COVID-19 pandemic(65, 66). Therefore, tackling loneliness and social isolation is simultaneously a clinical and public health priority. Professionals and experts by experience in Brussels reported an interest in better understanding the social support network of care users. While further research and initiatives are needed regarding this specific aspect, various methods and interventions do exist and may be of interest to care professionals(67-71), with peer-support as a key feature(72). Other examples include drop-in centres where people can go for coffee or a meal, non-clinical settings where they can go for (day) activities and social contacts (e.g. *lieux de liens*), recovery houses for having a drug-free home and engagement in self-help and mutual aid groups(39).

Recommendation 12: Accessibility to services, improved coordination, and integration should not be limited to health care. Reliance on the most generic services should be possible for anyone, and integration concerns the full range of health and social services.

Stakeholders involved: All policy authorities, with a specific attention to athorities with competence in health care and social welfare (Federal and federated entities); network coordinators and service managers, individual care professionals.

Examples and avenues for action: Create and adapt organisational mechanisms for funding, provision, and governance of social and care service supply.

Findings from SUMHIT indicate that the care users who accessed generic social services, i.e. social services accessible to the general population, had significantly more care needs met than other care users. This finding is consistent with previous studies on users of the mental health networks in Belgium(73). This finding is also highly consistent with our recurrent recommendation to put forward social integration objectives at the forefront of interventions. The federal government and several federated entities have recently promoted plans to support a higher integration of care and social support (See the Interfederal Plan on Integrated Care and Support https://www.inami.fgov.be/SiteCollectionDocuments/plan_interfederal_soins_integres_rapport_final_interfederaal_plan_geintegreerde_zorg_protocole_08112023.pdf). For some unexplained reason, however, the Interfederal Care Plan was not developed within the same organisational framework as the mental health reform. While *"closer links between mental health care networks and primary care are sought wherever possible"*, both policy initiatives were developed separately. It is recommended, therefore, that mental health networks, which include specialised addiction care supply, be considered in future developments of funding, provision, and governance mechanisms that facilitate a the integration and continuity of social and health care.

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APPENDIX

I. GROUPS OF NEEDS

Original variable	Name of the created group	Unmet need *(Having at least one unmet need in the two needs included) (n (%))*	Met need *(Having no unmet need but at least one met need in the two needs included) (n (%))*	No need *(Having no need considering the two needs included) (n (%))*
Needs related to drugs	**Substance use needs**	168 (30.4%)	273 (49.4%)	112 (20.3%)
Needs related to alcohol				
Needs related to psychological distress	**Mental health needs**	160 (28.9%)	260 (46.9%)	134 (24.2%)
Needs related to psychiatric symptoms				
Needs related to social relationship	**Relational needs**	284 (51.5%)	69 (12.5%)	198 (35.9%)
Needs related to intimate relationships				
Needs related to sexual expression				
Needs related to finance	**Socio-economic needs**	159 (28.9%)	193 (35.1%)	198 (36.0%)
Needs related to accomodation				
Needs related to social benefits				
Needs related to daily activities	**Daily activity needs**	204 (36.8%)	126 (22.7%)	225 (40.5%)
Needs related to looking after the home				
Needs related to self-care				

II. REPRESENTATIVENESS OF THE SELECTED AREAS FOR THE USERS' SURVEY

At the outset of the study, we assessed the representativeness of the chosen catchment areas with regards to individuals with substance use disorders based on socio-demographic factors and substance use behaviours. This involved a comparison between the study areas and all the institution that took part in the data collection for the Treatment Demand Indicator (TDI) in 2019.

Concerning the provision of treatment services, we identified an overrepresentation of specialised and outpatient services in the SUMHIT area. Specifically, there was a prevalence of 37.6% specialised services in the SUMHIT area compared to 28.0% in the overall TDI register. In addition, 32.5% of services in the SUMHIT area were outpatient, compared to 26.6% in the overall TDI register. Upon closer examination of the networks within the study area, we noted significant differences ($p < 0.001$), induced by a higher concentration of major urban centres such as Brussels and Antwerp in the SUMHIT area compared to the overall dataset. In Brussels and Antwerp, 92.0% and 89.5% of treatment episodes were registered in specialised services, respectively, compared to 68.2% in the overall TDI register. Notably, in Brussels, more than half of the treatment episodes were registered in outpatient services. Given that Brussels represents the largest network in terms of the number of treatment episodes in the study area, its characteristics exert a more significant impact on the overall profile of the SUMHIT area.

Regarding socio-economic characteristics, the study population appears to encounter more pronounced social challenges. Although differences in age and gender were very small, they remained statistically significant ($p < 0.01$). More substantial differences were observed in terms of income, employment status, and living situations. In the SUMHIT area, there was a significant higher proportion ($p < 0.001$) of individuals without income (13.4%), homeless individuals (7.5%) and those with unstable accommodation (7.8%), compared to the overall TDI register. However, drawing conclusion about the distribution based on work situations was challenging due to a sizable and unevenly distributed proportion of unknow values.

Regarding substance use behaviours, a significantly higher proportion of problematic cocaine use (28.2%) or opiates use (15.7%) was observed in the SUMHIT area compared to the overall TDI register (25.4% and 13.5% respectively) ($p < 0.001$). In addition, individuals in the SUMHIT study exhibited on average a significantly higher number of substances used in the SUMHIT study (1.72) compared to the overall TDI register (1.65) ($p < 0.001$). These findings align with the socio-economic characteristics of the study area, as social difficulties are often associated with a higher prevalence of cocaine and opiate use, as well as multiple substance use.

In conclusion, several differences were observed between the general population of drug users in Belgium and the populations in the five areas covered by SUMHIT, as indicated by the TDI (Treatment Demand Indicator). These differences pertained to the treatment offer, socio-economic conditions, and substance use behaviours. Notably, there was a higher proportion of users treated in specialised services in the areas covered by the SUMHIT study. Also, there was a higher proportion of users who exhibited problematic cocaine and opiate use, along with lower socio-economic status. However, these differences were relatively moderate and could be explained by the higher weight of urban areas such as Brussels and Antwerp in the SUMHIT study. Urban areas, characterised by higher proportions of individuals facing socio-economic challenges and diverse substance use behaviours, also featured more specialised treatment services.