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Caring for patients with substance use disorders: a qualitative investigation of difficulties encountered by hospital-based clinicians

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ABSTRACT

Background: Caring for patients with substance use disorders (SUD) is held in low regard and many clinicians resist treating them. To address this situation, numerous research projects assessed training program gaps and professional attitudes. In contrast, this study explored the actual clinical difficulties that a variety of hospital-based professionals encounter when treating patients with SUD. **Methods:** Qualitative multiple method design including: (1) individual semi-structured interviews with SUD experts and educators; (2) video-elicited, cross self-confrontation interviews with clinicians working in a specialist addiction unit; (3) paired semi-structured interviews with clinicians working in non-specialist units. Participants were recruited within one university hospital. Data collected at stages (1) and (3) relied on an interview guide and were analyzed using conventional content analyses. Data collected at stage (2) consisted of discussions of video recorded clinical interviews and were analyzed based on a participatory approach. **Results:** Twenty-three clinicians from seven hospital units participated. Forty-four difficulties were reported that we classified into six categories: knowledge-based; moral; technical; relational; identity-related; institutional. We identified seven cross-category themes as key features of SUD clinical complexity: exacerbation of patient characteristics; multiplication of medical issues; hybridity and specificity of medical discipline; experiences of stalemate, adversity, and role reversal. **Conclusions:** Our study, providing a comprehensive analysis of the difficulties of caring for patients with SUD, reveals a highly challenging clinical practice for a diversity of healthcare providers. They represent a complementary approach to addressing resistance as an important feature of a complex clinical system, and valuable material to discussing professional preparedness.

KEYWORDS

Qualitative research; addiction; substance use disorder; clinical practice; hospital providers; clinical difficulties

Introduction

Patients with substance use disorders (SUD) are overrepresented in most clinical settings,[1] including primary care practices,[2,3] mental health clinics,[4] and general hospitals.[5–7] These settings need healthcare providers that are able to detect SUD, refer patients to specialized treatments, deal with the multiple health consequences related to SUD, and adapt care accordingly. However, working with patients with SUD is largely held in low regard[8,9] and many clinicians resist treating them,[8,10,11] contributing to suboptimal care in mainstream healthcare setting[12,13]: SUD diagnostics are underinvestigated,[14,15] treatment needs are frequently undetected[16,17] and involvement of SUD specialists is low.[15]

Clinicians' resistance in caring for patients with SUD is mainly explained by two factors: insufficient training[9,18,19] and stigmatization.[13,20] Quite logically, numerous research projects and educational initiatives addressed this situation through the evaluation of training programs gaps[21–23] or assessment of professional attitudes.[24–27] Generally,

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these projects intended to identify core clinical competences required when caring for these patients.[28–32] Current addiction clinical practices and related clinical difficulties have been scarcely studied to explore resistance. Existing research has mainly focused on the perception of working with these patients using standard scales[8,33] or the experience of care from the patient perspective.[34–37] Studies focusing specifically on difficulties primarily investigated systemic barriers,[38,39] were restricted to interpersonal and relational difficulties[40–42] and patient-specific characteristics,[43] or were limited to very specific clinical settings (e.g. cardiology, hepatology).[27,44] Besides, past explorations focused on specific audiences, such as medical students[25,45,46] and residents,[26,47–49] mostly in primary care and psychiatry.[19,50] Clinical practice of SUD specialists was less addressed so far while their perspective and clinical experience might be crucial to the understanding of the experience of SUD non-specialists but also to the apprehension of the SUD-related clinical complexity.

Our study is based on two complementary assumptions and research perspectives. First, resistance to treating patients with SUD is not only related to lack of training and stigmatization, but also to the complexity of SUD clinical practice. Consequently, understanding resistance requires looking at clinical practice in addition to evaluating educational background and professional attitudes. Second, we assume that the apprehension of this SUD clinical complexity requires a joint exploration of specialized practice dealing with addictive behavior, and non-specialized practice dealing with medical consequences of addiction and the somatic and psychosocial needs of patients with SUD.

Care of patients with SUD is an institutional and educational challenge that requires a deep understanding of SUD-related clinical practice. Therefore, we addressed the following questions: What are the encountered clinical difficulties, and what does this tell us about SUD clinical complexity and clinician resistance in treating patients with SUD? Our research explored these issues *via* a qualitative methodological framework within three groups of hospital-based clinicians caring for patients with SUD in one university hospital.

Methods

General design and sampling strategy

We applied a three-phase qualitative multiple method study[51] combining individual semi-structured interviews, cross self-confrontation interviews,[52,53] and paired semi-structured interviews. The research took place at a 1,500 bed academic hospital and associated center for primary care, from May, 2017 to February, 2020. All interviews were conducted face-to-face by first author (SP) and took place on the hospital site.

Participants were recruited through purposive sampling. Generally, the sampling strategy aimed for diversity of clinical practices with patients with SUD and targeted the recruitment of participants with diverse professions, institutional affiliations, clinical experience, and practicing in different hospital settings, i.e., either inpatient or outpatient. Clinicians were recruited from a SUD-specialized unit and from a selection of non-specialized units (primary care and medical specialities). Heads of hospital units were informed about the study and aided in recruiting volunteers by promoting the study during weekly team meetings.

Data collection method 1

We used individual semi-structured interviews with addiction experts and educators. Inclusion criteria were current employment as a senior clinician in the Service of Addictions Medicine and/or in charge of a pre- or post- graduate addiction training program and/or in charge of supervising clinicians caring for patients with SUD. Topics addressed included: career path; perception of SUD clinical practice; clinical experience with SUD; clinical difficulties with SUD; clinical preparedness; and training experience. We developed an interview guide accordingly. Audio recordings were transcribed, de-identified and transferred to NVivo 11. Data were analyzed using conventional content analyses,[54] in which codes were derived inductively from data. Initial coding was applied using a line-by-line technique.[55] The first two interviews were coded blind (SP and research assistant). We used open coding to develop a list of all codes. The two coders then blind tested the

Table 1. Data collection methods: empirical data and analysis.

Empirical data	Analysis
Data collection method 1: Individual semi-structured interviews	
• 7 recorded interviews (53-82 min) • Related verbatim transcriptions	• Conventional content analysis,[54] grounded theory[55]
Data collection method 2: Cross self-confrontation interviews	
• 6 video recorded clinical interviews (24-51 min) and related verbatim transcriptions • 9 video recorded interviews (56-103 min) and related verbatim transcriptions • 3 audio recorded group interviews (87-91 min) and related verbatim transcriptions	• Activity Clinic[52,53,56] • Open coding[58]
Data collection method 3: Paired semi-structured interviews	
• 6 audio recorded interviews (65-88 min) and related verbatim transcriptions	• Conventional content analysis,[54] grounded theory[55]

coding manual on two initial transcripts. Discrepancies were resolved through consensus meetings. SP rated all material according to the final version of the manual.

Seven clinicians were included. Empirical data of data collection method 1 are presented in Table 1.

Data collection method 2

The use of cross self-confrontation (CSC) methodology[52,53] was part of a 3-phase design based on video recorded consultations.[56] CSC falls into participatory research[57] by associating researchers and participants in a co-analysis process. This specific methodology was chosen to collect field-grounded knowledge about addiction clinical practice and related challenges that might be complementary to data from semi-structured interviews.

Inclusion criteria were current employment as a registered nurse or medical resident within the Service of Addictions Medicine. Participants were included pairwise. Each participant was free to record any follow-up consultation with any consenting patient presenting a SUD that met the following criteria: no medical or substance-related contraindication and sufficient command of the French language. Once the consultation was recorded, SP made a video montage that included sequences that the clinician specifically wanted to comment and/or a selection of sequences that covered the various topics addressed during the consultation. According to CSC, each montage was first discussed with a researcher, secondly with a researcher and the other professional. Interviews were video-recorded. Then the researcher was responsible for extracting emerging themes based on an analysis protocol: (a) writing an interview summary, (b) identifying every reason for discussion, (c) open coding the transcript of interviews.[58] The preliminary results were discussed and finalized during a group meeting for each pair of clinicians.

One pair of medical doctors and two pairs of nurses participated. Empirical data of data collection method 2 are presented in Table 1.

Data collection method 3

Paired semi-structured interviews were used with SUD non-specialists in order to maximize collected information through dialogue between two clinicians working in the same unit, using any similarities and differences to explore their experience. Inclusion criteria were current employment as an experienced registered nurse or chief resident working within five pre-identified hospital units. The interview guide of data collection 1 was used with minor adaptations. SP tested the coding manual used for individual interviews on two initial transcripts. The manual was adapted accordingly. The analysis process was similar to data collection 1 and relied on conventional content analyses.

Five pairs of medical doctors and nurses were included. For organizational reasons, one pair was interviewed separately. Empirical data of data collection method 3 are presented in Table 1.

General data analysis

Data saturation was reached for each data collection. All three data sets were first analyzed separately by SP. A research group (SP; MM; FP; MS; JBD) debated the preliminary outcomes of each data collection to better describe emerging themes, and then triangulated the results from all

data sets to develop a final system for categorizing difficulties. The data were combined in the results.

Ethics

The research did not fall within the scope of application of the law on Research on Human Subjects (Decision: Req-2017-00238). However, information and consent sheets were submitted to the Cantonal Research Ethics Committee of Lausanne, Switzerland (Submission: March 23, 2017) and validated. Written informed consent was obtained and all data were kept anonymous.

Results

Sample characteristics

Participants varied with regard to professional background, general clinical experience and clinical experience with patients presenting a SUD. Altogether, 23 hospital-based clinicians from seven units were included; 11 of them were affiliated with a specialized SUD unit; 11 were female; 8 were junior clinicians (≤5 years of practice and/or ongoing medical residency). Included were 8 physicians, 4 psychiatrists, 11 nurses, one psychologist. Detailed positions and affiliations are presented in Table 2.

Table 2. Research participants.

	Position	Affiliation
Data collection method 1: Individual semi-structured interviews		
1	Senior physician	General Medicine
2	Senior physician	Addictions Medicine
3	Senior psychologist	Addictions Medicine
4	Senior psychiatrist	Addictions Medicine
5	Psychiatry chief resident	Addictions Medicine
6	Senior nurse	Addictions Medicine
7	Senior physician	Obstetrics and Gynecology
Data collection method 2: Cross self-confrontation interviews		
8	Specialist nurse	Addictions Medicine
9	Specialist nurse	Addictions Medicine
10	Psychiatry resident	Addictions Medicine
11	Psychiatry resident	Addictions Medicine
12	Clinical nurse	Addictions Medicine
13	Clinical nurse	Addictions Medicine
Data collection method 3: Paired semi-structured interviews		
14	Chief resident	General Medicine
15	Clinical nurse	General Medicine
16	Deputy-chief resident	Infectious Diseases
17	Specialist nurse	Infectious Diseases
18	Chief resident	Emergency Medicine
19	Specialist nurse	Emergency Medicine
20	Deputy-chief resident	Orthopedics and Traumatology
21	Clinical nurse manager	Orthopedics and Traumatology
22	Chief resident	Gastroenterology and Hepatology
23	Specialist nurse	Gastroenterology and Hepatology

Encountered clinical difficulties

Forty-four clinical difficulties were reported across the three data sets (Table 3). Clinical difficulties should be understood as reported clinical situations that challenge clinical practice and potentially interfere with quality of care (whether explicitly perceived as difficulties or not). Results show a very heterogeneous set of difficulties, that we classified into a six-category typology. The categories are presented below supported by quotes reflecting examples of difficulties that were classified among each category. A detailed description of each difficulty and their grouping in the various categories are presented in Table 3.

Category 1: Knowledge-based difficulties, i.e. related to knowledge, information or specific understanding required for clinical practice.

> *These are patients who are so different, even within the same pathology. (…) So it's not possible to enact guidelines. And for us (…) either we can draw a diagram and decide on guidelines or it is part of the medical art. (Data collect method (DCM) 3, Participant (P) Gc)*

Category 2: Moral difficulties, i.e. related to health providers' value system.

> *I have been thinking about what happens when I don't share the same values as the person in front of me. I know that I must accept the person and not judge […] But at the same time, there is a desire within me that the person does otherwise. (DCM 2, P Ab)*

Category 3: Technical difficulties, i.e. related to the application of specific abilities (e.g. maintaining a patient-centered approach).

> *Professionals very quickly get an idea 'Ah, this person is like that.' And then, the discussion tries to confirm the initial hypothesis. (…) It takes time to disregard our knowledge, values and expertise and really be open to encounters. (DCM 1, P Ca)*

Category 4: Relational difficulties, i.e. related to the intersubjective relationship between clinician and patient.

> *(…) what a movie [patient life experience]! (…) How can I receive all this? Clearly I think that we protect ourselves and that we don't want [to know] too much. (DCM 3, P Fc)*

Table 3. Typology of the clinical difficulties of SUD clinical practice.

	Clinical situations reported as difficulties	Label	Category
1	Lacking general knowledge on addiction (e.g. neurobiological mechanisms of addiction)	Addiction	**Knowledge-based difficulty**
2	Lacking specific knowledge on pharmacological treatment (e.g. equivalences between substances)	Pharmacology	
3	Dealing with absence of clinical guidelines and standard procedures and adapting to individual situations	Standard	
4	Caring for a patient perceived as repulsive; being nonjudgmental with patients perceived as repulsive	Disgust	**Moral difficulty**
5	Being nonjudgmental when facing behaviors that clash with own values (e.g. use of controlled substances, refusal to be treated) and willingness to treat the patient	Value conflict	
6	Dealing with own embarrassment when addressing sensitive topics (e.g. intravenous use, prostitution)	Modesty	
7	Facing own incompetence and helplessness; admitting not wanting to care for a patient	Acknowledgement	
8	Dealing with ethical questions related to treatment options (e.g. prescribing opioids, hospital discharge)	Bioethics	
9	Addressing multidimensional clinical situations (somatic, psychiatric, social, addiction-related)	Multidimensionality	**Technical difficulty**
10	Treating a behavior rather than a diseased organ	Behavior	
11	Truly listening to the patient and maintaining a patient-centered approach	Listening	
12	Untangling diagnoses and treating multiple mental health disorders	Co-occurrence	
13	Mastering pharmacological complexity (e.g. dosage)	Pharmacology	
14	Managing drug and alcohol withdrawal symptoms	Withdrawal	
15	Accessing the mechanisms behind the symptom (consumption)	Symptom	
16	Addressing serious medical complications related to poor medication compliance or poor health (e.g. superinfection)	Medical complications	
17	Piercing patients with damaged veins	Damage	
18	Managing relapse consequences on health and treatment plan	Relapse	
19	Addressing patient feelings of stigmatization	Embodied stigma	**Relational difficulty**
20	Dealing with own emotions (e.g. fear, modesty) when listening to history of patient difficult life	Life experience	
21	Remaining neutral when a patient attempts to disunite and divide healthcare providers	Triangulation	
22	Caring for a patient who refuses to take responsibility; helping a patient become active and aware of own responsibility; involving patient resources while acknowledging patient is ill	Responsability	
23	Managing own discouragement when facing repeated gaps between patient speech and actions	Patient ambivalence	
24	Striking a healthy balance between frustration and empathy to keep on treating patient effectively	Clinician ambivalence	
25	Dealing with patients under the influence of substances and associated behaviors (e.g. violence, aggressiveness, drowsiness); managing own safety; ascerting patient capacity of discernment	Behavioral instability	
26	Avoiding paternalistic excesses and abuse of power	Paternalism	
27	Preventing therapeutic breakdown; managing own discouragement; managing patient feeling of failure and shame	Relapse	
28	Maintaining a patient-centered approach to avoid attributing patient medical issues to SUD	Misattribution	
29	Creating and maintaining cooperative working relationship with patients having alliance-related issues (e.g. inability to seek help or collaborate)	Therapeutic alliance	
30	Coping with patient behavior disorders (e.g. noncompliance with rules or medical instructions)	Behavior disorders	
31	Addressing own discouragement, frustration, feeling of failure related to incapacity to help/heal without rejecting the patient	Helplessness	
32	Feeling unqualified to understand patient life experience; feeling unqualified to treat patients with SUD without having experienced SUD	Illegitimacy	**Identity-related difficulty**
33	Dealing with long-term treatment and accepting slow progress or treatment stagnation	Slowness	
34	Working at the interface between somatic and psychiatric medicine; being torn between professional/therapeutic cultures	Interface	
35	Dealing with narcissistic distress from not being able to heal; facing lack of recovery prospect; trying to help patients who do not attend treatment; admitting own incompetence	Failure	
36	Being limited to harm reduction measures; being prevented from treating addiction	Limitation	
37	Identifying own role in treating SUD	Role	
38	Adapting to patient pace and treatment objectives; setting aside own treatment preferences; accepting missed appointments as part of treatment; accepting patient endangerment (e.g. at risk consumption)	Patient first	

(*Continued*)

Table 3. Continued.

	Clinical situations reported as difficulties	Label	Category
39	Facing lack of consideration from hospital partners; feeling isolated within the institution	Devaluation	**Institutional difficulty**
40	Coping with overload due to time-consuming clinical situations; adapting to time-limited consultations for complex clinical situations	Overload	
41	Dealing with lack of responsiveness and collaboration from network	Disengagement	
42	Dealing with organizational, administrative and financial pressure related to missed appointments	Productivity	
43	Dealing with colleague judgmental attitudes toward patients with SUD and related consequences on care; referring a patient for medical investigations and insuring that the patient is taken seriously; avoiding a breakdown with partners or patients	Prejudice	
44	Preventing *in situ* substance use and drug dealer hospital visits; ensuring staff security	Security	

Category 5: Identity-related difficulties, i.e. related to the roles and missions of both clinician and patient.

> *[…] despite years of studying, you are completely naked. What can I provide for these people? They have a life experience that is so rich, so full, with huge problems that I have never experienced. (DCM 1, P Ca)*

Category 6: Institutional difficulties, i.e. related to the organization, resources or attitudes within the institution.

> *I think that's a difficulty with the network (…) the doctor knows [that] there is an alcohol issue and he will say that all the issues are related to it. […] How do we deal with the attitudes of the network (…) who are seen as incompetent and the enemies of our customers? (DCM 2, P Ab)*

Findings did not differ across data sources as a large part of the difficulties were reported by SUD specialists and non-specialists, and by junior and senior clinicians alike. The shared difficulties between the various groups of professionals fall into each of the six categories. They included: lacking standard procedure (*Standard*, Category 1); prescribing opioid medicines (*Bioethics*, Category 2); addressing multiple clinical situations (*Multidimensionality*, Category 3); dealing with complex patient-clinician interactions (*Triangulation*, Category 4); facing lack of recovery prospect (*Failure*, Category 5); and coping with time-consuming clinical situations; (*Overload*, Category 6).

Seven cross-category themes were identified to complete the typology and outline key features of SUD-related clinical complexity. A description of each is presented below supported by illustrative quotes.

Theme 1: *Exacerbation*, i.e., exacerbation of patient characteristics and required competences

Clinicians described patients presenting a SUD with exacerbated characteristics (e.g. more vulnerable, poorer health, more difficult life history). In addition, they outlined an exacerbation of required competences and resources to treat them (e.g. more interpersonal competences, more time to treat). This results in clinical difficulties that may also be exacerbated (e.g. facing more clinical failure).

> *Patients who use substances expect to be stigmatized. This is why, I think, it's trickier [to talk about SUD] than to talk about getting the right treatment for high blood pressure. Patient expectation of guilt is more important. (DCM 1, P Ba)*

Theme 2: *Multiplication*, i.e., multiplication of medical issues and required competences

According to clinicians, SUD clinical practice addresses multiple medical issues and requires multiple competences (e.g. psychiatric, internal, pharmacological, social, relational), resulting in multiple and extensive clinical difficulties.

> *We are not in a simple addiction treatment. On top of that, we get hit with psychosis. So we must also include the psychosis, or borderline disorders, ADHD, or eating disorders […]. This is the complexity when we treat addiction: dealing with injection wounds, a schizophrenia and addiction disorders. (DCM 2, P Fb)*

Theme 3: *Hybridity*, i.e., hybridity of the medical domain

Clinicians presented SUD clinical practice not as internal medicine, psychiatry, or social medicine, but made up of intertwined domains, blurred borders and hybrid identities. The perception of hybridity challenges clinicians in different ways, including by questioning their own role and the boarders of their missions in treating SUD (Table 3, *Role*).

During my years of psychiatry I used to [say] as soon as there was a somatic issue 'You check that with the internist and we focus on what we're discussing,' that's it. I don't spend forty-five minutes with my suicidal patient talking about constipation. Here [in addiction medicine] things are a lot more confused. (DCM 2, P Db)

Theme 4: *Specificity*, i.e., characterization of patients with SUD and related clinical practice as specific

Clinicians constantly switched from characterizing patient with SUD "like everyone else" to defining them as "unlike the others." By adhering to this same contradictory representation, they firstly presented work with those patients as non-specific and then insisted on its specificity.

It [creating an alliance] is specific to addiction medicine. Creating a therapeutic alliance is not necessarily easy. It can be difficult even in surgery settings, with a grandma. But in addiction settings, alliance is a real life problem for almost 100% of our patients. (DCM 2, P Eb)

Theme 5: *Stalemate*, i.e., at a standstill in treatment options and related frustration

Clinicians described their clinical practice as restricted to harm reduction, consumption evaluation or treatment of medical consequences of SUD. More generally, they felt being "stuck" and prevented from specifically treating SUD and properly helping patients, resulting in various difficulties. Accepting slow progress and treatment stagnation (Table 3, *Slowness*) is one good example.

(…) either we give protection so the patient does not die, or we target something therapeutic. But safety comes first, so you can be frustrated that all you have to do is watch out for safety. And at the same time, the patient is not going to move forward […]. So we are a bit trapped. (DCM 2, P Aa)

Theme 6: *Adversity*, i.e., adversity of the professional context

According to clinicians, SUD clinical practice evolves in the context of institutional adversity, prejudice, disengagement, devaluation, and lack of professional collaboration that is reflected in many difficulties, such as managing lack of consideration from hospital partners (Table 3, *Devaluation*). Adversity is strengthened by feelings of failure and helplessness that lead to significant difficulties, such as facing own incompetence (Table 3, *Failure*).

How can we deal with helplessness… this is a big issue. It is not specific to this discipline, but it is very strong in addiction medicine. […] If we don't talk about feeling helpless and undervalued regarding the efforts we make to support one patient, if we cannot talk about that… well, we risk to reject the patient. (DCM 1, P Ba)

Theme 7: *Role reversal*, *i.e.,* reversal of patient and clinician traditional roles.

According to clinicians, SUD clinical practice requires an exacerbated patient-centered approach. Patient life history, substance use, relational capabilities and behaviors dominate the course of treatment and interfere with a traditional treatment in which clinicians have the leading role. This results in feelings of role reversal that challenge clinicians in different ways. One example is the challenge to adapt to the pace and treatment objectives of the patient (Table 3, *Patient first*).

Pace is set by the patient. And if we want chances for success, we have to follow the patient. And sometimes this pace is completely harmful. When we go too slowly, patients are at risk. But we have to follow them counterintuitively. (DCM 2, P Cb)

Discussion

In this study, we analyzed three sets of data related to addiction clinical practice and associated clinical challenges encountered by clinicians with various training and experience. Our findings propose a comprehensive typology of clinical difficulties and reveal key features of SUD-related clinical complexity that enable an understanding of the experience of care with patients with SUD.

Comparison with previous studies

Our results partially echo previously published data and recurrent themes related to SUD patient care: lack of standardized approaches[27,41]; poor outcome of treatment,[59] notably the relapsing character of the disease[60]; gaps in medical knowledge[59,61]; frequent missed appointments[62]; clinicians' efforts to control patients[40]; lack of recognition and support from colleagues and professional partners[40]; and feelings of frustration, helplessness and hopelessness.[63,64] Our findings are also consonant with past findings reporting that professionals perceive patients with SUD as ambivalent,[59,65] with challenging interpersonal and violent behaviors[13,42,59,66]; distressing personal histories,[40] fear of mistreatment[41]; and

challenging health profiles consisting of various medical issues and concomitant mental health disorders.[34,66–68]

Generally, our findings show that complexity of SUD-related practice is far from being restricted to relational difficulties linked with negative attitudes toward patients perceived as challenging; clinicians are challenged at many distinct levels. Interestingly, our characterization of some clinical difficulties provides fresh insight into specific issues. An example is the reported difficulty *Pharmacology*. In addition to previous approaches that highlighted the cognitive component of this difficulty,[44] our results relate to the technical challenge of mastering pharmacology related to SUD. In particular, clinical situations experienced as *identity-related* difficulties supplement what has been reported in the literature. Difficulties that either discourage clinicians (e.g. *Failure*, *Limitation*), or confront them with uncertainty (e.g. *Role, Illegitimacy*), not only lead to feelings of helplessness and hopelessness,[63] but appear to threaten professional's identity as clinicians. We might presume that identity-related difficulties contribute significantly to negative attitudes and to resistance to work with patients with SUD. Special attention should be given to identity-related difficulties when devising strategies to prepare clinicians for SUD-related practices and careers.

Mainly, our results provide additional insight by precisely pinpointing the clinical difficulty that is experienced (e.g. managing own discouragement when facing repeated discrepancies between patient speech and action) rather than describing *patient-specific* difficulty factors (e.g. ambivalence) or *disease-specific* factors (e.g. relapse) alone. Providing a detailed list of difficulties encountered by clinicans is a valuable step toward highlighting what is experienced in the gamut of clinical complexity, and might be useful in outlining clinical and educational strategies to cope with this complexity.

A clinical complexity that goes beyond clinical difficulties

Our findings go beyond merely illustrating encountered difficulties as they contribute to characterize SUD-related clinical complexity through the identification of key features of this complexity. Some of the reported clinical difficulties, e.g. facing lack of recovery prospect (*Failure*) or caring for a patient perceived as repulsive (*Disgust*), are common to other clinical settings.[69–71] Cross-category themes broaden our understanding of the specificity of SUD-related clinical complexity. Most importantly, the existence of cross-category features illustrates that difficulties are not separate entities and that they are interconnected across themes. This implies that clinical complexity does not rest on dealing with numerous difficulties alone. This also suggests that enhancement of professional preparedness cannot rely only on addressing specific difficulties (e.g. knowledge-based) by learning specific competences (e.g. knowledge-based), but must approach clinical complexity as a whole.

A shared clinical reality

Another contribution rests on the finding that is not just professionals working in non-specialist addiction settings or junior clinicians that face SUD clinical complexity. It demonstrates that clinicians working in SUD-specialized settings – including senior clinicians – certainly experience difficulties and most importantly, that part of their difficulties when treating patients with SUD are similar to other healthcare providers caring for patients with SUD. Although resources, competences, clinical experience, and general attitudes differ between SUD specialists and non-specialists,[8,33] our findings suggest that even added resources, better training, greater competences and higher regard for working with patients with SUD would not prevent from experiencing some specific difficulties (e.g. *Bioethics*, *Triangulation*) and not always lessen the burden of clinical complexity when caring for patients with SUD. This result contributes to the recognition of SUD-related clinical practice as inherently complex. The exploration of addiction-specialized and senior clinical practice has yielded important data that gained access to a comprehensive view on the experience of care for patients with SUD and should be of interest in future research.

The relevance of exploring clinical practice through difficulties

One last significant contribution lies in allowing the clinical difficulties of professionals to be more accessible and visible. Own awareness of clinical difficulties is essential in exploring actual clinical practice and strategies in response to difficulties. Even though recognizing areas of incompetence is particularly daunting for many physicians and other actors of modern medicine,[72–74] we were able to raise a number of encountered difficulties and discuss them with a variety of professionals, including SUD specialists. These findings encourage further research on experienced difficulties that is complementary to the focus on required competences.

Limitations

There are several limitations in this study. First, clinical difficulties were not explored using identical methodology in the three groups of professionals, thus limiting comparability of results. The use of multiple methods and data sources may have assured, though, a comprehensive understanding of clinical practice and contributed to the completeness of our findings. Secondly, the sampling process may have lumped together those clinicians with a specific interest in SUD clinical practice. Clinicians less interested in care of patients with SUD may have been overlooked, whereas they may have different clinical experiences. Thirdly, we could expect the influence of social desirability biases when exploring encountered difficulties; this might result in the omission of some difficulties. Minimally, we could expect that moral difficulties were downplayed; acknowledgement of own counter-attitudes and moral challenges is particularly difficult for most caregivers.[69,75] However, the comprehensiveness of reported difficulties suggests a high level of self-disclosure. Another limitation was to explore clinical activity by addressing the professional's perspective only. The patient's complementary input might have completed our data and allow for an alternative perspective on clinical practice. The patient's perspective needs to be explored in future research. Finally, even though we present rich descriptive material that helps in understanding clinicians' resistance, we do not discuss here how this material could offer any new perspectives on improving clinicians' preparedness to treat patients with SUD, nor how it could be used to engage with patients. Future research should place emphasis on these perspectives and explore clinical strategies to deal with complex clinical issues.

Conclusions

The epidemiological reality of SUD requires a healthcare system and healthcare professionals that are sufficiently prepared to contend with their difficulties as an integral part of the care and treatment of patients with SUD. Our research provides a rich qualitative description of difficulties encountered by SUD specialized and non-specialized hospital-based clinicians, and contributes to a better understanding of the multifaceted nature and complexity of SUD clinical practice. Our focus on clinical practice appears to provide valuable insights pertaining to resistance toward working with patients with SUD. These data might help health professionals and training leaders to think of resistance, not just as a consequence of untrained professionals and stigmatization of patients perceived as difficult, but as an important feature of a complex clinical system.

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