



## Association between perceived coercion and perceived level of information in involuntarily admitted patients: Results from a multicenter observational study in Switzerland

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### ABSTRACT

**Background:** Involuntary admissions (IA) to psychiatric hospitals are controversial because they interfere with people's autonomy. In some situations, however, they appear to be unavoidable. Interestingly, not all patients perceive the same degree of coercion during IA. The aim of this study was to assess whether the level of knowledge about one's own IA is associated with perceived coercion.

**Methods:** This multicenter observational study was conducted on  $n = 224$  involuntarily admitted patients. Interviews were conducted at five study centers from April 2021 to November 2021. The Macarthur Admission Experience Survey was administered to assess perceived coercion. Knowledge of involuntary admission, perceptions of information received, and attitudes towards legal aspects of involuntary admission were also assessed.

**Results:** We found that higher levels of knowledge about IA were negatively associated with perceived coercion at admission. Perceived coercion did not differ between study sites. Only half of the patients felt well informed about their IA, and about a quarter found the information they received difficult to understand.

**Discussion:** Legislation in Switzerland requires that patients with IA be informed about the procedure. Strategies to improve patients' understanding of the information given to them about IA might be helpful to reduce perceived coercion, which is known to be associated with negative attitudes towards psychiatry, a disturbed therapeutic relationship, avoidance of psychiatry, and the risk of further coercion.

### 1. Background

Involuntary admission (IA) of a person to a psychiatric hospital or another appropriate facility and the use of coercive measures during treatment (e.g. forced medication, seclusion and restraint) are used with varying frequency. Depending on the legislation, which differs between countries, this may be justified by danger to self or others or the need for treatment in the patient's best interest (Georgieva et al., 2019; Sheridan Rains et al., 2019). Because these measures violate the human right to liberty, most states define criteria for when and by whom coercion may

be legally used (Dressing & Salize, 2004; Jaeger et al., 2014). However, some of these criteria vary between and within countries (Georgieva et al., 2019; Wasserman et al., 2020).

In Switzerland, the legal basis for IA, the retention of primarily voluntary admissions to psychiatric hospitals and the use of coercive measures during treatment is regulated by the Swiss Civil Code (Federal Assembly of the Swiss Confederation). The law also stipulates measures to enhance a person's autonomy in situations where coercion is required. These measures include transparent information to the patient, the involvement of persons of trust, the right to appeal to a court,

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the use of treatment plans and psychiatric advance directives (PAD) (Federal Assembly of the Swiss Confederation, n.d). To date, these measures are not widely used, although previous studies have shown their potential to reduce the incidence and harm of coercive measures (de Jong et al., 2016; Fiorillo et al., 2011; Nicaise, Lorant, & Dubois, 2013). Only about one quarter of involuntarily admitted patients appeal to the courts (Arnold et al., 2019; Hotzy et al., 2018) and PAD are completed and used only by few patients (Hotzy et al., 2020).

The Swiss Civil Code defines the criteria under which circumstance an IA may be carried out but it also stipulates, that the 26 cantons (states) of Switzerland may determine the persons who are authorized to order an IA. Besides the Child and Adult Protective Services (Kindes- und Erwachsenenschutzbehörde, KESB), these are usually physicians (in some cantons only psychiatrists, in other all physicians who are licensed to practice medicine in Switzerland). The cantons can also define the maximum length of a physicians' IA. Some cantons define 3 days, but most use the maximum duration of 42 days.

Compared to other countries, Switzerland has been shown to have one of the highest rates of IA (Sheridan Rains et al., 2019). Furthermore, within Switzerland the rate of IA varies considerably from canton to canton (Schuler & Peter, 2018). Legislation, but also structural differences in the provision of mental health services and the clinical culture in hospitals, may play a role in these differences (Eytan, Chatton, Safran, & Khazaal, 2013).

Patients' attitudes towards coercive measures have been shown to be more critical and less variable than those of healthcare professionals (HCP) and next of kin (NOK) across study sites (Hotzy, Hengartner, Hoff, Jaeger, & Theodoridou, 2019). In general, the use of coercion during psychiatric treatment is questioned and critically viewed by both patients (Soininen et al., 2013) and HCP (Hotzy et al., 2019; Molewijk, Kok, Husum, Pedersen, & Aasland, 2017; Morandi, Silva, Mendez Rubio, Bonsack, & Golay, 2021). Patients perceive high levels of coercion during IA (Gardner et al., 1999; Priebe et al., 2009). However, the perception of coercion varies between involuntarily admitted patients. Although IA was the strongest predictor of perceived coercion (Fiorillo et al., 2012) it is not clear what other aspects are associated with the different perceptions of coercion during IA.

Interestingly, some involuntarily admitted patients did not report perceived coercion and it is not fully understood why some patients report more perceived coercion than others (Fiorillo et al., 2012). It has also been shown that some voluntarily admitted patients perceive high levels of coercion during the initiation of therapy (Iversen, Hoyer, Sexton, & Gronli, 2002). These findings show that the perception of coercion is not only associated with a specific coercive measure, but also with other factors (Lidz et al., 1998).

Studies on individual risk for perceived coercion have been inconclusive (Newton-Howes & Mullen, 2011). Findings on gender and age for example showed a higher risk for perceived coercion in younger women with positive symptoms or younger men with foreign status (O'Callaghan, Plunkett, & Kelly, 2023). One study showed that some patients were unaware of the legal status of their hospitalization, yet IA was associated with higher perceived coercion (Golay, Morandi, Silva, Devas, & Bonsack, 2019). Patients who perceive coercion are at higher risk of a disturbed therapeutic relationship (Theodoridou, Schlatter, Ajdacic, Rossler, & Jaeger, 2012) and attempting suicide after discharge (Jordan & McNeil, 2020). They may also develop negative attitudes towards psychiatry (Mielau et al., 2018). High levels of perceived coercion during psychiatric treatment and a weak therapeutic relationship are associated with dropout (Sharf, Primavera, & Diener, 2010) and avoidance of further psychiatric treatment, which in turn is associated with an increased risk of experiencing coercion (Swartz, Swanson, & Hannon, 2003). Perceived coercion should therefore be minimized in both voluntary and, especially, involuntary patients.

Patients have criticized the lack of information about the legal basis of IA, and a lack of information has been associated with increased anxiety, disturbed therapeutic relationship and disempowerment

(Akther et al., 2019). The less knowledge persons have the more helpless and powerless they may feel (Katsakou et al., 2012). To address this problem, the law states that patients must be informed about the IA (reason for decision, next steps, maximum duration) and their right to appeal to a court. In-depth information about IA could give patients a greater sense of control and knowledge. In general, it is recommended that patients are to be informed about treatment options to increase their level of control. Several strategies for providing information to patients have been described (Hamann, Leucht, & Kissling, 2003). However, it has been shown that some psychiatrists are lacking in the involvement of their patients (Goss et al., 2008). In the context of IA, only 2/3 of the physicians who initiated IA reported that they were able to inform patients about the next steps and their right to appeal, mostly due to the patients' condition at the admission (Hotzy, Jaeger, et al., 2019).

Therefore, the aim of this study was to analyze whether involuntarily admitted patients in different psychiatric hospitals in Switzerland feel well informed about IA and whether the level of perceived information is associated with perceived coercion.

We hypothesized that a higher level of perceived information about IA would be associated with less perceived coercion.

## 2. Methods

### 2.1. Study sites

This multicenter observational study was conducted at five study sites throughout the three language regions of Switzerland.

Baselland: Rural catchment area, German-speaking part of Switzerland, participating clinic: Psychiatrie Baselland (PBL).

Grisons: Rural catchment area, German-speaking part of Switzerland, participating clinic: Psychiatrische Dienste Graubünden (PDGR).

Ticino: mixed catchment area, Italian-speaking part of Switzerland, participating clinic: Clinica psichiatrica cantonale (CPC).

Vaud: Mixed catchment area, French-speaking part of Switzerland, participating clinic: Département de psychiatrie du Center hospitalier universitaire vaudois (CHUV).

Zurich: Urban catchment area, German-speaking part of Switzerland, participating clinic: Psychiatrische Universitätsklinik (PUK) Zürich.

### 2.2. Sample

For this study, we enrolled  $n = 224$  psychiatric patients who were receiving treatment at the study sites, had recent experience with IA (within the current treatment episode or in the past year), were aged 18 years of age or older, and were able to provide informed consent for participation.

Patients without experience of IA, severe cognitive impairment or any other condition that would preclude informed consent, and lack of or insufficient knowledge of the German-, Italian- or French language were excluded.

### 2.3. Compliance with ethical standards

The study was approved by the Swiss Association of Research Ethic Committees (swissethics) for all the included study sites, Reference No. 2021-00857. Written informed consent was obtained in all patients prior to participation. The study has been developed in accordance with the STROBE guidelines.

### 2.4. Recruitment, screening and informed consent process

During the study period from 01.04.2021 to 01.11.2021 the project staff at the five study sites (namely: CHUV, CPC, PBL, PDGR, PUK) consecutively screened the inpatient admissions.

If patients met the inclusion criteria, the project staff provided them with written and verbal information about the study, including clarification of all questions. Written informed consent was obtained from patients willing to participate in the study.

Patients were recruited during their inpatient treatment. The time lag between involuntary admission and participation in the study was not assessed. However, the clinics have comparable lengths of inpatient treatment episodes with a mean duration ranging from 25 (PUK) to 33 (PBL) days, and a median ranging from 17 (PUK) to 23 (PDGR) days. Interviews were conducted within this time frame.

## 2.5. Procedures

Patients who agreed to participate in the study were enrolled. Project staff provided appropriate equipment in the form of tablets or laptops for participants to complete an anonymized online questionnaire. The estimated time to complete the survey was 20 min. Patients could complete the questionnaire themselves or, if they preferred to be interviewed, project staff interviewed the patients by completing the online questionnaire according to their responses.

## 2.6. Material

For the purpose of this study, we developed a semi-quantitative questionnaire in three languages (German, French, Italian).

### 2.6.1. Quantitative data

We asked the participating patients about their knowledge on the regulation of IA and their attitudes towards specific criteria for IA. Specifically, patients were asked about their general level of information about IA and its legal regulation. Participants could answer on a scale from 1 (very good) to 4 (very bad). Patients were asked whether the information they received was easy to understand, using a true/false format. Patients were asked who provided the information. They could choose from the following categories: hospital, referring person, other (e.g. NOK, other patients, organizations).

Using a scale from 1 (strongly agree) to 4 (strongly disagree), we asked patients whether they agreed that protection of others or burden on others should be considered when making decisions about IA. Also using a scale from 1 (strongly agree) to 4 (strongly disagree), they were asked whether psychiatrists and other physicians are competent to assess whether IA is necessary.

Perceived coercion was assessed using the MacArthur Admission Experience Survey (AES) (Gardner et al., 1993; Monahan et al., 1995). This questionnaire consists of 15 items and includes three subscales. Translated versions are available in the three official languages of the study sites (Golay et al., 2017; Jaeger & Roessler, 2010; Mandarelli et al., 2019). The Perceived Coercion subscale consists of 5 items and focuses on the idea, initiative, choice, freedom, control, and influence over hospitalization. The Negative Pressure subscale consists of 6 items and focuses on the question whether threats and force were used during the admission. The Voice scale assesses whether patients felt that their opinions were taken into account during the admission process. Participants could choose an answer on a scale from 1 (strongly agree) to 5 (strongly disagree). We did not include an item on emotional reaction to the admission (item 16 of the AES) (Gardner et al., 1993; Monahan et al., 1995).

### 2.6.2. Qualitative data

Participants were asked for statements about their positive and/or negative experiences with IA in an open-ended question format. Their responses were written down and a coding system was developed in the interrelation between theory and concrete material using an inductive approach (Azungah, 2018). The strength of qualitative content analysis lies in the predetermined individual steps of interpretation. With this approach a certain objectivity can be achieved. The openness associated

with inductive procedures allows for a greater coverage of content for the defined research question, but reliability suffers as a result. To increase validity and reliability, a category system was used. We analyzed the free-text responses for content and created categories regarding the admission process, information about IA, procedural and treatment aspects, interpersonal experiences, and feelings during IA. We also created exemplary statements within these categories and recorded their frequency.

## 2.7. Statistical analysis

Descriptive analyses were used. Group comparisons were made using univariate ANOVA followed by Bonferroni post hoc tests. Spearman correlation coefficients were calculated to assess relationships between variables.

Statistical analyses were performed with SPSS 27.0 (IBM Corp. Released 2020. IBM SPSS Statistics for Windows, Version 27.0. Armonk, NY: IBM Corp) for Windows. The significance level was set at  $p < 0.05$ . The two-sided significance level was set at  $\alpha = 0.05$ .

## 3. Results

### 3.1. Descriptive analyses

A total of  $n = 224$  patients were included in this study. They had a mean age of 43.7 years ( $SD = 17.0$ ) and  $n = 114$  (50.9%) were male,  $n = 108$  (48.2%) were female and  $n = 2$  (0.9%) were non-binary.

Most participants were from the canton of Baselland ( $n = 52$ , 23.2%), followed by Ticino ( $n = 49$ , 21.9%), Zurich ( $n = 42$ , 18.8%), Grisons ( $n = 36$ , 16.1%), Vaud ( $n = 24$ , 10.7%), and  $n = 21$  9.3% did not specify their canton.

Of the respondents,  $n = 92$  (41.1%) reported personal experience with at least one coercive measure during psychiatric treatment. Of these,  $n = 77$  (34.3%) reported experience with forced medication,  $n = 68$  (30.4%) with seclusion, and  $n = 24$  (10.7%) with restraint.

### 3.2. Perceived level of information and attitudes about the legal regulation of involuntary admissions

We found that  $n = 97$  (43.3%) of the patients felt very well or well informed about the legal background of IA,  $n = 57$  (25.4%) stated that the information they received was not easy to understand. Approximately half of the patients ( $n = 107$ , 47.8%) indicated that they were informed in the hospital,  $n = 68$  (30.4%) were informed during the initiation of IA and the others ( $n = 49$ , 18.8%) indicated that they were informed elsewhere.

Patients were more likely to agree that psychiatrists are somewhat or very competent to perform IA (74%) than they were to agree that other physicians are competent to decide on IA (38%). Patients were also more likely to agree or strongly agree that the protection of others is a criterion for IA (84%), compared with the criterion that the burden on others should be taken into account (57%).

### 3.3. Perceived coercion and its association with the perceived level of information and the attitude towards the legal regulation

We assessed the perceived coercion at admission using the MacArthur Admission Experience Survey (AES) (Gardner et al., 1993; Monahan et al., 1995) and found that all three subscales were moderately rated. The negative pressure subscale had a mean value of  $M = 3.32$  ( $SD = 1.39$ ), perceived coercion was  $M = 3.12$  ( $SD = 1.47$ ), and process exclusion was  $M = 3.19$  ( $SD = 1.29$ ). Perceived coercion did not differ significantly between the study sites (for details see Table 1).

In a correlation analysis of the three subscales of the AES with the level of perceived information and attitudes towards some criteria for IA, we found that higher levels of negative pressure, perceived coercion,

**Table 1**

Comparison between study centers regarding the patients' perceived coercion at admission according to the AES.

M (SD)	BL	GR	TI	VD	ZH	Other	Total	P	Eta <sup>2</sup>
AES: negative pressures subscale	3.10 (1.47)	3.54 (1.44)	3.55 (1.49)	3.63 (0.93)	2.94 (1.22)	4.61 (0.41)	3.32 (1.39)	0.217	0.055
AES: perceived coercion subscale	3.41 (1.51)	3.37 (1.30)	2.71 (1.56)	3.38 (0.93)	2.84 (1.56)	3.7 (0.83)	3.12 (1.47)	0.266	0.051
AES: process exclusion subscale	3.42 (1.05)	3.28 (1.72)	2.96 (1.53)	3.44 (0.86)	2.68 (1.33)	4.3 (0.94)	3.19 (1.29)	0.123	0.068

Note: AES = MacArthur Admission Experience Survey, BL = Baselland, GR = Grisons, TI = Ticino, VD=Vaud, ZH = Zurich, Other refers to patients with a residency in another canton but hospitalization at one of the study sites; lower values indicate higher perceived coercion, scale 1–5.

and process exclusion were significantly associated with lower levels of perceived information about IA and less agreement with the legal criteria for IA (see Table 2 for details).

Qualitative questions were used to ask patients about their positive and/or negative personal experiences with IA. Almost three quarters of the patients (n = 160, 71.4%) reported positive experiences, while n = 184 (82.1%) reported negative experiences. Details regarding negative experiences during the initiation of IA were reported by n = 31 patients. In addition, n = 39 reported negative experiences regarding information about their IA and n = 24 criticized procedural aspects during IA. Only few (n = 7) made statements on negative experiences regarding their treatment, whereas n = 73 perceived some aspects of their treatment positive and n = 32 reported positive experiences with HCP or other patients. However, n = 32 also reported negative experiences with the HCP involved and n = 88 reported negative feelings regarding their IA. Details are shown in Table 3.

**4. Discussion**

In this study, we found that more than half of the participating patients felt not well informed about the legal background of the IA (e.g. maximum duration, legal rights to involve the court). Confirming our hypothesis, our study results show that a lack of perceived information about IA is associated with higher perceived coercion in involuntary admission and lower agreement with the legal criteria for IA.

In Switzerland, the legislation requires that during exertion of an IA each patient has to be informed of the legal framework of his or her IA (e.g. justification, next steps, maximum duration, right to appeal). The patient's point of view must also be discussed (Federal Assembly of the Swiss Confederation, n.d). Contrary to the theoretical framework, less than one third of the participants stated that they were informed when the IA was initiated and less than half felt well informed. In addition, about a quarter did not find the information they received understandable.

Previous findings have shown that in one third of IA referrals, the referring physicians themselves reported that they were unable to provide the legally required information about IA, mostly due to the patient's medical condition, lack of motivation or compliance, or language barrier (Hotzy, Jaeger, et al., 2019). To address this information gap, it is standard practice for patients with IA to be routinely informed of their legal rights and the course of IA during the admission process. The information should be adapted to the patient's level of understanding and health status. Our results show that only half of our sample felt

adequately informed. In addition to this lack of information, our study shows that higher perceived coercion is associated with lower levels of perceived information.

As discussed in previous studies, transparent information is necessary for psychiatric patients, especially in the context of IA (Fiorillo et al., 2011). Patients who felt well informed reported less anxiety, better therapeutic relationship, and less disempowerment (Akther et al., 2019). Patients want to engage in a dialogue with the professionals and receive information about their situation, but also to provide information so that clinicians or the court could gain understanding (Sugiura, Pertega, & Holmberg, 2020). These findings confirm the results of previous qualitative studies, that have highlighted the patients' desire to be involved in a shared decision-making process at the time of both voluntary and involuntary psychiatric hospitalization (Silva et al., 2023). Our qualitative responses also show that some patients criticized the problematic communication with HCP or their stigmatizing attitudes, while others emphasized the positive impact of HCP who took the time needed to clarify questions.

Previous studies have shown that patients who felt inadequately informed felt out of control (Katsakou et al., 2012), or in danger (Stylianiadis et al., 2018). Lack of information was associated with reduced confidence in treatment, which in turn affected treatment outcomes (Gaebel et al., 2014).

Although, the information of patients with IA is required at the beginning of treatment, about a quarter of the patients in our study reported that the information they received was not easy to understand and less than half of the participants felt well informed. More efforts are needed to provide information that is easy to understand and tailored to patients' needs (Fiorillo et al., 2011; Wasserman et al., 2020). It is not enough to inform patients about their legal rights and the IA only during or immediately after admission. Recapitulation of the legal status is also needed at different stages of the treatment process to clarify whether patients feel informed and have questions about aspects of the IA.

Feeling better informed is associated with higher perceptions of control (Katsakou et al., 2012), and explains the association with lower perceived coercion among participants in our study. In addition to continuity of care, perceptions of dignity, safety and non-stigmatizing communication, transparency and provision of information can increase trust in psychiatry (Gaebel et al., 2014) and reduce negative attitudes (Mielau et al., 2018) or the risk of avoiding psychiatry (Swartz et al., 2003).

To achieve procedural justice, all patient groups must have an equal opportunity to receive information. Patients with severe cognitive

**Table 2**

Correlation-table with the three subscales of the AES, perceived level of information and attitudes towards legal criteria for IA.

	1	2	3	4	5	6	7	8
1 AES: negative pressures subscale	–							
2 AES: perceived coercion subscale	0.500**	–						
3 AES: process exclusion subscale	0.618**	0.747**	–					
4 How well informed do you feel about the legal regulation of IA?	–0.005	–0.244**	–0.253**	–				
5 Do you think that the protection of others should be considered as a criterion for IA?	–0.300**	–0.202*	–0.223*	0.040	–			
6 Do you think that the burden on others should be considered as a criterion for IA?	–0.305**	–0.186*	–0.236**	–0.024	0.521**	–		
7 How competent do you think psychiatrists are in assessing IA?	–0.316**	–0.194*	–0.281**	0.204**	0.164**	0.179**	–	
8 How competent do you think other physicians are in assessing IA?	–0.166	–0.182*	–0.190*	0.100*	0.165**	0.186**	0.361**	–

Note: AES = MacArthur Admission Experience Survey, IA = Involuntary admission.

**Table 3**  
Qualitative statements regarding positive and negative experiences and perceptions regarding involuntary admission.

Pre admission
Negative ( <i>n</i> = 31)
<ul style="list-style-type: none"> <li>• Violent police during transport to the clinic (<i>n</i> = 5)</li> <li>• Not allowed to take personal belongings (<i>n</i> = 4)</li> <li>• Problematic attitude of HCP (issuing the IA based on the medical history rather than clinical examination, paternalistic and undifferentiated medical reports facilitate prejudice) (<i>n</i> = 15)</li> <li>• Time constraints impeded understanding of the patients' or NOKs' situation, gathering of the necessary information, discussion of the reasons for IA, focus on alternatives for IA (<i>n</i> = 7)</li> </ul>
Information about IA
Negative ( <i>n</i> = 39)
<ul style="list-style-type: none"> <li>• Insufficient information (verbal and in written form) about: reasons for the IA, possible alternatives to the IA, the further course of the IA, contact persons, costs, estimated length of stay, legal options, planned treatment measures, diagnosis, medication, prognosis (<i>n</i> = 26)</li> <li>• Poor timing of information (too early, when patients lack of capacity), lack of easy understandable written information in multiple languages, no handout of the treatment documentation (<i>n</i> = 13)</li> </ul>
Procedural aspects during IA
Negative ( <i>n</i> = 24)
<ul style="list-style-type: none"> <li>• Time delays until HCP repeal IA, until the authorities review the IA (<i>n</i> = 10)</li> <li>• No/insufficient involvement of others or second opinions (NOK, outpatient psychiatrists) (<i>n</i> = 14)</li> </ul>
Positive ( <i>n</i> = 8)
<ul style="list-style-type: none"> <li>• IA was stopped as soon as possible (discharge or change to voluntary hospitalization) (<i>n</i> = 8)</li> </ul>
Treatment during IA
Negative ( <i>n</i> = 7)
<ul style="list-style-type: none"> <li>• No treatment provided (<i>n</i> = 3)</li> <li>• Bad hospital quality (<i>n</i> = 4)</li> </ul>
Positive ( <i>n</i> = 73)
<ul style="list-style-type: none"> <li>• Protection and support (life saving measure, others were protected/unburdened) (<i>n</i> = 41)</li> <li>• Therapy led to self-reflection, insight into the illness, solutions, a change of existing patterns, improvement in health (<i>n</i> = 13)</li> <li>• More comprehensive care during IA, review of previous therapies and medication (<i>n</i> = 10)</li> <li>• Good Quality of hospital (food, cleanliness) (<i>n</i> = 9)</li> </ul>
Interpersonal experiences with HCP / other patients
Negative ( <i>n</i> = 32)
<ul style="list-style-type: none"> <li>• Problematic communication of HCP (disrespectful, impersonal, paternalistic, unfriendly, conflict-encouraging, uninterested in the individual needs, not listening, unhelpful) (<i>n</i> = 12)</li> <li>• IA disrupted the therapeutic relationship, HCP were experienced as incompetent (<i>n</i> = 7)</li> <li>• Other patients on ward were burdensome (<i>n</i> = 13)</li> </ul>
Positive ( <i>n</i> = 32)
<ul style="list-style-type: none"> <li>• Empathic and competent HCP (cared for patients, adapted to the needs of patients and NOK, afforded the time needed, established therapeutic relationship) (<i>n</i> = 18)</li> <li>• Chance to make contacts with other patients, exchange ideas, learn from each other (<i>n</i> = 14)</li> </ul>

**Table 3 (continued)**

Pre admission
Category: Feelings during IA
Negative ( <i>n</i> = 88)
<ul style="list-style-type: none"> <li>• Feeling helpless or abandoned (<i>n</i> = 41)</li> <li>• Feeling traumatized, coerced, distrust in psychiatry (<i>n</i> = 47)</li> </ul>

Note: Personal statements were analyzed, and categories were developed. Exemplary statements display typical experiences within these categories. IA = involuntary admission, NOK = Next of Kin, HCP = healthcare professionals.

impairment, sedation, or language difficulties are at greater risk for missing information (Wasserman et al., 2020). Clinical impairment in psychotic or bipolar disorders (Walker et al., 2019), but also having a foreign status, such as being a tourist or an asylum seeker, were shown to be risk factors for IA (Hotzy et al., 2019; Sheridan Rains et al., 2019). In the qualitative responses, the patients themselves criticized that the information came too early, when there was a lack of capacity. Therefore, questions regarding the legal framework of the IA, as well as the considerations of the treatment team, should be discussed repeatedly during the treatment process and also after decrease of severe symptomatology (e.g. psychotic symptoms or manic episodes).

When patients are admitted, they may be clinically impaired, and a long discussion of the legal framework in addition to the clinical examination may be exhausting and paradoxically lead to an increase in symptoms such as suspicion and hostility (Walker et al., 2019). Therefore, short contacts with clinicians at regular intervals may be preferable. In addition, the involvement of a legal representative (e.g., a lawyer, counselor, or social worker) may be helpful to provide additional information and (legal) support during hospitalization. Countries with mandatory involvement of a legal representative showed significantly lower rates of IA (Dressing & Salize, 2004; Sheridan Rains et al., 2019).

In the case of language difficulties, a translator is needed to ensure that the information presented is received and understood and that questions can be clarified. Discussing the information in a more dialogical approach, where questions can be clarified, could be a step towards a better information status, the establishment of a better working alliance and lead to a higher standard of informed consent within the treatment (King & Moulton, 2006).

In addition to patients, it is also emphasized that NOK and other stakeholders receive transparent and easily understandable information (Fiorillo et al., 2011; Wasserman et al., 2020). NOK want to be involved in the decision-making process of IA, the ongoing treatment and discharge planning (Sugiura et al., 2020). Our qualitative responses support these needs, as some patients criticized that their NOK were not or only insufficiently involved in the treatment process and found the exchange between HCP and NOK, but also outpatient psychiatrists helpful. The involvement of the NOK, outpatient psychiatrists (if available) or other existing professionals during IA was described as important for continuity of care and appropriate discharge planning (Fiorillo et al., 2011; Wasserman et al., 2020). In addition to the desire to be involved in the treatment process, some patients criticized the timing of the information, which was provided too early or during clinical states when capacity was lacking. Recapitulation of information was requested. Easily understandable written information should be provided, and access to information should be provided before or after the acute phase of illness (e.g. through patient organizations, health insurers, etc.). Advanced statements such as joint crisis plans, which allow patients and professionals to develop joint strategies to be implemented in future crisis situations, facilitate the transfer of information to patients and promote their involvement in therapeutic decisions might be helpful. In addition, the joint crisis plan makes it possible to limit the use of future coercive measures (de Jong et al., 2016).

#### 4.1. Limitations

This study has some limitations that need to be mentioned. Due to the anonymized recruitment process, we have limited sociodemographic and clinical data on the participating patients. Also, information on the current stage of treatment, the time lag between involuntary admission and participation in the study, or the clinical improvement during the treatment process is lacking and the number of refusals to participate were not assessed.

The assessment of the level of information is based on the subjective perception of the information received. Therefore, patients may have received the same information but perceived it differently. The perception of the information may have been influenced by symptomatology or poor insight into illness. Therefore, this study can only make a statement about the self-rated level of knowledge about IA and the perception of coercion. Due to the lack of clinical data, we cannot describe the factors that may have reduced the ability to understand and memorize the information provided (e.g., psychotic symptoms, intoxication). However, the qualitative data showed that some participants stated that information about IA was provided too early in the treatment process, when they felt too unwell to fully understand the information. The study design does not allow objective measurement of the information provided by the clinicians. Therefore, some participants may have received more information than others. Nevertheless, the participating clinics have comparable standards for the information a patient must receive upon involuntary admission. Therefore, we can assume that the written information was comparable, although the way it was provided may have differed.

Due to the recruitment strategy without financial compensation or other incentives, the enrolled patients were intrinsically motivated to participate in the study. Therefore, results may differ in other study populations or other clinical settings. However, about 40% of the participants reported having experienced a coercive measure. This is consistent with data from a Swiss study showing that about 1/3 of patients with IA experience coercive measures (Hotzy et al., 2018).

Despite the limitations, some strengths of this study are the large number of participating patients and the multicenter design with five study sites that differ in terms of urbanization and key aspects of the legal regulation of IA.

#### 5. Conclusions

We can conclude that about half of the participants did not feel well informed about their IA, although the participating clinics have existing standards to inform involuntarily admitted patients about their IA. Feeling less informed was associated with higher perceived coercion. This suggests the need for additional efforts to increase knowledge about the background and course of IA in patients. Besides easy understandable information material, the timepoint of information should be adapted to the patients' capacity.

#### Authors' contributions

F.H., M.S., R.R., M.J. and AT conceptualization, funding acquisition, methodology, project administration, resources, software, supervision

F.H., M.S., R.R., A.S., R.T., S.M., M.J. and AT data curation, investigation

F.H., M.S., R.R., M.J. and AT formal analysis, validation

F.H., M.J. and AT visualization, writing original draft

F.H., M.S., R.R., A.S., R.T., S.M., M.J. and AT writing review and editing

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analysis or interpretation of the data, preparation, review and approval of the manuscript.

#### Availability of data and material

The dataset of this study will be available upon request.

#### Declaration of Competing Interest

The authors declare that research was conducted without the presence of any personal, professional or financial relationships that could potentially be a conflict of interest.

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