

Patient Participation in Multidisciplinary Team Meetings in Residential  
Mental Health Services: An Explorative Study of Patients' Perception

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Patient participation in multidisciplinary team meetings in residential mental health services: An explorative study of patients' perception.

## **Accessible Summary**

### **What is already known?**

- Patient participation is an important focus in mental health care, leading to increased involvement of mental health patients in multidisciplinary team meetings (MTMs) during their stay in psychiatric hospitals.
- Limited evidence exists regarding mental health patients' perceptions of participation in MTMs and the factors influencing these perceptions. This lack of evidence hinders the planning, delivery, and quality assurance of person-centered care for mental health patients during their hospital stay.

### **What this paper adds to existing knowledge?**

- To the best of our knowledge, this is the first study to examine mental health patients' perceptions of participation in MTMs and the associations between patients' perceptions and various patient characteristics and relationship-contextual factors.
- The study found that mental health patients are generally willing to participate in MTMs and consider it important to participate in meetings where their care is discussed.
- The study also identified associations between patients' perceptions of participation in MTMs and factors such as gender, level of education, nature of psychological complaints, hospital admission status, and prior experience with patient participation in MTMs.

### **What are the implications for practice?**

- Understanding mental health patients' perceptions of participation in MTMs, along with the factors influencing these perceptions, can assist mental healthcare professionals, students, hospital management and patients in enhancing the person-centeredness of care.
- These insights can also help optimize the organization and execution of MTMs, ensuring that patient participation is more effectively integrated into mental healthcare practice.

## **ABSTRACT**

### **Introduction**

The lack of evidence of mental health patients' perception on patient participation in multidisciplinary team meetings (MTMs) is a potential threat to the person-centeredness of care.

### **Aim**

To explore the perceptions of mental health patients regarding patient participation in MTMs and to identify factors associated with these perceptions.

### **Method**

In a cross-sectional study, 127 former and 109 currently admitted mental health patients completed the Patient Participation during Team Meetings Questionnaire (PaPaT-Q). The STROBE-checklist was used for reporting the study.

### **Results**

Overall, patients' perceptions were positive. Former patients expressed greater willingness to participate in MTMs, considered participation as more important, and felt more competent. These patients also exhibited a stronger preference for an autonomous role in medical decision-making when participating in MTMs. The perception varied across factors such as gender, educational level, nature of psychological complaints, and prior experience(s) with participation in MTMs.

### **Discussion**

These findings may help mental healthcare professionals to become more aware to factors associated with mental health patients' perception of patient participation in MTMs.

### **Implications**

The results can be used by mental healthcare professionals to motivate mental health patients in an even more tailor-made basis to participate in MTMs when admitted in a hospital.

**Key words:** mental health, patient participation, patient care team

## BACKGROUND

Patient participation has become increasingly important in healthcare, resulting in patients being more actively involved in decisions regarding their treatment (Michaelis et al., 2017, Bauman and Brütt 2021). As a consequence, inpatients are participating more frequently in multidisciplinary team meetings (MTMs) where their care is planned and evaluated by the treatment team (Butow et al., 2007; Lindberg et al., 2013; Donnelly et al., 2013; van Dongen et al., 2016, 2017).

Empirical research has shown that patients in elderly, oncological, and palliative care express a strong desire to participate actively in MTMs (Pushner et al., 2010; Lindberg et al., 2013; Michaelis et al., 2017; Parker-Oliver et al., 2016; van Dongen et al., 2016) as they believe participation benefits their treatment outcomes (Butow et al., 2007). These patients have reported that their involvement in MTMs leads to treatment goals being formulated in a more patient-centred manner, which ultimately improves health outcomes and increases treatment satisfaction (van Dongen et al., 2016). In addition, participation in MTMs provide patients with an opportunity to develop better relationships with the treatment team, fostering increased trust in the team members (van Dongen et al., 2016, 2017).

The extent to which patients are satisfied with their participation in MTMs may, however, vary depending on organisational and personal factors. Concerning organisational factors, patients in oncological and elderly care have emphasised the need for a pre-meeting before participating in an MTM. Hereby, they find it crucial to be informed about the meeting's purpose and duration (Efraimsson, Sandman, and Rasmussen 2006; Butow et al., 2007; Swenne and Skytt 2014; van Dongen et al., 2016). Furthermore, limiting the number of healthcare professionals present at the meeting is considered essential to ensure patient comfort, as a smaller group of professionals creates an environment where patients feel more at ease sharing personal information (Butow et al., 2007; Lindberg et al., 2013; van Dongen et al., 2016). In addition, healthcare professionals are encouraged to avoid medical jargon, which improves patients' understanding during the meeting (Efraimsson, Sandman, and Rasmussen 2006; Butow et al., 2007; van Dongen et al., 2016, 2017). Finally, the presence of a supportive nurse during the MTM can also have a positive effect on patients' well-being (Butow et al., 2007; Bate et al., 2008). In terms of personal factors, research on the associations between patient characteristics and their willingness as well as the participation preferences to participate in MTMs is limited. For example, a previous study in oncological care highlighted that patients' assertiveness could be both a facilitator and a barrier to participation (van Dongen et al., 2016).

Although research on patient participation in MTMs has expanded in recent years, it has predominantly focused on elderly, oncological, and palliative care patients. Despite growing interest in mental health patients' involvement in MTMs, the existing body of knowledge in this area remains insufficient to fully support current practice in mental healthcare. A study by Carey, Lally and Abba-Aji (2014) found that mental health patients also highly value being well-informed prior to MTMs and prefer meetings with a limited number of team members present. While most patients reported feeling less anxious when they were prepared, they also emphasised that informing them before the MTM is a key responsibility of mental health nurses. This study also revealed that the longer a patient is hospitalised, the more willing they are to participate in MTMs. Hereby, the level of clinical interaction between patients and healthcare

professionals before and during hospitalisation can predict which professionals the patient prefers to have present at the MTM. Patients tend to prioritise the presence of healthcare professionals with whom they have had intensive contact and who were directly involved in their care. Among these professionals, mental health nurses and psychiatrists are most frequently preferred to be present during MTMs. Here too, patients emphasise the essential role of mental health nurses, noting that these team members are best positioned to advocate for their perspective during the MTM. Additionally, nurses often lead discussions and provide reassurance, helping to alleviate patients' nervousness about participating in these meetings (Carey, Lally and Abba-Aji 2014). While patients report feeling supported by these professionals, further exploration of the nurse's perspective is recommended to enhance genuine and meaningful patient participation in MTMs (Berben et al., 2022). Furthermore, women have been found to be more willing to participate in MTMs compared to their male counterparts, indicating that gender may play a role in influencing participation preferences (Carey et al., 2014). Mental health patients also express a strong desire to be recognised as competent and equal partners in the decision-making process during MTMs (Dahlqvist-Jönsson et al., 2015). To achieve this, patients value professionals who respect them as individuals and demonstrate confidence in their abilities. Professionals who empower patients through open dialogue, actively support their autonomy, and entrust them with responsibility in decision-making are especially appreciated. This expectation is particularly relevant for mental health nurses, given their vital role in developing and implementing shared decision-making within the context of patient participation in MTMs (Dahlqvist-Jönsson et al., 2015).

Despite these insights, research into mental health patients' perception of participation in MTMs remains limited. To date, only one study includes a measurement tool that assesses the degree to which MTMs are person-centred from the patient's perspective (Carey, Lally and Abba-Aji 2014). However, the design of this study, which included a small sample size and a self-administered questionnaire, led the authors to note that the results may be less generalizable. Consequently, there is still a lack of comprehensive understanding regarding mental health patients' willingness, needs and participation preferences for participation in an MTM, as well as which factors influencing their decision to engage in these meetings. So, in sum, the association between demographic characteristics (e.g., age, gender, ...) and contextual factors (e.g., admission, duration of admission, ...) and the intention of mental health patients to participate in MTMs are still a matter of debate. Understanding this is crucial for mental health professionals, as it equips them with the necessary knowledge to provide high-quality, recovery-oriented care tailored to meet patient's needs.

The aim of this explorative study was to investigate the perceptions of mental health patients regarding patient participation in MTMs and to explore which factors are associated with this perception. Given that hospital admission status may influence patients' participation preferences (Michaelis et al., 2016), this study includes both admitted and former patients.

## **METHODS**

### *Design*

This study used a cross-sectional design (Polit and Beck, 2021). The consolidated criteria for reporting cross-sectional research (STROBE) were followed to report the study (Knottnerus and Tugwell 2008).

### *Participants and Data Collection*

The study population comprised both current and former mental health patients from psychiatric hospitals and psychiatric wards of a general hospital in Flanders (Dutch-speaking part of Belgium). For former patients, data were gathered via an electronic questionnaire distributed through a network of 29 patient associations and 15 peer support workers in mental healthcare, who served as gatekeepers. These gatekeepers forwarded the email with the questionnaire link to their networks. Additionally, 24 of the 29 patient associations shared the URL on their social media page. After 14 days, the patient associations reposted the URL to encourage further participation. The data collection from former patients occurred from May 25 to June 28, 2020, via a convenience sampling method. For currently admitted patients, a paper-and-pencil version of the questionnaire was administered in a psychiatric hospital. This data collection took place from October 16 to October 23, 2020.

### *Instrument*

The instrument used in this study was the Patient Participation during Multidisciplinary Team Meetings Questionnaire for patients (PaPaT-Q-PAT); specifically designed to measure mental health patients' perceptions of participation in MTMs within mental healthcare settings. The questionnaire consists of 33 items distributed across six subscales: role of the patient in the MTM (SS1), role of the patient in medical decision-making (SS2), estimation and perceived competence (SS3), effects of patient participation in MTMs (SS4), organisational conditions of patient participation in MTMs (SS5), and needs and beliefs of the patient (SS6). All item loadings in the questionnaire were statistically significant, meeting the requirements for convergent validity. The standardized parameter loadings for the first-order constructs ranged from 0.49 to 0.81 for SS3, 0.45 to 0.73 for SS4, 0.51 to 0.70 for SS5, and 0.51 to 0.76 for SS6. All loadings exceeded the 0.40 cut-off value, ensuring acceptable convergent validity for four of the six subscales. Cronbach's alpha values for all subscales ranged from 0.70 to 0.92, reflecting acceptable to excellent internal consistency. Notably, strong correlations among the subscales were observed, reflecting a significant degree of interrelatedness in the constructs measured.

Each subscale in the questionnaire was rated using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree), except for SS1 and SS2, which had specific role-related scales. SS1 was measured by requesting participants to choose between 'none'(1), 'passive role'(2), 'active role'(3), or 'guiding role'(4). SS2 was measured by requesting to choose between 'passive'(1), 'semi-passive'(2), 'collaborative'(3), 'partially autonomous'(4), or 'autonomous'(5). Demographic and contextual data were also collected, including gender, age, living situation, work status, education level, hospital admission status, previous admissions in a psychiatric hospital, duration of (previous) admission in a psychiatric hospital, nature of psychological complaints, comorbidities, health condition assessment, and prior experiences with participation in MTMs.

### *Statistical analysis*

All data were analysed using SPSS Statistics 27.0 (SPSS, Chicago, IL, USA). The variables age, number of previous admissions in a psychiatric hospital and nature of psychological complaints were recoded in order to facilitate analysis. Age was grouped into five categories (18-24, 25-34, 35-44, 45-54, and >55

years), previous psychiatric hospital admissions were recoded into three categories (1-2, 3-4, and >5 times), and the nature of psychological complaints were categorized into four groups (depression and anxiety, substance abuse, psychotic vulnerability, and eating disorder). In order to investigate the perception of mental health patients about patient participation in MTMs in general, descriptive analyses were performed considering absolute frequency and relative percentage from the 33 items in the questionnaire. Relative percentages were calculated by adding 'agree' and 'totally agree' in order to compare the percentage between both groups afterwards. To explore which factors are associated with this perception, Fisher-Freeman-Halton exact tests were used to identify the correlations between the demographic characteristics and SS1 and SS2. For the subscales SS3 to SS6, multivariate analysis of covariance (MANCOVA) were used to test differences on the summed subscales in the questionnaire according to the respondent characteristics. A significant MANCOVA was followed by univariate F-tests using the Wilks'  $\lambda$  statistic. Linear independent pairwise comparisons were performed to examine the magnitude of the difference in the mean scores of the dependent variables. Covariates were defined by means of a Spearman's rank correlation coefficient test.

### *Ethics*

The study was approved by the Ethics committee Ghent University Hospital (B670201837675). The respondents were fully informed about the study's purpose, the advantages and disadvantages of participation prior to the commencement of the study. They were assured of the voluntary nature of their participation, the anonymity of the data, and their right to withdraw at any time. All respondents provided informed consent.

## **RESULTS**

### *Participants' characteristics*

A total of 282 respondents participated in this study. After excluding 46 respondents from the former patients' group due to missing data on their current hospital admission status, 236 respondents (127 former patients and 109 currently admitted patients) were included in the final analysis. When comparing former and currently admitted patients, a significant larger proportion of female respondents were found in the former patients' group ( $X^2$  (df)= 10.76,  $p = 0.005$ ). Additionally, a significantly higher proportion of former patients lived alone ( $X^2$  (df)= 17.99,  $p \leq 0.001$ ). In comparison with the admitted patients' group, the former patients' group was also highly educated ( $X^2$  (df)= 17.51,  $p = 0.002$ ) and reported psychological complaints that were more related to depression, anxiety and psychotic vulnerability ( $X^2$  (df)= 41.53,  $p \leq 0.001$ ), whereas the psychological complaints of the admitted patients' group were more related to substance abuse. The higher prevalence of substance abuse in admitted patients can be explained by the presence of specialised departments within the psychiatric hospital that focus on substance abuse treatment. No significant differences were found between the two groups in terms of age, work status, number of previous admissions to psychiatric hospitals, comorbidity, health status assessment, and prior experiences with participation in MTMs (all  $p > 0.05$ ). The details of the characteristics of the respondents are summarised in [Table 1](#).

### *Perception of mental health patients*

Table 2 shows the included subscales of the PaPaT-Q-PAT and descriptive statistics for both currently admitted and former patients' responses. As shown in Table 2, the proportion of the admitted patients' group who preferred a passive role for the patient in the MTM was higher than that in the former patients' group (11.9% VS 0.8%,  $p \leq 0.001$ ). A similar trend existed with regard to the role of the patient in medical decision-making. Respondents in the admitted patients' group were proportionally more likely to choose a semi-passive role than the former patients' group (20.2% VS 7.9%,  $p = 0.013$ ). Both groups also differed in terms of estimation and perceived competence. It is noticeable that the former patients' group was more willing to participate in an MTM (98.4% vs. 91.7%,  $p \leq 0.001$ ) and considered patient participation in MTMs as more important than the admitted patients' group (97.6% vs. 86.2%,  $p \leq 0.001$ ). In addition, the former patients group also felt more competent to participate in an MTM than the admitted patients' group (92.1% VS 76.2%,  $p \leq 0.001$ ). Further analysis also showed that 95.3% respondents of the former patients group strongly or partially agreed that patient participation in MTMs increases the patients' belief in his own abilities to be able to change his situation, in comparison with 83.5% from the admitted patients' group ( $p \leq 0.001$ ). In terms of organisational conditions, a majority of the former patients group strongly or partially agreed that patient participation in MTMs requires a willingness from all team members to allow patients to participate in an MTM (92.1%): this while only 72.5% of the admitted patients group strongly or partially agreed with this statement ( $p \leq 0.001$ ). Further, both groups also differed in terms of needs and beliefs for the patient. It appeared that 15.6% respondents of the admitted patients group strongly or partially disagreed with the need to have a support figure from the team next to him when participating in an MTM, in comparison with 4.7% from the former patients' group ( $p = 0.028$ ). Finally, the former patients group also attached more importance to the need to be seen as a unique person when participating in an MTM ( $p \leq 0.001$ ). With regard to the latter subscales (SS3-SS6), as shown in Table 3, independent samples t-tests showed a significant difference between both groups. Hereby it is noticeable that the former patients group scored significantly higher on all subscales than the currently admitted patients' group (with effect sizes all being medium to large).

### *Factors associated with perception by group*

As significant differences were demonstrated between former and currently admitted patients, it was decided to explore the associated factors per group separately.

#### *Group 1: Currently admitted patients*

According to a Fisher-Freeman-Halton exact test, it was found that SS1 differed by experience with patient participation in MTMs ( $p \leq 0.001$ ). Admitted patients with no experience in patient participation in MTMs were more likely to choose for a passive role for a patient in an MTM. Furthermore, no significant associations were found between the demographic characteristics and the responses on SS2 (see Table 4). A Spearman's rank correlation between the sum score of SS3-SS6 and all demographic variables found a positive correlation between the variable comorbidity and the sum score of all four



subscales. As shown in [Table 5](#), a MANCOVA with gender as independent variable, comorbidity as covariate, and the scores of SS3, SS4, SS5, and SS6 as dependent variables, showed a statistically significant main effect of gender on all four subscales ( $F(4, 102) = 3.915, p = 0.005$ , Wilks'  $\Lambda = 0.867$ , partial  $\eta^2 = 0.133$ ). Post-hoc comparisons using the Bonferroni test clarified in this group that admitted women were more willing and felt more capable than men when it comes to participating in an MTM ( $p = 0.002$ ). Furthermore, women in this group also had a more positive perception than men about the effects ( $p = 0.033$ ), the organisational conditions ( $p = 0.001$ ), and the patients' needs when participating in an MTM ( $p = 0.004$ ). Another MANCOVA with experience in patient participation in MTMs as an independent variable, comorbidity as covariate, and the scores of the four subscales as dependent variables showed a statistically significant main effect on SS3 and SS5 ( $F(4, 103) = 2.675, p = 0.036$ , Wilks'  $\Lambda = 0.906$ , partial  $\eta^2 = 0.094$ ). The post-hoc comparisons using the Bonferroni test indicated that admitted patients with experience in patient participation in MTMs were more willing to participate in an MTM compared to those who have no experience ( $p = 0.016$ ). Additionally, this group also believed that organising patient participation in MTMs requires more effort ( $p = 0.009$ ). The MANCOVA's with the variables age living situation, work status, education level, number of previous hospital admissions, duration of (previous) hospital admissions, nature of psychological complaints, and health condition assessment showed no significant associations with the subscales SS3-SS6.

#### *Group 2: Former patients*

According to a Fisher-Freeman-Halton exact test, it was found that the answers on SS2 differed by education level ( $p = 0.037$ ) and nature of psychological complaints ( $p = 0.022$ ). Former patients with a higher education level were more likely to choose for a (partially) autonomous role for the patient in medical decision-making. Similarly, former patients with psychological complaints related to depression, anxiety, and psychotic vulnerability were more likely to choose for a (partially) autonomous role. Furthermore, no significant associations were found in this group between the demographic characteristics and the responses on SS1 (see [Table 4](#)). A Spearman's rank correlation between the sum score of SS3-SS6 and all demographic variables found a positive correlation between the variable previous admissions and the sum score of all four subscales. As shown in [Table 6](#), a MANCOVA with the nature of psychological complaints as independent variable, the number of previous admissions as covariate, and the scores of SS3, SS4, SS5, and SS6 as dependent variables, showed a statistically significant main effect of complaints on SS5 ( $F(12, 315.136) = 2.306, p = 0.008$ , Wilks'  $\Lambda = 0.800$ , partial  $\eta^2 = 0.072$ ). A post-hoc comparisons using the Bonferroni test showed that the former patients with complaints related to anxiety and depression scored significantly higher than the group of former patients with complaints related to substance abuse ( $p = 0.007$ ) and therefore believe that organising patient participation in MTMs requires more effort. Another MANCOVA in this group with experience in patient participation in MTMs as an independent variable, the number of previous admissions as covariate, and the scores of the four subscales as dependent variables showed a statistically significant main effect on SS4 ( $F(4, 121) = 5.707, p \leq 0.001$ , Wilks'  $\Lambda = 0.841$ , partial  $\eta^2 = 0.159$ ). The post-hoc comparisons using the Bonferroni test indicated that former patients with experience in patient participation in MTMs had a more positive perception about the effects of patient participation in MTMs

( $p \leq 0.001$ ). The MANCOVA's with gender, age, living situation, work status, education level, duration of (previous) hospital admissions, comorbidity, and health condition assessment showed no significant associations with the subscales SS3-SS6.

## DISCUSSION

The current study explored the perception of mental health patients regarding patient participation in MTMs in general and identified patient characteristics associated with this perception. The results contribute to the limited body of knowledge surrounding patient participation in MTMs within mental healthcare, adding to previous findings by McKeown et al. (2014), which suggested that patient participation in MTMs is promising for inpatient care. Our study highlights also the nuanced differences between former and currently admitted mental health patients regarding participation in an MTM.

The findings of our study indicate that currently admitted patients tend to have a lower estimation level regarding to patient participation in MTMs compared to former patients, despite both groups expressing a strong willingness and belief in the importance of participation in MTMs. Compared to other studies in rehabilitative and oncological care (Butow et al., 2007; van Dongen et al., 2016; Baumann and Brütt 2021), it seems that the willingness to participate in MTMs among mental health patients is indeed equal. The main difference in our study seems to be in the sense of competence, as analyses showed that currently admitted patients were more likely to feel less competent to participate in an MTM than former patients. According to Vahdat et al. (2014), this may be due to various factors which may influence patients' self-efficacy when admitted in a psychiatric hospital. For example, patient-related factors (e.g., mental state) and disease-related factors (e.g., types of illnesses, symptoms, stage, illness severity) can influence self-efficacy and thus also patients' participation in health care decision-making. In addition, it is also possible that admitted patients are more reluctant to speak up and to challenge the system to take a more active role as they are often feel dependent on the healthcare professionals. Another key finding is that both currently admitted and former patients placed less emphasis on the involvement of family members in MTMs. This differs notably from findings in elderly and oncological care, where patients value the presence of relatives (Parker-Oliver et al., 2005, 2009, 2013; Parker-Oliver et al., 2016; Lindberg et al., 2013; van Dongen et al., 2016, 2017). In contrast, our results suggest that mental health patients, while acknowledging the potential benefits of family involvement, do not prioritise it to the same extent. This is consistent with broader research showing that, despite evidence supporting the benefits of family involvement in the care of patients with severe mental illness, it remains underutilised by healthcare professionals (Hem et al., 2023) and presents barriers for patients who may feel uncomfortable with such involvement (Cameron et al., 2021).

Our study also reveals that currently admitted patients are more likely to believe that a passive role is sufficient when participating in an MTM, where simply being present and listening is enough. This contrasts with the former patients' group and patients in other healthcare fields such as elderly, oncological, and palliative care, who tend to favour a more active role in MTMs (Lindberg et al., 2013; Parker-Oliver et al., 2016; van Dongen et al., 2016, 2017). With regard to the role of a patient in medical

decision-making, we were able to confirm previous findings suggested that most mental health patients prefer a collaborative role in medical decision-making (Hamann et al., 2010; Perestelo-Perez et al., 2011; Michaelis et al., 2017). However, our study was also able to find a significant difference between both groups of mental health patients. Our study found that the group of currently admitted patients more often believed in a semi-passive role for a patient in medical decision-making. This while the group of former patients more often believed in a (partially) autonomous role for a patient when making medical decisions. In summary, based on our results, it stands out that currently admitted patients more often opt for a passive style when participating in an MTM. This could be attributed to the fact that admitted patients feel less competent to participate in such meetings. Also factors that influence patients' self-efficacy when admitted in a psychiatric hospital, as mentioned earlier, could explain this phenomenon as self-efficacy is a strong predictor regarding patients' participation preference in care (Vahdat et al., 2014; Michaelis et al., 2017).

Regarding effectiveness, our study uncovered new insights. Our results indicate that currently admitted patients were less confident that participation in MTMs improves therapy adherence after discharge or significantly enhances their self-efficacy. Despite this, both groups shared a strong belief that involving patients in MTMs leads to a great sense of involvement in their care process. These findings are unique as, to our knowledge, no prior studies have specifically investigated the effects of patient participation in MTMs from the patient's perspective in mental healthcare.

Concerning the organisational conditions, our study highlighted the critical belief shared by both groups that patient participation in MTMs requires openness from both the team members and the patient. This openness involves a willingness to compliment, correct and provide feedback during the meeting. However, the groups differed significantly in their perceptions of the importance of team members' willingness to involve patients in MTMs. Currently admitted patients placed less importance on all team members being willing to involve patients, which contrasts with the former patients, who found this willingness to be more essential. Both groups did agree on the importance of informing the patient in advance about key aspects of the meeting. This includes clarifying the purpose, process, duration, and identifying the team members who will be present. Acknowledging these preferences is crucial for mental healthcare professionals, as several studies emphasise that preparation and information prior to MTMs are perceived as critical for enhancing patient engagement and experience (Efraimsson, Sandman, and Rasmussen 2006; Butow et al., 2007; van Dongen et al., 2016; van Dongen et al., 2017). These findings are particularly relevant for mental health nurses, as patients view them as the most important team members responsible for providing information and preparation (Carey, Lally, and Abba-Aji 2014).

In terms of what patients consider necessary when participating in an MTM, our study revealed several key expectations shared by both groups. Both groups emphasised the importance of the team listening to their experiences and addressing their current care needs. Patients also underscored the necessity of being treated as unique and competent individuals, particularly recognizing that participation in an MTM is a vulnerable moment for them. These findings are consistent with previous studies (Efraimsson,

Sandman, and Rasmussen 2006; Lindberg et al., 2013; Dahlqvist-Jönsson et al., 2015; van Dongen et al., 2017), where patients expressed the importance of being in the centre of the meeting and having opportunities to share their personal narratives. Hereby, more attention should be given to the meaning of living with an illness and the way this affects life than the medical anamnesis. Both groups also agreed on the importance that participants in the MTM are clearly visible so that everyone can be involved in the discussion. This finding aligns with other studies that noted patients felt more comfortable and inclined to share personal details when the number of team members were limited (Efraimsson, Sandman, and Rasmussen 2006; Carey, Lally, and Abba-Aji 2014; van Dongen et al., 2017). Patients also preferred that only team members directly involved in their care, with whom they had established a therapeutic alliance, be present at the MTM (van Dongen et al., 2017). One noticeable difference in our findings was that currently admitted patients felt less of a need for support from a team member during the MTM compared to former patients. This contrasts with findings from oncological care, where inpatients often value the presence of a support figure from the team both during and after the MTM (Butow et al., 2007). Previous literature has highlighted that nurses can fulfil this supportive role in MTMs (van Dongen et al., 2017). Therefore, further research may focus on the specific role of mental health nurses in facilitating participation in MTMs (Carey, Lally, and Abba-Aji 2014). Moreover, the primary nurse, who maintains the closest and most continuous relationship with the patient, may be uniquely positioned to provide the emotional and practical support that enhances patient participation during these meetings. Understanding these dynamics could be a key to improving patient participation in these meetings (Hartley et al., 2020; Berben et al., 2024).

Our study also identified variables that are associated with the perception of currently admitted and former patients about patient participation in MTMs. Our findings align with previous research indicating that gender influences participation preferences. In the past, studies have shown that being female can be viewed as an indicator of a desire to actively participate in care (Street et al., 2005; Savage, 2011; Carey, Lally, and Abba-Aji 2014). In our study, we also found this association. Women were found to be more willing to participate in MTMs than men and generally had a more positive outlook on the effects of such participation. Women also perceived organizing patient participation as requiring more effort and placed higher importance on the positioning of team members and the support provided by them during MTMs. Although Michaelis et al. (2017) found that women preferred a collaborative role in decision-making while men favoured a more autonomous role, our study did not confirm this specific association. Contrary to previous studies (Savage, 2011; Vahdat et al., 2014; Michaelis et al., 2017) that found a strong link between educational level and willingness to participate in care, our study did not find an association between educational level and willingness to participate in MTMs. However, we did confirm that individuals with higher education were more likely to prefer a (partially) autonomous role in medical decision-making in an MTM compared to those with lower educational levels. With regard to the nature of psychological complaints, our study discovered that patients with psychological complaints related to depression, anxiety, and psychotic vulnerability were more likely to choose a (partially) autonomous role for a patient in medical decision-making. This contrasts with Michaelis et al. (2017), who found that patients with depressive or adjustment disorders preferred a more passive role. Additionally, those with depression and anxiety in our study believed that organizing patient

participation in MTMs required more effort. Finally, experience with participation in an MTM emerged as a predictor for preferring an active role rather than a passive one. Patients with prior experience were also more willing to participate in MTMs and felt that organizing such meetings demanded significant effort. To date, no studies have been conducted that evaluate the effect of previous experiences of participation in MTMs on the perceptions of (mental health) patients. However, previous studies in the field of factors influencing patient participation report that experiences from previous hospital admissions determine a patients' participation preferences (Michaelis et al., 2017). Here, the length of hospital admission and the accompanying increase in trust in the treating team determine whether the patient shares control (Vahdat et al., 2014; Michaelis et al., 2017). Nevertheless, these findings were not confirmed in our study as we didn't find an association between the number and duration of previous hospital admissions and the patients' perception on participation in MTMs.

This study identified a strong willingness among mental health patient to participate in MTMs. However, participation in these meetings is influenced by various intrinsic and extrinsic factors (Michaelis et al., 2017). Therefore, healthcare professionals need to tailor their approach to effectively motivate and support patients. For this, an approachable attitude from healthcare professionals is essential as it fosters better relationships and helps patients feel more comfortable and secure when participating in MTMs (Efraimsson, Sandman, and Rasmussen 2006; van Dongen et al., 2016). Additionally, patients emphasise the importance of respectful communication and a structured approach, which are key factors in enhancing patient participation in MTMs (van Dongen et al., 2017). To achieve a more person-centered approach, mental healthcare professionals may need to adjust their attitudes and behaviours and implement changes in practice (Carey, Lally, and Abba-Aji 2014). Previous studies suggest that mental health nurses could play a pivotal role in facilitating these changes, given their central position in the team and their capacity to support patient participation (Dahlqvist-Jönsson et al., 2015; Reid, Escott, and Isobel 2018).

### *Limitations*

Some study limitations merit mentioning. First, it should be considered that the study was performed in Flanders (Belgium) where patient participation in MTMs is gaining in importance but was still not common practice. Countries with a longer tradition of involvement of patients in MTMs might have other norms, which could reflect the perceptions of patients regarding this theme. Second, the term "multidisciplinary team meeting" can vary across different mental health services in Belgium, which may lead to confusion or misinterpretation among respondents. Although we provided a definition in the information letter, the variability in terminology might affect how patients understand and respond to questions. Third, sampling bias may be a limitation due to the use of convenience sampling, which was primarily facilitated by gatekeepers rather than directly by the researchers. Additionally, only one mental health facility participated in the study, which, combined with the convenience sampling method, may restrict the generalizability of the findings. Forth, the possibility of non-response bias in the former patients' group should be considered as a limited number of patient organisations and social media pages were used in the sampling procedure. Therefore, we cannot estimate whether the

respondents who responded to the invitation through these channels had different perceptions about patient participation in MTMs, compared to those who did not respond. Fifth, the sample consisted mainly of female and higher educated respondents. As a result, we have a sample that is generally more likely to participate in their care. Further research should focus on other patient characteristics as it can influence patients' perception. Sixth, clustering was necessary for the variable 'nature of psychological complaints'. As a result, we obtained four groups which represent a large sample of the total population of patients with a mental disorder. Nevertheless, certain groups remain underexposed.

### *Recommendations for future research*

The findings of this study can be enriched by incorporating qualitative research on mental health patients' experiences with patient participation in MTMs. Future research could examine how admitted patients experience participating in an MTM and what aspects are meaningful to them. Hereby, attention could go to their motivations and drivers for participation, as well as identifying barriers and the requirements and needs they experience. Additionally, research should explore the perspectives of patients who do not wish to participate in MTMs, focusing on the motives behind their reluctance. It is also crucial to evaluate the effectiveness of patient participation in MTMs, particularly by examining variables such as self-efficacy, therapy adherence, empowerment, sense of involvement, trust, and communication dynamics. Finally, research on the role of mental health nurses is essential, given that the study's findings indicate a certain duality in patients' views regarding the supportive role of nurses. In addition to exploring this theme with patients, mental health nurses can also be research participants where the focus could go to their perspective(s) and the meaning they can have in the participation process. Moreover, research should specifically examine the perspective of primary nurses to better understand their unique role and contributions in facilitating patient participation in MTMs.

## **CONCLUSION**

In conclusion, this study highlights that perceptions of patient participation in MTMs among mental health patients vary depending on their current admission status. Both admitted and former patients show a strong willingness to engage in MTMs and consider participation important. However, currently admitted patients tend to feel less competent and prefer a more passive or semi-passive role in these meetings compared to former patients. Notably, women and those with prior experience in patient participation are more inclined to take an active role in MTMs, especially among currently admitted patients. Conversely, among former patients, those with higher education levels and psychological issues related to depression, anxiety, and psychosis are more likely to prefer an autonomous role in medical decision-making. Future research should employ qualitative methods to delve deeper into the lived experiences of mental health patients regarding MTM participation. This approach could provide richer insights into the factors influencing patient involvement and help tailor strategies to enhance participation across different patient groups.

## RELEVANCE FOR PRACTICE

These findings can support mental health units in implementing or optimising patient participation in MTMs. By considering these insights, (mental) healthcare professionals can better understand patients' perceptions, thereby enhancing person-centered care during MTMs. Given the crucial role of nurses in facilitating participation in these meetings, the perceptions highlighted in this paper provide valuable guidance for mental health nurses in creating a structure that allows inpatients to meaningfully participate in MTMs. From a patient perception standpoint, it is therefore recommended that mental health nurses recognize that participation preferences are influenced by a patient's admission status. Upon hospital admission, there appears to be a shift in patients' preferences regarding participation in MTMs. Additionally, factors such as gender, the nature of psychological complaints and prior experience with participation in MTMs also impact patients' willingness to participate. Mental health nurses should be attuned to these findings and adjust their approach to foster a supportive environment that encourages patient engagement and empowers them to participate in ways that are meaningful to them. Furthermore, this research can also reignite the discussion on how to organise MTMs more efficiently. For this, mental healthcare professionals should focus on viewing each patient as a unique individual, approaching them holistically, and paying close attention to their current care needs. The results of this study may also help mental health nurses understand how small, interactional aspects of their role as (primary) nurses can contribute to meaningful patient-nurse interactions and support patient well-being during MTMs. Hereby, it may inspire mental health nurses to know that informing, preparing, supporting, fostering open dialogue, and building relationships based on equality are important to the perceptions of mental health patients. This could necessitate additional training and education to equip mental health nurses with the necessary skills and knowledge to effectively facilitate patient participation in MTMs.

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**Table. 1**  
Baseline characteristics

Variables	Total Sample (n = 282)	Admitted Patients Group (n = 109)	Former Patients Group (n = 127)	X <sup>2</sup>	P value
	n (%)	n (%)	n (%)		
<b>Gender</b>				10.763	0.005 **
Male	79 (32.8)	47 (43.1)	30 (23.6)		
Female	162 (57.4)	62 (56.9)	97 (76.4)		
Missing value	41				
<b>Age (years)</b>				7.402	0.116
18 – 24	28 (11.6)	17 (15.6)	11 (8.7)		
25 – 34	52 (21.6)	27 (24.8)	24 (18.9)		
35 – 44	66 (27.4)	31 (28.4)	34 (26.8)		
45 – 54	52 (21.6)	17 (15.6)	35 (27.6)		
> 55	43 (17.8)	17 (15.6)	23 (18.1)		
Missing value	41				
<b>Living situation</b>				17.988	≤ 0.001 ***
Alone	88 (36.5)	32 (29.4)	55 (43.3)		
With partner and children	137 (56.8)	67 (61.5)	66 (52.0)		
Mental health facility	7 (2.9)	1 (0.9)	6 (4.7)		
No place of residence	9 (3.7)	9 (8.3)	0 (0.0)		
Missing value	41				
<b>Work status</b>				2.682	0.612
Employment/Independently	81 (33.6)	35 (32.1)	42 (33.1)		
Unemployment	102 (42.3)	51 (46.8)	50 (39.4)		
Student	28 (11.6)	12 (11.0)	16 (12.6)		
Retired	16 (6.6)	7 (6.4)	9 (7.1)		
Others	14 (5.8)	4 (3.7)	10 (7.9)		
Missing value	41				
<b>Education level</b>				17.511	0.002 **
No school-leaving diploma	12 (5.0)	7 (6.4)	5 (3.9)		
Secondary school diploma	86 (35.7)	51 (46.8)	34 (26.8)		
High school diploma	95 (39.4)	36 (33.0)	58 (45.7)		
University diploma	43 (17.8)	11 (10.1)	29 (22.8)		
Others	5 (2.1)	4 (3.7)	1 (0.8)		
Missing value	41				
<b>Number of admissions</b>				4.863	0.088
1 – 2 times	106 (44.9)	49 (45.0)	57 (44.9)		
3 – 4 times	58 (24.6)	33 (30.3)	25 (19.7)		
> 5 times	72 (30.5)	27 (24.8)	45 (35.4)		
Missing value	46				
<b>Psychological complaints</b>				41.525	≤ 0.001 ***
Depression and anxiety	96 (40.7)	29 (26.5)	67 (52.8)		
Substance abuse	87 (36.9)	63 (57.8)	24 (18.9)		
Psychotic vulnerability	29 (12.3)	6 (5.5)	23 (18.1)		
Eating disorder	24 (10.2)	11 (10.1)	13 (10.2)		
Missing value	46				
<b>Comorbidity</b>				0.765	0.382
Yes	114 (48.3)	56 (51.4)	58 (45.7)		
No	122 (51.7)	53 (48.6)	69 (54.3)		
Missing value	46				
<b>Health status assessment</b>				6.093	0.107
Badly	32 (13.6)	17 (15.6)	15 (11.8)		
Reasonably	99 (41.9)	52 (47.7)	47 (37.0)		
Good	75 (31.8)	31 (28.4)	44 (34.6)		
Very good	30 (12.7)	9 (8.3)	21 (16.5)		
Missing value	46				
<b>Experience with patient participation in MTMs</b>				2.760	0.097
Yes	109 (46.2)	44 (40.4)	65 (51.2)		
No	127 (53.8)	65 (59.6)	62 (48.8)		
Missing value	46				

\*  $p \leq 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p \leq 0.001$

**Table. 2. Included subscales and descriptive statistics of admitted and former mental health patients' responses on all items.**

Included subscales	Items	Group	Multiple Choice Question					X <sup>2</sup>	P value
			(1) none n (%)	(2) passive role n (%)	(3) active role n (%)	(4) guiding role n (%)			
(SS1) Role of the patient in the MTM	What role do you think a patient should take when he participates in a multidisciplinary team meeting (abbreviated: MTM) where his care is discussed?	1: a.p. 2: f.p.	6 (5.5)	13 (11.9)	85 (78.0)	5 (4.6)	19.526	≤ 0.001 ***	
			2 (1.6)	1 (0.8)	109 (85.8)	15 (11.8)			
Multiple Choice Question									
</									

	Shortens the length of hospital stay	1: a.p.	9 (8.3)	32 (29.4)	51 (46.7)	13 (11.9)	4 (3.7)	26.208	≤ 0.001 ***
		2: f.p.	1 (0.8)	15 (11.8)	69 (54.3)	24 (18.9)	18 (14.2)		
	Provides the patient with a greater sense of control and the feeling of being able to make choices in the care process	1: a.p.	0 (0.0)	2 (1.8)	13 (11.9)	70 (64.3)	24 (22.0)	31.276	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	9 (7.1)	45 (35.4)	73 (57.5)		
	Strengthens the patient so that he gets a better grip on his situation and his environment	1: a.p.	0 (0.0)	1 (0.9)	20 (18.3)	59 (54.2)	29 (26.6)	21.155	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	8 (6.3)	51 (40.2)	68 (53.5)		
			n (%)	n (%)	n (%)	n (%)	n (%)	X <sup>2</sup>	P value
	(SS5) Organizational conditions of patient participation in MTMs	1: a.p.	0 (0.0)	8 (7.3)	14 (12.8)	51 (46.8)	36 (33.1)	9.834	0.019 *
		2: f.p.	0 (0.0)	3 (2.4)	15 (11.8)	44 (34.6)	65 (51.1)		
	Means that the patient must be informed about which team members are present during the MTM and what their function is during the MTM	1: a.p.	0 (0.0)	1 (0.9)	8 (7.3)	60 (55.1)	40 (36.7)	26.579	≤ 0.001 ***
<i>Patient participation during a MTM ...</i>		2: f.p.	0 (0.0)	2 (1.6)	3 (2.4)	34 (26.7)	88 (69.3)		
	Means that the patient must be informed about the purpose, process and duration of the MTM	1: a.p.	0 (0.0)	2 (1.8)	5 (4.6)	56 (51.4)	46 (42.2)	19.875	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	3 (2.4)	35 (27.5)	89 (70.1)		
	Asks for a care model where the patient can decide on his own therapies in function of his care needs and objectives	1: a.p.	3 (2.8)	7 (6.4)	20 (18.3)	53 (48.6)	26 (23.9)	21.676	≤ 0.001 ***
		2: f.p.	1 (0.8)	1 (0.8)	10 (7.9)	54 (42.5)	61 (48.0)		
	Asks for an (electronic) patient record in which the patient can also make notes regarding objectives and hospitalization	1: a.p.	3 (2.8)	12 (11.0)	26 (23.8)	46 (42.2)	22 (20.2)	13.988	0.006 **
		2: f.p.	1 (0.8)	15 (11.8)	16 (12.6)	44 (34.6)	51 (40.2)		
	Means that you consider the patient as an equal partner in care	1: a.p.	0 (0.0)	2 (1.8)	12 (11.0)	54 (49.5)	41 (37.7)	12.552	0.004 **
		2: f.p.	0 (0.0)	4 (3.1)	11 (8.7)	37 (29.1)	75 (59.1)		
	Requires a willingness from all the team members to allow patients to participate in a MTM	1: a.p.	4 (3.7)	7 (6.4)	24 (22.0)	40 (36.7)	34 (31.2)	36.906	≤ 0.001 ***
		2: f.p.	0 (0.0)	1 (0.8)	9 (7.1)	32 (25.2)	85 (66.9)		
	Asks for openness on the part of the team members and the patient to complement, correct and provide feedback to each other during the MTM	1: a.p.	0 (0.0)	2 (1.8)	4 (3.7)	48 (44.0)	55 (50.5)	15.409	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	1 (0.8)	33 (26.0)	93 (73.2)		
	Means that team members must learn to speak about a patient in his presence	1: a.p.	1 (0.9)	0 (0.0)	9 (8.3)	48 (44.0)	51 (46.8)	21.648	≤ 0.001 ***
		2: f.p.	1 (0.8)	1 (0.8)	2 (1.6)	29 (22.8)	94 (74.0)		
			n (%)	n (%)	n (%)	n (%)	n (%)	X <sup>2</sup>	P value
	(SS6) Needs and beliefs of the patient	1: a.p.	5 (4.6)	12 (11.0)	21 (19.3)	46 (42.2)	25 (22.9)	10.604	0.028 *
		2: f.p.	1 (0.8)	5 (3.9)	38 (29.9)	49 (38.6)	34 (26.8)		
	That the participants of the MTM sit down so that everyone is clearly visible and everyone can be (non) verbally involved in the discussion	1: a.p.	0 (0.0)	0 (0.0)	7 (6.4)	54 (49.6)	48 (44.0)	5.957	0.047 *
		2: f.p.	0 (0.0)	0 (0.0)	3 (2.4)	50 (39.3)	74 (58.3)		
	That the team listens to my experiences and current care needs	1: a.p.	1 (0.9)	2 (1.8)	6 (5.5)	42 (38.5)	58 (53.3)	18.770	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	0 (0.0)	31 (24.4)	96 (75.6)		
<i>If I (would) participate in a MTM, I find it necessary ...</i>	That team members recognize this as a moment where my vulnerability emerges	1: a.p.	2 (1.8)	5 (4.6)	11 (10.1)	40 (36.7)	51 (46.8)	11.940	0.010 **
		2: f.p.	0 (0.0)	0 (0.0)	9 (7.1)	39 (30.7)	79 (62.2)		
	To be seen as a unique person in its totality (physical, psychological, social, spiritual)	1: a.p.	0 (0.0)	4 (3.7)	5 (4.6)	48 (44.0)	52 (47.7)	15.778	≤ 0.001 ***
		2: f.p.	0 (0.0)	0 (0.0)	3 (2.4)	34 (26.8)	90 (70.8)		

That forward looking goals are formulated	1: a.p.	0 (0.0)	0 (0.0)	4 (3.7)	52 (47.7)	53 (48.6)		
	2: f.p.	0 (0.0)	1 (0.8)	6 (4.7)	48 (37.8)	72 (56.7)	3.093	0.366
To have a clear structure of what is discussed during the MTM	1: a.p.	0 (0.0)	2 (1.8)	9 (8.3)	62 (56.9)	36 (33.0)		
	2: f.p.	0 (0.0)	0 (0.0)	13 (10.2)	51 (40.2)	63 (49.6)	9.846	0.014 *
To receive a report after the MTM stating what is discussed and decided	1: a.p.	1 (0.9)	5 (4.6)	10 (9.2)	42 (38.5)	51 (46.8)		
	2: f.p.	0 (0.0)	1 (0.8)	5 (3.9)	34 (26.8)	87 (68.5)	14.277	0.003 **

\*  $p \leq 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p \leq 0.001$   
1: a.p. = group 1 admitted patients (n=109)  
2: f.p. = group 2 former patients (n=127)

**Table. 3**

Comparison the average level of the subscale estimation and perceived competence, effects, organizational conditions, needs and beliefs between former and admitted patients.

Subscales	Admitted Patients Group (n = 109)		Former Patients Group (n = 127)		df	<i>t</i>	<i>P</i> value	<i>Cohen's d</i>
	M	SD	M	SD				
Estimation and perceived competence	20.28	± 2.694	22.30	± 2.121	203.98	-6.34	$p \leq 0.001$	0.84
Effects of patient participation in MTMs	36.18	± 4.378	39.06	± 4.278	234	-5.10	$p \leq 0.001$	0.67
Organizational conditions of patient participation in MTMs	37.05	± 4.756	40.47	± 3.550	197.30	-6.19	$p \leq 0.001$	0.83
Needs and beliefs of the patient	33.96	± 4.163	35.94	± 2.996	192.69	-4.14	$p \leq 0.001$	0.55

**Table. 4.** Associations between the demographic characteristics and subscale 1 and subscale 2 per group (Fisher-Freeman-Halton exact test)

Admitted Patients Group (n = 109)			Former Patients Group (n = 127)	
Variables	(SS1) Role patient MTB	(SS2) Role patient medical decision-making MTB	(SS1) Role patient MTB	(SS2) Role patient medical decision-making MTB
Gender	$p = 0.729$	$p = 0.059$	$p = 0.574$	$p = 0.128$
Age	$p = 0.470$	$p = 0.137$	$p = 0.502$	$p = 0.122$
Living situation	$p = 0.259$	$p = 0.237$	$p = 0.811$	$p = 0.117$
Work status	$p = 0.186$	$p = 0.566$	$p = 0.342$	$p = 0.309$
Education level	$p = 0.613$	$p = 0.293$	$p = 0.055$	$p = 0.037^*$
Number of admissions	$p = 0.165$	$p = 0.688$	$p = 0.347$	$p = 0.534$
Psychological complaints	$p = 0.901$	$p = 0.743$	$p = 0.176$	$p = 0.022^*$
Comorbidity	$p = 0.785$	$p = 0.630$	$p = 0.184$	$p = 0.075$
Health status assessment	$p = 0.619$	$p = 0.284$	$p = 0.114$	$p = 0.983$
Experience with patient participation in MTMs	$p = \leq 0.001^{***}$	$p = 0.658$	$p = 0.185$	$p = 0.446$

\*  $p \leq 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p \leq 0.001$



**Table. 5.** Mean differences between the demographic characteristics and the scores of the subscales – Admitted Patients

	(SS3)		(SS4)		(SS5)		(SS6)	
	Estimation and Perceived Competence		Effects		Organizational Conditions		Needs and Beliefs of the Patient	
Variables	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Admitted Patients Group								
Gender								
Male	19.33	(2.97)	35.17	(4.72)	35.24	(5.22)	32.61	(4.17)
Female	20.90	(2.22)	37.00	(3.97)	38.27	(3.90)	34.94	(3.54)
F	9.68**		4.69*		11.31**		8.68**	
Age (Years)								
18-24	20.59	(2.55)	35.59	(3.59)	37.82	(5.29)	34.18	(3.75)
25-34	19.99	(2.59)	35.26	(4.02)	36.70	(3.80)	34.19	(3.69)
35-44	20.55	(2.50)	35.81	(4.41)	35.71	(4.63)	33.90	(4.01)
45-54	20.47	(3.54)	37.29	(5.05)	38.59	(5.43)	33.76	(5.71)
> 55	19.88	(2.57)	37.82	(4.71)	37.71	(4.92)	33.71	(4.22)
F	0.29		1.06		0.64		0.18	
Living situation								
Alone	20.22	(2.86)	36.44	(5.73)	37.56	(5.25)	33.69	(3.89)
Partner/Children	20.27	(2.61)	36.51	(3.70)	36.79	(4.39)	34.10	(4.32)
Mental Health Facility	22.00	-	37.00	-	41.00	-	35.00	-
No place of residence	20.33	(3.24)	32.78	(2.05)	36.57	(6.00)	33.78	(4.56)
F	0.15		2.09		0.57		0.09	
Work status								
Employment / Independently	19.06	(2.91)	35.31	(4.30)	35.86	(4.89)	32.83	(4.50)
Unemployment	20.88	(2.37)	36.14	(4.48)	37.20	(4.72)	34.61	(3.98)
Student	20.42	(2.64)	36.42	(3.61)	39.17	(3.30)	35.42	(2.68)
Retired	20.57	(2.82)	38.71	(6.05)	37.00	(6.03)	33.00	(4.47)
Others	22.35	(0.96)	39.25	(4.79)	39.25	(4.27)	33.00	(5.60)
F	3.21		1.43		1.23		1.49	
Education level								
No school leaving diploma	19.71	(1.80)	37.31	(5.68)	35.71	(5.35)	32.00	(4.47)
Secondary school diploma	20.20	(2.82)	35.00	(3.66)	37.02	(4.82)	34.02	(3.40)
High school diploma	20.53	(2.70)	37.33	(4.68)	37.36	(4.86)	34.67	(4.98)
University diploma	20.73	(2.41)	36.91	(3.96)	38.45	(2.98)	33.64	(3.23)
Others	18.75	(3.50)	36.25	(6.90)	33.00	(5.48)	31.25	(6.50)
F	0.59		1.94		1.25		1.10	
Number of admissions								
1-2 times	19.57	(2.91)	35.43	(4.39)	36.20	(4.30)	33.08	(4.30)
3-4 times	20.67	(2.71)	37.00	(4.33)	37.36	(4.90)	35.03	(3.92)
> 5 times	21.07	(1.92)	36.56	(4.35)	38.19	(5.24)	34.26	(4.01)
F	3.53		1.43		1.96		2.30	
Psychological complaints								
Depression/Anxiety	20.86	(2.70)	36.93	(3.71)	38.03	(3.94)	34.31	(3.97)
Substance abuse	19.97	(2.76)	36.08	(4.84)	36.46	(5.30)	33.40	(4.43)
Psychotic vulnerability	19.57	(1.37)	33.00	(2.28)	33.83	(1.47)	33.50	(3.45)
Eating disorder	20.82	(2.79)	36.55	(3.59)	39.55	(2.77)	36.55	(2.38)
F	0.97		1.49		2.95*		1.92	
Comorbidity								
Yes	20.36	(2.60)	36.29	(4.30)	37.41	(4.47)	34.02	(4.63)
No	20.19	(2.82)	36.08	(4.50)	36.66	(5.05)	33.91	(3.65)
F	0.11		0.06		0.68		0.02	

Health status assessment								
Badly	21.00	(2.12)	36.41	(4.11)	38.29	(5.76)	34.59	(3.86)
Reasonably	20.58	(2.54)	36.38	(3.93)	37.08	(4.18)	33.88	(4.08)
Good	19.81	(2.76)	36.03	(4.85)	36.68	(4.55)	33.97	(4.59)
Very good	18.78	(3.73)	35.11	(6.07)	35.78	(6.67)	33.22	(4.21)
<i>F</i>	1.78		0.22		0.59		0.22	
Experience with patient participation in MTMs								
Yes	21.02	(2.28)	36.45	(4.33)	38.45	(4.13)	34.75	(3.30)
No	19.77	(2.85)	36.00	(4.44)	36.09	(4.94)	33.43	(4.61)
<i>F</i>	6.02*		0.30		7.12**		2.69	

\*  $p \leq 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p \leq 0.001$

**Table. 6.** Mean differences between the demographic characteristics and the scores of the subscales – Former Patients

	(SS3)		(SS4)		(SS5)		(SS6)	
	Estimation and Perceived Competence		Effects		Organizational Conditions		Needs and Beliefs of the Patient	
Variables	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Former Patients Group								
Gender								
Male	22.40	(2.21)	38.63	(3.94)	40.07	(3.74)	35.33	(2.58)
Female	22.27	(2.10)	39.20	(4.39)	40.60	(3.50)	36.13	(3.10)
F	0.14		0.33		0.48		1.52	
Age (Years)								
18-24	21.09	(3.18)	37.45	(3.80)	40.18	(3.57)	36.45	(2.77)
25-34	22.17	(1.66)	38.50	(3.35)	39.21	(2.75)	35.08	(3.56)
35-44	22.44	(2.15)	39.32	(4.88)	41.12	3.06)	36.15	(2.90)
45-54	22.51	(2.01)	39.49	(4.58)	40.29	(4.30)	36.20	(2.83)
> 55	22.48	(2.06)	39.39	(4.03)	41.26	(3.55)	35.91	(2.92)
F	1.13		0.77		1.46		0.72	
Living situation								
Alone	22.05	(2.12)	38.95	(4.35)	39.98	(3.97)	35.27	(3.04)
Partner/Children	22.53	(2.12)	39.33	(4.22)	40.91	(3.09)	36.41	(2.94)
Mental Health Facility	22.00	(2.19)	37.17	(4.49)	40.17	(4.31)	37.00	(2.19)
No place of residence	-	-	-	-	-	-	-	-
F	0.91		0.78		1.09		2.73	
Work status								
Employment / Independently	22.48	(2.11)	39.71	(4.10)	40.43	(3.44)	35.31	(3.00)
Unemployment	22.28	(2.09)	38.18	(4.74)	39.94	(3.89)	36.26	(3.18)
Student	21.63	(2.66)	38.88	(3.61)	40.25	(3.32)	36.00	(2.94)
Retired	22.00	(1.80)	38.78	(4.38)	42.33	(2.65)	36.44	(2.13)
Others	23.00	(1.63)	41.30	(2.50)	42.00	(2.79)	36.50	(2.84)
F	0.77		1.49		1.38		0.71	
Education level								
No school leaving diploma	22.60	(0.89)	37.00	(3.67)	37.20	(1.64)	33.60	(2.30)
Secondary school diploma	21.82	(2.54)	38.97	(4.39)	40.00	(3.68)	36.74	(2.63)
High school diploma	22.60	(1.87)	39.09	(4.17)	40.79	(3.40)	36.05	(2.83)
University diploma	22.31	(2.12)	39.62	(4.55)	41.14	(3.60)	35.34	(3.53)
Others	19.00	-	35.00	-	35.00	-	32.00	-
F	1.38		0.68		2.34		2.15	
Number of admissions								
1-2 times	22.05	(2.50)	38.82	(4.20)	40.56	(3.30)	35.74	(3.23)
3-4 times	22.76	(1.48)	39.88	(4.76)	40.36	(3.99)	36.08	(2.68)
> 5 times	22.36	(1.89)	38.91	(4.12)	40.42	(3.68)	36.13	(2.91)
F	0.99		0.57		0.03		0.25	
Psychological complaints								
Depression/Anxiety	22.21	(2.34)	39.55	(4.39)	41.30	(3.39)	36.25	(3.04)
Substance abuse	22.54	(1.98)	37.83	(3.52)	38.63	(3.56)	35.79	(3.08)
Psychotic vulnerability	22.04	(1.89)	39.70	(4.22)	40.70	(3.01)	35.09	(2.70)
Eating disorder	22.77	(1.59)	37.69	(4.73)	39.23	(3.98)	36.15	(3.13)
F	0.48		1.55		4.20**		0.91	
Comorbidity								
Yes	22.00	(2.38)	38.24	(4.40)	40.21	(3.50)	36.31	(2.62)
No	22.55	(1.85)	39.75	(4.07)	40.70	(3.60)	35.64	(3.26)
F	2.56		4.16		0.62		1.52	

Health status assessment								
Badly	21.53	(1.85)	35.60	(4.41)	39.80	(3.10)	35.27	(2.63)
Reasonably	22.04	(2.44)	38.81	(4.05)	40.34	(4.14)	36.06	(3.09)
Good	22.70	(1.77)	39.57	(4.07)	40.43	(3.22)	35.77	(3.16)
Very good	22.57	(2.11)	41.05	(4.28)	41.33	(3.12)	36.52	(2.73)
<i>F</i>	1.61		5.72		0.62		0.62	
Experience with patient participation in MTMs								
Yes	22.36	(1.96)	37.69	(4.33)	40.02	(3.68)	36.02	(2.92)
No	22.34	(2.29)	40.50	(3.75)	40.95	(3.38)	35.87	(3.10)
<i>F</i>	1.00		16.65***		2.42		0.04	

\*  $p \leq 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p \leq 0.001$