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Participation of Inpatients in Multidisciplinary Team Meetings: An Explorative Study of Mental Healthcare Workers' Perception.

ABSTRACT

Aim: To explore the perception of mental healthcare workers about participation of inpatients during multidisciplinary team meetings (MTMs) and to determine which demographic and contextual factors are associated with this perception.

Methods: A cross-sectional multicentre study in 17 psychiatric hospitals with 701 mental healthcare workers was performed between 29 April and 19 May, 2019 . For measuring the perception of the mental healthcare workers, the Patient Participation during Multidisciplinary Team meetings Questionnaire was used.

Results: 93% of the mental healthcare workers indicate that they are willing to allow patients to participate in a MTM. Most mental healthcare workers prefer an active role for the patient when participating in a MTM (93%) and a collaborative role for the patient when making decisions in a MTM (75%). Level of education, discipline, experience with patient participation in MTMs, working in a team where patient participation is applied, and recent training on patient participation, are associated with the mental healthcare worker's perception on patient participation in MTMs.

Conclusion: Mental healthcare workers report a great willingness to involve inpatients in MTMs. However, social workers, nurses, and pedagogues feel less competent and are less positive about the effects of patient participation in MTMs. Mental healthcare workers with recent training in patient participation and experience in patient participation in MTMs feel more competent and believe more often that the patient should fulfill a more autonomous role when participating in a MTM. These results can be used to understand and improve patient participation in MTMs in mental healthcare.

Key words: patient participation, multidisciplinary team meeting, mental healthcare, multidisciplinary care, patient-centred care.

BACKGROUND

In healthcare, in somatic as well as in mental healthcare, there is a global tendency towards more active involvement of patients in care (Storm *et al.,* 2013, Vandewalle *et al*., 2017). This movement represents an enhanced recognition of the patients' perspective, and the patients' right to be involved in decisions concerning their own health and healthcare (Snyder *et al*., 2016, Vandewalle *et al*., 2017). As a result of this tendency, more and more (in)patients in (mental) healthcare are involved in multidisciplinary team meetings (MTMs) when their care is discussed (Vuokila-Oikkonen *et al*., 2002, Fiddler *et al*., 2010, Lindberg *et al*., 2013, Carey *et al*., 2014, van Dongen *et al*., 2017 & 2018, Rosell *et al*., 2018).

Most of the studies that have been conducted on patient participation in MTMs has shown that participation of (in)patients during MTMs improves the quality and patient centeredness of care (Butow *et al*., 2007, Oliver-Parker *et al*., 2009, 2010 & 2014, Donnelly *et al*., 2013, Bangsbo *et al*., 2014, Salloch *et al*., 2014, Massoubre *et al*., 2017, van Dongen *et al*., 2016, 2017 & 2018, Redley *et al*., 2018). A few other studies suggested that involving inpatients in MTMs might promote an open and participatory communication in which there is more understanding, recognition and trust between the hospital staff and the patient which can lead to positive health outcomes (Oliver-Parker *et al*., 2005, 2009, 2010 & 2014, Wittenberg-Lyles *et al*., 2010, Donnelly *et al*., 2013, van Dongen *et al*., 2016). Furthermore, the studies of Vuokila-Oikkonen *et al.* (2004) and Wittenberg-Lyles *et al.* (2010) found that patient participation in MTMs improves therapy adherence in hospice care and the patients ability to cope in daily life outside the hospital.

Although patient participation in MTMs is a widespread concept and is commonly used in healthcare, research about the health workers' perception on participation of inpatients in MTMs is limited. To date, researchers examined the perception of healthcare workers in oncological and elderly care, and little is known about the association between healthcare worker-related factors and the healthcare worker's willingness to involve inpatients in MTMs (Butow *et al*., 2007, van Dongen *et al*., 2018). Previous research (Butow *et al*., 2007, Oliver-Parker *et al*., 2005 & 2009, Lindberg *et al*., 2013) indicated that healthcare workers often have ambivalent feelings when inpatients participate during MTMs. The study of Devitt *et al.* (2010) found that these ambivalent feelings emerge due to concerns about the patients ability to cope with the information discussed and the effect their presence would have on the dynamics of the decision-making process. The demographic characteristics that influence the healthcare workers' willingness to share responsibility with a patient during a MTM include the discipline and the region of the healthcare worker. With regard to these characteristics, the aforementioned literature reports that (breast) nurses are more supportive in involving patients in MTMs then oncologists and surgeons. Also, clinicians in major capital cities were significantly less likely to be supportive in involving patients in MTMs compared with clinicians in regional of rural centres (Butow *et al*., 2007). However, these studies focus mainly on oncologists, surgeons, and nurses, while other disciplines are missing (Butow *et al*., 2007, Lindberg *et al*., 2013). Despite the evidence in elderly –and oncological care, literature about patient participation in MTMs in mental healthcare is rather scarce (Fiddler *et al*., 2010). Previous research found that mental healthcare workers experience feelings of anxiety when implementing

patient participation in MTMs in their practice as it means a fundamental shift in the power balance between caregivers and patients. Despite this, mental healthcare workers still believe that participation of inpatients in MTMs leads to better outcomes such as a more rewarding staff-patient relationship and an improvement in information sharing and decision-making (Fiddler *et al.*, 2010). So, in sum, the mental healthcare workers' perceptions of participation of inpatients in MTMs as well as the demographic variables that affect this perception are still a matter of debate.

The main aim of this explorative study was to investigate the perception of mental healthcare workers about participation of inpatients during MTMs in general and to explore which demographic and contextual factors influence this perception. More specifically, the following research questions were raised: (1) what is the perception of mental healthcare workers on the concept of involving inpatients during MTMs; (2) which demographic and contextual factors are associated with this perception?

METHODS

Design

A cross-sectional multicenter study design was used. Seventeen psychiatric hospitals in Flanders (the Dutch-speaking part of Belgium) participated in the study.

Participants and Data Collection

Data collection was initiated by sending an email to the gatekeeper of each hospital, with a URL of the electronic version of the questionnaire. Each hospital received its own URL. The gatekeepers forwarded the email, along with instructions for completion. Respondents were informed that they were required to answer all items for valid participation. All healthcare workers in the psychiatric hospitals were invited to participate in the study. Experiences with participation of inpatients during MTMs in mental healthcare was not necessary. Outpatient and community mental health-care systems were excluded from this study. Fourteen days after launching the questionnaire, the gatekeepers sent a reminder email. The convenience sample was collected between 29 April and 19 May, 2019. Approximately 5700 mental healthcare workers were invited to participate in the study.

Instrument

To determine the healthcare workers' perception of participation of inpatients during MTMs in mental healthcare, the patient participation during multidisciplinary team meetings questionnaire for mental healthcare workers (PaPaT-Q-MHcW) was used (Berben, Dierckx, Crabeel, Beeckman, Van Hecke, Verhaeghe, 2019).

The PaPaT-Q-MHcW is a questionnaire that measures the perception of mental healthcare workers about participation of inpatients during MTMs. The questionnaire consists of 37 items divided over 6

subscales: (1) role of the patient in the MTM, (2) role of the patient in medical decision-making, (3) estimation and perceived competence of the healthcare worker, (4) effects of patient participation in MTMs, (5) organizational conditions of patient participation in MTMs, and (6) needs and beliefs of the patient. The overall Cronbach's alpha of the PaPaT-Q-MHcW is 0.92 and all subscales of the PaPaT-Q-MHcW ranged from 0.75 to 0.91. The 'role of the patient in the MTM' was measured by requesting participants to choose between 'none'(1), 'passive role'(2), or 'active role'(3). The 'role of the patient in medical decision making' was measured by requesting participants to choose between 'passive'(1), 'semi-passive'(2), 'collaborative'(3), 'partially autonomous'(4), or 'autonomous'(5). All the other subscales of the questionnaire were formulated to be measured on a five-point Likert rating scale (1 = strongly disagree; 5 = strongly agree). The following demographic characteristics of mental healthcare workers were also included: gender, age, work status, discipline, education level, duration of employment in mental healthcare, whether or not working in a team where participation of inpatients during MTMs is applied, experience with participation of inpatients during MTMs, and training and education about patient participation in the past five years. An overview of the included PaPaT-Q-MHcW subscales and items is provided in Table 1.

Statistical analysis

All data were analyzed using SPSS Statistics 27.0 (SPSS, Chicago, IL, USA). Only the questionnaires that were fully completed were analyzed. One demographic characteristic of the PaPaT-Q-MHcW, in particular 'discipline', had to be recoded, as some disciplines were under-represented in the sample. Recoding for this variable took place on three criteria: (a) the tasks of the discipline in general, (b) the tasks of the discipline during a MTM, and (c) the intensity of contact between the patient and the discipline during the care process and hospital stay of a patient. Recoding of this variable resulted in the following discipline groups: (1) management, (2) psychiatrists, (3) psychologists, (4) head nurses, (5) nurses and pedagogues, (6) social workers, (7) non-verbal therapists, (8) peer support workers, and (9) others. Descriptive analyses were performed considering absolute frequency and relative percentage. Data were described as n (%) for categorical variables and mean±SD or median (P25–P75) for numerical variables. The Fisher-Freeman-Halton exact test was used to identify the correlations between the demographic characteristics, subscale 1 'the role of a patient during a MTM', and subscale 2 'role of the patient in medical decision making'. The Spearman's rank correlation coefficient test was done to define the covariates. General linear models of multivariate analyse of covariance (MANCOVA) were used to test differences on the summed subscales in the PaPaT-Q-MHcW according to the respondent characteristics. A significant MANCOVA was followed by univariate F-tests using the Wilks' λ statistic. Linear independent pairwise comparisons were analysed to examine the magnitude of the difference in the mean scores of the dependent variables.

Ethics

The study was approved by the Ethics committee of Ghent University Hospital (B670201837675). An approval from the local ethics committees from each hospital was acquired. All respondents were fully

informed prior to the commencement of the study. They were assured of the voluntary nature of their participation, and of the anonymity of the data. All respondents provided electronic informed consent.

RESULTS

A total of 701 out of 956 respondents fully completed the questionnaire (73.3%). Despite their low number in the sample, it was decided to include the group of 'psychiatrists' (N = 14) and 'peer support workers' (N = 8) only in the descriptive analyses. As it was not possible to indicate the discipline of the group 'others', this group was fully excluded for further analysis (N = 35). The majority of the sample (N = 666) was female (69.1%) and aged between 30 and 39 years (30.9%). More than half had a bachelor degree (52.7%) and a large part had a master degree or higher (31%). The characteristics of the respondents are summarized in Table 2.

The descriptive statistics of the mental healthcare workers' responses are provided in Table 1. These statistics showed a great willingness among mental healthcare workers to involve inpatients in MTMs (93%). In addition, 88% of mental healthcare workers considered it important that inpatients participate in a MTM and 79% strongly or partially agreed to be competent to involve inpatients in MTMs. Regarding to the role a patient should fulfil when participating in a MTM, the majority of mental healthcare workers believed that a patient should take an active role (93%). At the same time, 75% preferred a collaborative role when it comes to a patient's role in medical decision-making.

Fisher-Freeman-Halton exact test

A first test revealed that the subscale '*role of the patient in the MTM*' significantly differed by recent training and education about patient participation (p= 0.016), experience with patient participation in MTMs (p= 0.001), and working in a team where patient participation in MTMs is applied (p= 0.001). Mental healthcare workers who answered 'yes' to these three variables were more likely to choose for an active role for a patient during a MTM. A second test revealed that the subscale *'role of the patient in medical decision making'* significantly differed by recent training about patient participation (p= 0.028) and experience with participation of inpatients in MTMs (p= 0.005). Mental healthcare workers who indicated 'yes' to these two variables choose more often for an autonomous role of a patient in the process of medical decision making and therefore believe that a patient independently decides, whether or not in consultation with the team, which treatment he or she wants to receive.

Multivariate analysis of covariance (MANCOVA)

Mean differences between the demographic characteristics and the scores of the subscale 'estimation and perceived competence of the healthcare worker' (SS3), 'effects of patient participation in MTMs' (SS4), 'organizational conditions of patient participation in MTMs' (SS5), and 'needs and beliefs of the patient' (SS6), were analyzed with multiple analysis of covariance (MANCOVA; see Table 3). Variables as discipline, the duration that healthcare workers were employed in mental healthcare, training and

education about patient participation in the past five years, experience with participation of inpatients during MTMs, and whether or not working in a team where participation of inpatients during MTMs is applied, were used as covariates in each analysis.

A first MANCOVA with level of education as independent variable and the scores of the four subscales as dependent variables, showed a statistically significant main effect of level of education on SS3 and SS4 ($F(12, 1669.76) = 2.399$, $p = 0.004$, Wilks' $\Lambda = .956$, partial $\eta^2 = .015$). Post-hoc comparisons using the Bonferroni test clarified that mental healthcare workers with a graduate diploma felt less competent than their colleagues with a master degree or higher ($p= 0.032$). Furthermore, this group of mental healthcare workers also believe that organizing participation of inpatients during MTMs requires less effort than their colleagues with a bachelor-after-bachelor degree ($p= 0.011$) and a master degree or higher ($p= 0.041$).

A second MANCOVA with discipline as independent variable and the scores of the four subscales as dependent variables, showed a statistically significant main effect of discipline on SS3, SS4, and SS5 ($F(20, 2070.53) = 3.307$, $p \leq 0.001$, Wilks' $\Lambda = .901$, partial $\eta^2 = .026$). Post-hoc comparisons using the Bonferroni test clarified that the group of managers felt more competent than the psychologists ($p= 0.030$), the nurses and pedagogues ($p\leq 0.001$), the social workers ($p\leq 0.001$), and the non-verbal therapists ($p= 0.005$). Furthermore, psychologists were more willing to involve inpatients in MTMs than the nurses and pedagogues ($p= 0.043$), and the social workers ($p= 0.011$). A similar result for the group of head nurses, they were also more supportive in involving inpatients in MTMs than the nurses and pedagogues ($p= 0.006$), and the social workers ($p= 0.003$). Concerning SS4, the group of social workers had a less positive perception about the effects than the head nurses ($p= 0.045$), the psychologists ($p= 0.006$), and the managers ($p\leq 0.001$). However, the management group scored significantly higher on this subscale then the head nurses ($p= 0.041$), the nurses and pedagogues ($p\leq 0.001$), and the non-verbal therapists ($p= 0.002$) and thus had a more positive perception about the effects. Concerning SS5, the group of nurses and pedagogues scored significantly lower in comparison with the group of the head nurses ($p= 0.008$) and the psychologists ($p= 0.014$) and therefore believe that organizing participation of inpatients during MTMs requires less effort.

A third MANCOVA with experience with patient participation in MTMs as an independent variable and the scores of the four subscales as dependent variables showed a statistically significant main effect on SS3 and SS4 ($F(4, 634) = 8.559$, $p \leq 0.001$, Wilks' $\Lambda = .949$, partial $\eta^2 = .051$). The post-hoc comparisons using the Bonferroni test indicated that mental healthcare workers with experience in patient participation in MTMs felt more competent ($p\leq 0.001$) and had a more positive view of the effects of patient participation in MTMs ($p\leq 0.001$) then their colleagues without experience. A similar effect was observed in the MANCOVA's where working in a team where patient participation is applied and recent training about patient participation were added as an independent variable and the scores of the four subscales were added as dependent variables. Findings showed that SS3, SS4, and SS5, were significantly affected by working in a team where patient participation is applied ($F(4, 634) = 9.734$, $p \leq 0.001$, Wilks' $\Lambda = .942$, partial $\eta^2 = .058$) and recent training about patient participation ($F(4, 634) =$

6.053, $p \leq 0.001$, Wilks' $\Lambda = .963$, partial $\eta^2 = .037$). Post-hoc comparisons using the Bonferroni test showed that the group of mental healthcare workers who worked in a team where patient participation in MTMs is applied felt more capable ($p \leq 0.001$), had a more positive view of the effects ($p = 0.006$), and believed that organizing patient participation in MTMs requires less effort ($p = 0.027$). These findings were confirmed for the group who followed a recent training about patient participation. This group also felt more competent ($p \leq 0.001$), had a more positive view of the effects ($p = 0.001$) and believed that involving patients in MTMs requires less effort ($p = 0.002$).

DISCUSSION

The current study aimed to explore the perception of mental healthcare workers on participation of inpatients in MTMs in general as well as the influence of demographic and contextual variables on the mental healthcare workers' perception. In this study, 701 of approximately 5.700 mental healthcare workers participated in the study. According to Singh *et al.* (2014), we therefore have a sufficiently large sample to obtain reliable results.

The results of this study showed that there is a great willingness on the part of mental healthcare workers to involve inpatients in MTMs and a large number of them also consider it important that inpatients participate in MTMs. This might provide some confirmation of the assumptions based on a previous Belgian study of Van Hecke *et al.* (2014) where 877 mental healthcare workers already indicated that patient participation in MTMs could bring benefit for their organization. Compared to other studies in elderly and oncological care (Butow *et al.*, 2007, Oliver-Parker *et al.*, 2005 & 2009, Lindberg *et al.*, 2013), it seems that mental healthcare workers have less ambivalent feelings concerning patient participation during MTMs. This may be due to the global tendency in mental healthcare to actively involve patients in care and the patients' right to be involved in decisions concerning their own health (Storm *et al.*, 2013, Snyder *et al.*, 2016, Vandewalle *et al.*, 2017). Furthermore, 8 out of 10 mental healthcare workers indicate that they feel capable to involve inpatients in MTMs.

Regarding the role of a patient, our results indicate that 93% of mental healthcare workers believe that the patient should fulfil an active role when participating in a MTM. Based on these findings, it could be presumed that mental healthcare workers would choose for an autonomous role for the patient during the decision-making process of his care more quickly, as this also gives a greater sense of control to the patient. However, our study indicate that 75% of mental healthcare workers choose for a collaborative role in the process of medical decision-making, which means that they believe that the decision about the best treatment for the patient is a shared responsibility between the patient and the team.

Concerning the effects of participation of inpatients in MTMs, our results show that mental healthcare workers strongly believe that involving inpatients in MTMs ensures that the patient feel more involved in his care process. Furthermore, they also believe it improves the communication between the patient and the team members and it increase patient's confidence in the team members. This might provide

some confirmation of the assumptions based on the studies of Oliver-Parker *et al.*, (2014), Wittenberg-Lyles *et al.*, (2010), Donnelly *et al.*, (2013), and van Dongen *et al.*, (2016) that involving inpatients in MTMs promotes an open and participatory communication in which there is more understanding, recognition and trust between the hospital staff and the patient which can lead to positive health outcomes. Concerning the responses about the effect of improving therapy adherence, it is noteworthy that mental healthcare workers have diverse views. Where 78% of mental healthcare workers believe that patient participation during MTMs improves patients therapy adherence during hospital stay, only 57% of mental healthcare workers believe it also improves patients therapy adherence after discharge from the hospital. These results are in accordance with previous studies (Vuokila-Oikkonen *et al.*, 2004, Wittenberg-Lyles *et al.*, 2010) although it is unclear why mental healthcare workers are less convinced of the effect on patient's therapy adherence after discharge from the hospital.

This study also showed that mental healthcare workers believe that participation of inpatients during MTMs affects the duration of the MTM. This might provide some conformation of the findings based on the studies of Oliver-Parker *et al.* (2005 & 2016) that team meetings attended by inpatients last longer. Moreover, both studies indicate that the amount of additional time could be of significant influence on the willingness of healthcare workers in involving patients in MTMs. Thus, acknowledging this perception might be important when mental healthcare workers intend to implement participation of inpatients in MTMs in their current practice. Our results also indicate that mental healthcare workers think that the structure of a MTM must change when inpatients participate in such a meeting. According to van Dongen *et al.* (2016), having a clear structure and task distribution is important when inpatients participate during MTMs. A facilitating factor here is the presence of a chairperson who leads the discussion during the MTM, summarizes the information and closes the meeting within the planned time spin (Donnelly *et al.*, 2013, van Dongen *et al.*, 2018). Besides this, it is recommended that a patient should be the first one to speak at the meeting as this would improve participation and give a greater sense of control to the patient (Donnelly *et al.*, 2013). Furthermore, recent studies indicate that it is the task of the chairperson and all the team members to involve the patient in the team discussions during the MTM by actively ask the patient to respond to statements which are made and if he has any questions or additions (Wittenberg-Lyles *et al.*, 2013, Oliver-Parker *et al.*, 2016, van Dongen *et al.*, 2016).

Our study also showed that mental healthcare workers believe it is important to inform patients in advance about the purpose, process, and duration of the MTM (95%), and which team members are present during the MTM (89%), when participating in a MTM. This might provide some conformation of the assumptions based on the studies of Donnelly *et al.* (2013), Wittenberg-Lyles *et al.* (2013), Oliver-Parker *et al.* (2016), and van Dongen *et al.* (2016) that it useful to prepare the patient before involving in a MTM by organizing a pre-meeting where you inform the patient about the purpose of the meeting, the available time, the number of disciplines present in the meeting, and the patients' role during the meeting. Concerning the responses about the characteristics about the organizational culture wherein inpatients participate in MTMs, our results show that mental healthcare workers believe that participation of inpatients during MTMs requires a lot of effort. In this study, 97% of mental healthcare workers believe that participation of inpatients during MTMs requires an openness on the part of the

team members and the patient to compliment, correct, and provide feedback to each other during the MTM. In addition, 80% believe that it means that you consider the patient as an equal partner in care. Acknowledging these efforts might be important when mental healthcare workers intend to implement patient participation in MTMs in their current practice as several studies highlight that involving inpatients during MTMs means that healthcare workers and inpatients build a relationship based on trust and equality (Oliver-Parker *et al.*, 2009, van Dongen *et al.*, 2016). This study also showed that mental healthcare workers clearly prefer peer review (83%) over training and education (66%) when it comes to a topic as patient participation in MTMs.

In terms of perception about what it means for a patient when participating in a MTM, it is noticeable that four out of five items scored 91 percent or higher (range: 91%-98%). Our results indicate that mental healthcare workers believe a patient considers it important that his current care needs are listened to when participating in a MTM. Further, they also believe that a patient consider it important to be approached as a unique person with attention to his physical, psychological, social, and spiritual plane in his life when attending in a MTM. These results are in accordance with previous studies showing that is important for healthcare workers to use communication skills that focus on emotional concerns and effort in order to gain a more holistic understanding of a patient when participating in a MTM (Washington *et al.*, 2013, van Dongen *et al.*, 2016). Our study also showed that 93% of mental healthcare workers believe that a patient considers it important that participants of the MTM are clearly visible and can be involved in the discussion during the MTM. Compared with other studies this is a reassuring percentage as these studies show that patients feel more comfortable and tell more personal things during the MTM if the number of team members is limited (Donnelly *et al.*, 2013, van Dongen *et al.*, 2016) and if the patient is given a visible place at the table (Lindberg *et al.*, 2013).

This study also explored which healthcare worker-related factors influence the mental healthcare workers' perception about the patient's role in a MTM. Our study shows a clear significant association between factors such as experience with patient participation in MTMs and recent training or education about patient participation, and an active role for a patient in a MTM. Furthermore, there is also a significant association between the same factors and an autonomous role for a patient in the decision-making process of care.

This study also showed that the mental healthcare workers' perception about participation of inpatients during MTMs is influenced by the mental healthcare worker's discipline and education level. In terms of estimation and perceived competence, our results indicate that nurses and pedagogues are less willing to involve inpatients in MTMs than head nurses and psychologists. In addition, nurses and pedagogues also feel less competent concerning participation of inpatients in MTMs than head nurses and psychologists. These results are in contrast with a study of Butow *et al.* (2007) that concluded that nurses are more supportive in involving patients in MTMs. However, this study only included nurses, oncologists, and surgeons, which makes it difficult to generalize those results to our study as we excluded psychiatrists from the inductive analysis. According to our findings, a special attention should go to the nurses with a diploma degree as they perceive a lower sense of competence of involving inpatients in

MTMs than their colleagues with a bachelor degree or higher. Extra qualification, both by experience and training or education, for this group of mental healthcare workers can be useful as it can lead to advanced nursing behavior (Cotterill-Walker, 2012). Parallel findings were found for the group of social workers. Social workers are less willing and feel less competent to involve inpatients in MTMs than head nurses and psychologists. With regard to the group of managers, this study shows that managers feel more competent compared to almost all discipline groups. Concerning the effects of participation of inpatients in MTMs, our results show that non-verbal therapists, head nurses, and nurses and pedagogues are less convinced about the effects of patient participation in MTMs than managers are. A similar finding was found for the group of social workers. They score significantly lower on this subscale than the head nurses, psychologists, and managers, which may mean that they believe less strongly in the effects of participation than the other three groups. In terms of organizational conditions for involving inpatients in MTMs, this study show that the nurses and pedagogues believe that organizing participation of inpatients during MTMs requires less effort then the psychologists and head nurses. These discrepancies might be explained by the differences in the tasks of the discipline in general as well as the specific tasks of the discipline during a MTM. Further, it might be explained by the impact of specific characteristics of the discipline influencing the healthcare worker relationship and proximity to the patient. Therefore, it is plausible that the less direct patient contact a healthcare worker has the more positive he is about participation of inpatients in MTMs. Our results also showed that the mental healthcare workers' perception about participation of inpatients during MTMs is influenced by professional experience and recent training and education. Despite the fact that only 33% of the mental healthcare workers in this study followed a training about patient participation in the past five years, we see a significant positive impact on the willingness of mental healthcare workers to involve inpatients in MTMs.

Some study limitations merit mentioning. First, it should be considered that the study was conducted in Flanders (Belgium) where patient participation in MTMs is not yet common practice. Countries with a longer tradition of active involvement of patients in care might have other norms with regard to participation of inpatients in MTMs, which could reflect the perceptions of mental healthcare workers regarding this theme. Second, the possibility of non-response bias should be considered as we cannot estimate if the mental healthcare workers who chose to participate in this study had more favourable views towards patient participation in MTMs, compared to those who did not participate or interrupted the questionnaire early (N = 255). Third, this study only considered mental healthcare workers' perspective of participation of inpatients in MTMs. Positive scores on the various questions does not necessarily lead to more active involvement of inpatients in MTMs. Patient-related factors must also be considered when evaluating patient participation (Davis *et al.*, 2011, Broer *et al.*, 2014, Vandewalle *et al.*, 2017). Fourth, the validity of the self-reported answers could be subject to social desirability bias since we use long questions in the PaPaT-Q-MHcW.

The findings of this study might function as eye-opener for mental healthcare workers and can be used to support further development and implementation of quality improvement programs. The insights of this study can be complemented with qualitative research data of stakeholders' experiences of patient

participation in MTMs. Future research must focus on the meaning psychiatric nurses, pedagogues, and social workers give to participation of inpatients in MTMs. In particular, the focus should be on explaining why these three discipline groups are less supportive in involving inpatients in MTMs and are less convinced about the effects of patient participation in MTMs. In addition, future research should take into account the perception of both the psychiatrist and peer support worker. Furthermore, research in this area should focus on the effects of patient participation in MTMs. In this regard, there should be enhanced attention to the mental healthcare workers who are working in a team where patient participation is applied, as they believe in better health outcomes. These studies should be focus on whether the belief in better effects by this group of mental healthcare workers actually leads to better patient outcomes. In addition, the insights of this study can be supplemented with quantitative research data. For instance, the effects for patient participation in MTMs can be assessed through a randomized-controlled trial or quantitative studies investigating whether the effect of patient participation in MTMs depends on the number of times a patient participates in a MTM. As this questionnaire exclusively focuses on patient participation in MTMs in inpatient psychiatric settings, future research must focus on the mental healthcare workers' perception on patient participation in MTMs in community-based mental health care systems. Finally, to fully understand the phenomenon of participation of inpatients in MTMs, it also essential to explore the patient's perception about patient participation in MTMs.

CONCLUSION

In conclusion, this study showed a great willingness among mental healthcare workers to involve inpatients in MTMs and a large number of them also consider it important that inpatients participate in MTMs. Thereby, a large proportion of mental healthcare workers feel competent to involve (in)patients in MTMs. Professionals in mental healthcare consider it important that a patient should fulfil an active role when participating in a MTM. Furthermore, they prefer a collaborative role in the process of medical decision making in a MTM. Special attention should go to the group of social workers and nurses and pedagogues as they feel less competent and are less positive about the effects of patient participation in MTMs. Finally, having experience with patient participation in MTMs and following a training about patient participation ensures that mental healthcare workers feel more competent and estimate the effects of patient participation in MTMs more positively. This group of mental healthcare workers also give the patient a more active role in the MTM and a more autonomous role in the process of decision-making. Future studies should apply qualitative research designs to explore the lived experience of mental healthcare workers. Furthermore, research should also focus on cross-sectional designs to examine the perception of mental health patients about participation in MTMs and the characteristics that determine whether a patient is willing to participate in a MTM.

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