

# **RESEARCH ARTICLE**

## **Barriers and facilitators for implementing interventions for professionals providing long-term community mental healthcare to people with severe non-psychotic mental illness: a Grounded Theory approach**

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## **ABSTRACT**

**Title:** Barriers and facilitators for implementing interventions for professionals providing long-term community mental healthcare to people with severe non-psychotic mental illness: a Grounded Theory approach.

**Background:** A major challenge in mental healthcare is to bridge the gap between research and practice. Several studies have described that community mental healthcare for people with severe non-psychotic mental illness lacks a formal structure, and a solid basis that guides interventions. In order to successfully implement a new intervention, barriers and facilitators have to be explored. However, not much is known about the barriers and facilitators regarding the implementation of interventions within this field.

**Research question:** What are the barriers and facilitators for the implementation of interventions for professionals providing long-term community mental healthcare to people with severe non-psychotic mental illness?

**Method:** A qualitative study using a Grounded Theory approach was conducted. Data were gathered through a combination of fourteen individual interviews and one focus group. The focus groups and interviews were recorded using audio recording and transcribed verbatim. Data analysis was based on the Grounded Theory approach.

**Results:** This study identified six categories of barriers and facilitators. Professionals perceived most barriers at the intervention level, and facilitators at the level of the organizational context. These findings correspond with the findings of other studies.

**Conclusion:** This study provides new insights into barriers and facilitators as perceived by professionals. The surplus value was found to be the core category that drives the whole implementation. Barriers and facilitators cannot simply be seen as separate factors because they interact with each other within the process of implementation.

**Recommendations:** It is recommended to use tailored implementation strategies that take the barriers and facilitators found within this study into account when implementing a new intervention.

**Keywords:** mental health services, health plan implementation, community psychiatry, qualitative research

## INTRODUCTION

A major challenge in the field of mental healthcare services is to bridge the gap between research and practice. Over the last years a considerable amount of interventions have been developed with the purpose of improving mental healthcare services.<sup>1-8</sup> Unfortunately, many of these interventions are not widely offered in daily practice.<sup>9-13</sup> Consequently, this prevents people with mental disorders to benefit from evidence-based interventions.

Mental healthcare services exist for over 85% of community mental healthcare (CMHC).<sup>14</sup> CMHC is defined as 'a community-based, long-term treatment within a supportive atmosphere, aimed at stability rather than change'.<sup>15</sup> About 50% of these services are used by a relatively small group of 160.000 people (age 18-65) with severe mental illness (SMI).<sup>16</sup> People with SMI suffer from a psychiatric disorder, use mental healthcare for 2 years or more, and have a score at or below 50 on the Global Assessment of Functioning-scale (GAF).<sup>17</sup>

People with SMI can either have psychotic disorders, non-psychotic disorders or both. In the Netherlands about 40% of the people with SMI have non-psychotic disorders, such as mood-, personality-, anxiety-, and addiction disorders.<sup>16</sup> Especially within this group there are issues regarding the balance between treatment needs and treatment received.<sup>18-20</sup>

Several studies described that CMHC for people with severe non-psychotic mental illness lacks a formal structure, and a solid empirical and theoretical basis that guides interventions.<sup>20-22</sup> This may result in negative effects on patients, such as a lack of or unnecessary dependence of care.<sup>20,23</sup> In order to provide the best possible care to people with severe non-psychotic mental illness, the process of implementation is of key importance when bridging the gap between research and practice, and to make sure evidence-based interventions are used in CMHC services.<sup>13,24</sup>

Within the context of this study, implementation is defined as the systematic process of planning, transferring and embedding interventions from research into daily practice. Implementation processes are complex and there are many factors to consider in the implementation of evidence-based interventions. Moreover, it seems necessary to use specific strategies for implementation to ensure changes in healthcare practice.<sup>24,25</sup> Barriers and facilitators for the implementation of interventions should be addressed within these strategies.<sup>26-29</sup>

Research regarding barriers and facilitators has been conducted within the field of primary mental healthcare, assertive community treatment, and clinical psychiatry.<sup>25,30-32</sup> However, research regarding barriers and facilitators for the implementation of interventions within the field of long-term CMHC for people with severe non-psychotic mental illness is limited. It is

therefore unknown whether specific barriers or facilitators exist regarding the implementation of interventions for professionals providing care to these patients.

### **Aim**

This study aims to explore the barriers and facilitators for the implementation of interventions for professionals providing long-term CMHC to people with severe non-psychotic mental illness.

## **METHOD**

### **Design**

A qualitative study using a Grounded Theory (GT) approach was conducted. Data were collected through a combination of semi-structured interviews and a focus group. Qualitative data collection methods were selected, because they can provide a rich in-depth description of the participants' knowledge, attitude and views on barriers and facilitators for the implementation, which is well suited for this type of study. Moreover, the combination of interviews and a focus group was chosen to pursue data-richness and thereby contribute to a thorough exploration of the barriers and facilitators.<sup>33-38</sup> The GT approach enables a theory to be developed that is grounded in the views and experiences of the participants in the study.<sup>39-41</sup>

### **Participants**

Participants were identified through convenience sampling. Several teams of professionals from mental healthcare organizations in the Netherlands who provide CMHC were approached and to participate in the study. Teams of several organisations were approached to get a broad perspective of the views of professionals working at different mental healthcare organisations.

The eligibility of professionals who were interested in participating in the study was established by the following criteria:

- Working as a (specialized) psychiatric nurse, nurse practitioner, rehabilitation worker, case manager, psychiatrist or psychologist with people with severe non-psychotic mental illness for at least one year.
- Offering structure and support to people with severe non-psychotic mental illness who receive CMHC for at least two years.

### **Data collection**

Data were collected between March and May 2015. First, interviews were conducted to get insight into which factors influence the success of the implementation of interventions. After these interviews were analysed, a focus group was conducted with the purpose of triggering a lively discussion regarding the barriers and facilitators and to explore if and how these factors interact. Finally, two additional interviews were conducted to get further insight in the interaction between factors, and to check whether data saturation was achieved.

The interviews and focus group were conducted by the primary researcher (LV) who had been trained in conducting interviews and focus groups. Within the interviews, a topic guide was used to systematically collect data. The guide was developed based on known barriers,

facilitators and other factors that influence a successful implementation, and included the following themes: changes in general, experiences with previous implementations of interventions, and needs for implementing a new intervention.<sup>25-27,42,43</sup> A test interview was conducted with the purpose of practicing interviewing and testing the topic guide.<sup>34,36,44,45</sup> As data collection proceeded, the topic guide was modified to reflect categories that required further development.<sup>33,39,44,45</sup>

The interviews and focus group were held in a comfortable environment which was easily accessible for the participants, and were recorded using audio recording. The interviews lasted between 25 and 50 minutes.

The focus group procedures of Krueger and Casey were used in preparing and conducting the focus group.<sup>36</sup> In order to systematically collect data within the focus group, a questioning route was developed based on the topic guide.<sup>36</sup> The focus group was conducted with the help of an assistant from the research group. The researcher acted as moderator and the assistant handled logistics, took notes and monitored the recording equipment. Within the focus group a whiteboard was used to create an overview of all factors and interactions that were found. The focus group lasted 105 minutes, including a 15- minute break.

During data collection and analysis the researcher made memos and field notes with the purpose of documenting methodological decisions, contextual information, thoughts, and actions relevant to the research endeavour.<sup>33,34,36,44</sup>

## **Data analysis**

All interviews and the focus group were transcribed verbatim. The GT approach was used to guide data analysis.<sup>39,41</sup> The process of data collection occurred simultaneously with data analysis. Data collection and data analysis continued until data saturation was achieved.

All data were imported into the software package of NVivo. Data analysis was guided through three stages: open, axial and selective coding.<sup>33,39,41,44</sup> First, each transcript, notes and memos were read thoroughly to familiarize with and develop a sense of all data within context. Transcripts were then read line by line and relevant fragments were coded. All codes were described and grouped into subcategories if they were found to be conceptually alike or related in meaning. Codes and subcategories were continually refined and compared with each other to reduce the number of subcategories.<sup>33,39,41,44</sup>

All codes and subcategories were categorised as being either a facilitator, a barrier or both (depending on the circumstances). Codes and subcategories were categorised as a facilitator when participants stated that it would be helpful if it was taken care of, or that it wouldn't be helpful if it wasn't being taken care of. The assumption was made that these

'double negative' factors can be considered as facilitators if they are being taken care of. In order to create a clear overview of the different types of factors, all codes and subcategories within each category were categorised as being either a factor related to characteristics of the intervention, the individual professional, the patient, the organisation, the social context or the external environment, based on the framework of Grol & Wensing.<sup>42</sup>

During the phase of axial coding it was discovered that the barriers and facilitators could not be seen as separate factors, because they interact with each other throughout the process of implementation. Therefore, the topic guide and questioning route were refined after each interview to further explore the interaction between factors. Moreover, interviews were constantly compared to check whether the findings regarding these interactions corresponded with each other.

Within the last phase, the relationship between categories was examined by comparing and prioritizing categories. Finally, a core category that was linked to all other categories was identified. With this core category as a basis, a model in which the interaction between factors was made visible was created.<sup>33,39,41,44</sup>

### **Data trustworthiness**

Credibility was ensured by methodological triangulation, constant comparison, member checking and peer review.<sup>46</sup> Methodological triangulation existed of a combination of interviews and a focus group. Member checking was performed after data analysis. Each participant received a report of the primary findings, with a request for feedback. Feedback confirmed that the factors that were found provided a recognisable interpretation of participants' views on the implementation of new interventions. As a further validity check, the first interview was analyzed by and discussed with a supervisor (AP). Moreover, interim results were discussed with the supervisor, within the research group and with fellow researchers (peer review).

### **Ethical considerations**

This study did not meet the criteria of the Medical Research Involving Human Subjects Act (WMO) and therefore did not need to be approved by the Medical Research Ethics Committee (METC).

This study was conducted according to the principles of the Declaration of Helsinki.<sup>47</sup> All participants received an information letter at least one week before scheduling the interviews or focus group and signed the forms before participating. Participants were informed that they could refuse to participate or withdraw from the study at any time. Data were saved



securely on a password protected computer. All collected data was coded and handled anonymously.

## RESULTS

Eighteen professionals from five organizations participated in the study. A total of fourteen interviews, and one focus group with four participants were conducted.

The individual characteristics of the participants are showed in Table 1. Five participants were male and thirteen were female. The age of the participants varied from 23 to 57 years. The years of working experience varied from 1 to 34 years.

<<Table 1>>

### Barriers and facilitators

Sixteen barriers, eighteen facilitators and three barriers/facilitators were identified. All barriers and facilitators were divided into six categories, as shown in Table 2. Each category will be discussed in order.

<<Table 2>>

### Intervention

Participants mentioned three facilitators; surplus value, user friendly, and a clear framework allowing flexibility to adjust to patient needs. The intervention should benefit the treatment of the patient, as well as that it helps professionals in their work. Participants stated that the intervention must fit into the vision and mission of the organisation and the team, in order to have surplus value. The intervention itself has to be a specific, clear, practically applicable and easy to understand framework. Moreover, it has to allow the professional to adjust the intervention based on patients' needs. Some professionals also found it important that an intervention is evidence based.

*"I always find it pleasant when the intervention itself has a basis which I can adjust to the individual patient."*

It is found to be a barrier if an intervention is time consuming and entails a high amount of administrative work. Moreover, professionals stated that their motivation is negatively influenced when the performance of the intervention is highly dependent on the whether patients are willing to cooperate or when the intervention entails a high burden on the patient. Some professionals also find it difficult to perform an intervention if the topic of the intervention, such as alcohol usage, is taboo.

## **Individual professional**

Professionals stated that intrinsic motivation to perform a new intervention and/or a personal interest in the topic of the intervention facilitate implementing a new intervention. Knowledge about the value of evidence based practice and/or having a positive attitude towards the implementation of an intervention were also perceived as facilitators. Moreover, professionals feel that if they have confidence in their own abilities this will contribute to a positive attitude towards performing a new intervention.

*“If I understand the importance, than I’m willing to invest in it. By then it doesn’t matter if I’m being facilitated or not. If I really want it, than I will do it.”*

A negative attitude of professionals acts as a barriers to implementation. Participants mentioned that a negative attitude is however common in professionals working with people with severe non-psychotic mental illness. This is because, as stated by the participants, a lot of professionals who work with these patients are doing the same work for many years and have developed their own work style which they don’t want to change. Other barriers that were found are a low level of education of professionals and that some professionals are not used to working with protocols.

*“There are professionals who will just say: “Well, I have my own methods”.*

Professionals stated that they attach great importance to the contact and the relationship with their patients. This relationship forms the basis of the patients’ treatment. When this basis is good and stable this is seen as an opportunity to perform a new intervention. However, the importance professionals attach to the relationship can also work as a barrier. Some professionals stated that they are afraid that by performing a new intervention the relationship with the patient will be disturbed or even end. This makes professionals hesitant to perform a new intervention.

*“What we mainly do is keep in contact with the patient and not exert pressure because otherwise a door can close which probably won’t open again.”*

## **Patient**

The only barrier regarding patient factors, as mentioned by just two participants, is that a negative attitude of some patients towards interventions of caregivers can demotivate professionals to perform a new intervention.

## **Organizational context**

Professionals stated that they find it helpful to receive information, in a transparent manner, about what kind of intervention is being implemented, what the experiences of others are with the intervention, why it is being implemented, and how it will be implemented. Moreover, they need sufficient facilitation, which should provide professionals the time, space and opportunity to immerse themselves in the intervention, draw up the implementation plan, practice with the intervention and perform the intervention.

*“How to perform the intervention, why this intervention, where does the intervention come from, and what are the experiences of others? That is what I would like to know.”*

The implementation itself should proceed in a structured way. Professionals stated it helps them to know what the timeline of the implementation is, how the intervention is being implemented and who is responsible for what. Informing patients about the new intervention should also be included within the implementation plan.

*“That there is a plan at the start of the implementation regarding how things are handled, how long it is going to take and where we are headed.”*

For a successful implementation it is, as stated by professionals, critical that the implementation and the intervention are being discussed and evaluated regularly. The purpose of this is not only to address occurring problems but also to share successes, receive positive feedback, and to make sure that the intervention is embedded in daily practice.

*“Specific feedback when implementing an intervention. So that you can hear whether you’re doing it right or wrong, what you can improve and how to improve.”*

Main barriers are a heavy workload and many changes within a short period of time. Both factors make it difficult to keep track of everything that is happening and to stay focused on implementing a new intervention. Moreover, rapid changes cause managers to lag behind which leads to many ad hoc decisions. All of this can result in resistance of professionals to perform a new intervention.

*“When you experience a high workload or when too many changes are happening, you simply can’t succeed in doing a mindful implementation. You need to be able to focus completely.”*

Installing a so called “locomotive” is seen as helpful by most professionals. A locomotive is a driving force who keeps his or her colleagues motivated and provides help where needed. The risk of installing a locomotive, however, is that other professionals don’t feel responsible for the implementation and that the success of the implementation depends a lot on how well the locomotive is able to keep everybody constantly motivated.

### **Social context**

Professionals said they want to be involved in the implementation while being able to discuss the implementation with colleagues and express their considerations, doubts, questions or even hesitance. An enthusiastic and supportive team and team manager are hereby helpful to keep the professionals motivated. If the team culture is however discouraging, or there is a pressure from management to perform, this can create resistance. Another barrier is the absence of the manager.

*“That you at least have the idea of having a say, or being able to brainstorm about it together. That there eventually is a plan which isn’t mandatory, but jointly drafted.”*

*“If everyone is just navel-gazing and saying things like ‘oh no, not another change’, that will create resistance.”*

An obligation from the management or organization to perform an intervention can be effective when professionals experience a high workload or aren’t motivated to perform a new intervention. However, professionals stated they rather not be obligated to perform an intervention. If professionals really understand the surplus value of the intervention they will be motivated enough without the obligation.

### **External environment**

Rapid changes in laws and regulations and the healthcare system were described as a barrier by participants. Rapid changes create confusion and cause the feeling of lag behind. Moreover, two participants stated that in attempting to adjust to changes it is difficult to find out how to the changed laws and regulations must be applied.

*“The laws and regulations are changing rapidly. Not one organisation understands how it all works.”*

## Interaction between factors

### <<Figure 1>>

The main factor that, in the views of participants, drives the whole implementation is the surplus value. An intervention can only have surplus value if it is well designed and implemented at the right time, at the right target group and under the right conditions. Professionals stated that if for any reason whatsoever they don't see the surplus value, this will create resistance. If professionals, however, do (continue to) see the surplus value, this will create support.

The model as presented in Figure 1 presents how the barriers and facilitators interact with each other. At each step the surplus value has to be seen by the professionals so that support is created. If there are, however, too many barriers or there is a lack of facilitators, this will create resistance. As stated by professionals, each step has to be 'checked' in order to move forward to the next step. In order for a step to be 'checked', barriers have to be minimized as much as possible, and facilitators have to be provided as much as possible. If all steps are 'checked', the implementation has a very good chance of being successfully implemented.

## DISCUSSION

This study identified barriers and facilitators for the implementation of new interventions for professionals providing long-term CMHC to people with severe non-psychotic mental illness. Professionals perceived most barriers at the intervention level, and facilitators at the level of the organizational context. The findings of this study correspond with the findings of other studies.<sup>25,30-32</sup> No specific factors related to the long-term CMHC to people with severe non-psychotic mental illness were found.

A frequently discussed barrier within this study was the lack of facilitation, such as lack of time or resources. This barrier is mentioned in many other studies describing barriers and facilitators for implementation.<sup>26</sup> Another factor mentioned by participants was the support from management. Other studies have also shown that this factor is important or even critical to implementing and sustaining interventions in organizations.<sup>48,49</sup> Organizations should strategize carefully to overcome these potential barriers when implementing a new intervention.

Participants suggested that a negative attitude towards implementation is common in professionals providing care to people with severe non-psychotic mental illness. This corresponds with the findings in the study conducted by Forsner.<sup>30</sup> Another study also found that the degree of ownership of professionals regarding the implementation is an important factor in the utilization of interventions in daily practice.<sup>50</sup> This highlights the importance of early involvement of professionals in the implementation to stimulate a positive attitude.

A strength of this study is that this study not only describes barriers and facilitators for the implementation of a new intervention but also provides a clear overview of how the factors interact with each other in the process of implementation. This study also has a few limitations. This study was initially set out to be a focus group study. As a result of limited time and participants working at different organisations it was however not feasible to conduct multiple focus groups. Therefore the choice was made to shift to conducting a combination of interviews and a focus group. This combination has however strengthened the research in terms of data triangulation and data richness.<sup>38</sup>

Within a GT study it is usually common to use theoretical sampling.<sup>34,39-41,44</sup> This was however not feasible within the time of this study. Nonetheless, there was a wide variation within the characteristics of the participants. It thus seems reasonable to assume that different views on the barriers and facilitators have been explored.

Within this study, professionals who provided care to people with severe non-psychotic mental illness as well as to people with severe psychotic mental illness were not excluded. This may have caused an under-reporting of factors specifically related to providing care to

people with non-psychotic illnesses. Further research must be conducted with professionals who only provide care to people with severe non-psychotic mental illness to explore whether there are factors specifically related to this type of care.

## **CONCLUSION**

This study provides new insights into barriers and facilitators as perceived by professionals providing long-term CHMC to people with severe non-psychotic mental illness. It was found that the barriers and facilitators cannot simply be seen as separate factors because they interact with each other within the process of implementation. The surplus value was found to be the core category that drives the implementation.

## **RECOMMENDATIONS**

The model that was created in this study can be used to explore barriers and facilitators in the different phases of the implementation of a new intervention for professionals providing long-term CMHC to people with severe non-psychotic mental illness. It is recommended to use tailored implementation strategies that take these barriers and facilitators into account.

Within this study it was found that some factors are perceived as a barrier as well as a facilitator, depending on the circumstances. When implementing a new intervention it should be examined what the preference of the professionals is regarding these factors by using tailored implementation strategies which take these factors into account.



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## TABLES AND FIGURES

**Table 1** Demographic characteristics

Variable	<i>N</i>	Percentage
Gender		
Male	5	28
Female	13	72
Age (in years)		
23-29	5	28
30-39	2	11
40-49	6	33
50-57	5	28
Years of working experience in mental healthcare		
1-9	6	33
10-19	6	33
20-29	3	17
30-39	3	17
Profession		
(Specialized) Psychiatric nurse	6	33
Nurse practitioner (in training)	4	22
Rehabilitation worker	4	22
Casemanager	2	11
Psychiatrist	1	6
Psychologist	1	6

**Table 2** Barriers and facilitators

	<b>Barrier</b>	<b>Facilitator</b>	<b>Barrier/facilitator</b>
<b>Intervention</b>	Intervention is time consuming	Surplus value	
	Burden on patient	User friendly	
	High amount of administrative work	Clear framework allowing flexibility to adjust to patient needs	
	Topic is taboo	Intervention is evidence based	
	Dependence of patient in performing the intervention		
<b>Individual professional</b>	Negative attitude towards implementation of new interventions	Positive attitude towards implementation of new interventions	The importance of the relationship with the patient attached by the professional
	Not used to working with protocols	Intrinsic motivation	
	Low level of education	Personal interest in topic of new intervention Confidence in own abilities Knowledge about evidence based practice	
<b>Patient</b>	Negative attitude towards interventions of caregivers as a result of lack of illness insight		
<b>Organizational context</b>	Heavy workload	Sufficient facilitation	Installation of a so called "locomotive"
	Many changes within the organisation and teams	Information about intervention is provided	
	Ad hoc decisions as a result of constant change in focus	Performing and discussing the intervention is part of routine Regular evaluation and positive feedback	
		Structured implementation plan and execution	
		Patients are informed about start of new intervention	
<b>Social context</b>	Discouraging team culture	Stimulating team culture	Obligation of performing the intervention
	Absence of team leader or manager	Entire team involved in implementation	
	Pressure from management to perform	Support from management	
<b>External environment</b>	Changes within the law and healthcare system		

**Figure 1** Model of interaction of barriers and facilitators

