Early recognition method for patients with schizophrenia or bipolar disorder in community mental health care

Illness insight, self-management and control

Johansen, Kirsten Kjær; Marcussen, Jette; Hansen, Jens Peter; Hounsgaard, Lise; Fluttert, Frans

Published in:
Journal of Clinical Nursing

DOI:
10.1111/jocn.16181

Publication date:
2022

Document version:
Accepted manuscript

Citation for published version (APA):

Go to publication entry in University of Southern Denmark's Research Portal

Terms of use
This work is brought to you by the University of Southern Denmark. Unless otherwise specified it has been shared according to the terms for self-archiving. If no other license is stated, these terms apply:

• You may download this work for personal use only.
• You may not further distribute the material or use it for any profit-making activity or commercial gain.
• You may freely distribute the URL identifying this open access version.

If you believe that this document breaches copyright please contact us providing details and we will investigate your claim. Please direct all enquiries to puresupport@bib.sdu.dk

Download date: 15. Sep. 2023
Early Recognition Method for patients with schizophrenia or bipolar disorder in community mental health care: Illness insight, self-management and control

A qualitative study

Kirsten Kjær JOHANSEN, Ph.D student1,2, Jette MARCUSSEN, Postdoc2,6,7 Jens Peter HANSEN, Ph.D1,5, Lise HOUNSGAARD, Professor2,5, Frans FLUTTERT Associate Professor3,4,5

1Mental Health Department Esbjerg, University Clinic Region of Southern Denmark; 2OPEN, Institute of Clinical Research, University of Southern Denmark; 3Senior-Researcher FPC Dr. S. Van Mesdag, NL; 4Research Supervisor, Molde University College & Oslo University Hospital, NO; 5CPS/ Institute of Regional Health Research, Faculty of Health Sciences, University of Southern Denmark; 6Department of Nursing and Health Sciences, University of Greenland; 7Faculty of Nursing, Health Science Research center, University College Lillebaelt

Corresponding author: Kirsten Kjær Johansen
Email: Kirsten.johansen@rsyd.dk
Phone: +4551293149

Acknowledgements

We thank all the patients and staff members of the involved community centers who supported this research. Without their engagement, this study could not have been carried out.

Conflict of interests

The authors declare no conflict of interest for the research, authorship or publication of this article.

Funding

This research was funded by the Psychiatric Research Foundation, Region of Southern Denmark Mental Health Department Esbjerg, University clinic Region of Southern Denmark HR Mental Services Vejle, Region of Southern Denmark.

Clinical trial permissions

The Danish Data Protection Agency (2008-58-0035) Regional Scientific Ethics Committee, Southern Denmark (S-20160117)

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi:10.1111/JOCN.16181

This article is protected by copyright. All rights reserved
Author contribution

Kirsten Johansen (KJ), Frans Fluttert (FF), Jens Peter Hansen (JPH) and Lise Hounsgaard (LH) were involved in the study design. KJ and LH collected the data. KJ, Jette Marcussen and LH analyzed the data, and were involved in writing the manuscript. All authors were involved in revision of the manuscript.
Introduction

Schizophrenia and bipolar disorder are chronic mental illnesses characterized by a cyclical pattern of relapse and remission (Morris, Vinjamuri, Faizal, Bolton, & McCarthy, 2013; Oud et al., 2016). The prevalence of these diseases, across cultures and ethnicities, are 1% and 1.5% respectively (Oud et al., 2016; Xia, Merinder, & Belgamwar, 2011). Worldwide, 20 mill people are diagnosed with schizophrenia and 45.5 mill with bipolar disorder (James et al., 2018). These diseases are associated with great personal costs to patients, their relatives (Morris et al., 2013; Oud et al., 2016) and society in general, due to mood fluctuations, varying treatment needs and working capacity (Miziou et al., 2015; Okpokoro, Adams, & Sampson, 2014). Evidence shows that for patients with severe mental illness (SMI), such as schizophrenia and bipolar disorder, a history of hospitalizations predicts future hospitalizations (Daniels, Kirkby, Hay, Mowry, & Jones, 1998). Therefore, it is essential to include relapse prevention in treatment programs targeted to these patients.

When patients are involved in decisions about their own care, the chosen course of action is likely in agreement with their perceived needs, increasing the likelihood of treatment adherence (James & Quirk, 2017). The collaborative process of reaching agreed treatment decisions, is particularly valuable for patients with chronic mental health disorders (James & Quirk, 2017). International research states, that involving patients with schizophrenia or bipolar disorder in decision-making improves treatment outcome, and augments self-efficacy and autonomy (Calcedo-Barba et al., 2020).

The literature describes challenges in treatment adherence in mental health care (MHC), concerning patients with schizophrenia and bipolar disorder (Chakrabarti, 2016; Chaudhari, Saldanha, Kadiani, & Shahani, 2017). We found no published treatment description that met these challenges. The review by Johansen et al. (2020) states that individual tailoring of the treatment, according to diagnosis and need,
may have a beneficial effect on relapse prevention (Johansen, Hounsgaard, Frandsen, Fluttert, & Hansen, 2021a).

Improving quality of life among vulnerable patients, including those with chronic mental health disorders, has international focus (WHO, 2017). WHO calls for an increased effort to improve MHC, including promoting patient participation in decision making processes (WHO, 2017). In Denmark, the Governmental Department of Research issued a national research strategy in 2015, to benefit patients with mental illness, focusing on individualized treatment, patient participation and patient involvement in treatment planning (Ministeriet for Sundhed og Forebyggelse, Ligestilling, & Forskningsministeriet, 2015).

Background

Recent literature describes “state of the art” practice in MHC as the promotion of self-managing capacity in patients with mental disorders, such as schizophrenia or bipolar disorder (Wilson, Crowe, Scott, & Lacey, 2018). It requires skills, knowledge and confidence to manage symptoms, treatment and the physical and psychosocial challenges associated with living with a chronic condition (Wilson et al., 2018). Therefore, when a person possess this capacity, it is associated with personal autonomy, self-governance, the person’s dignity and right to make treatment related decisions (Calcedo-Barba et al., 2020). Illness-insight is important knowledge when making health related decisions. The literature review by Lysaker et al. (2018) confirms the relation between a lack of insight and treatment non-adherence in patients with schizophrenia (Lysaker, Pattison, Leonhardt, Phelps, & Vohs, 2018). They found that poor insight is a predictor of poor adherence, and lack of insight predicts dropout (Lysaker et al., 2018). It is suggested that the presence of symptoms may cause poor insight which in turn causes reduced treatment adherence, resulting in a further increase in symptoms (Lysaker et al., 2018). Evidence shows that better insight reduces the risk of relapse (Lysaker et al., 2018). According to White et al. (2017), individual consumer factors, such as engagement in illness management and recovery, predict individual treatment response. Moreover, the level of achieved illness self-management is linked to the extent of patient activation and engagement, based on perceived hope and quality of the patient-physician relationship (White et al., 2017). Focusing on self-management strategies in research and care of patients with SMI reflects a change of treatment perspective in SMI. It emphasizes an adaptation to the individual health circumstances by the development of personal strategies, to manage and live meaningful lives alongside the illness (Nicholas, Boydell, & Christensen, 2017). To facilitate patient involvement in decision-making processes, it is suggested that the level of mental capacity and individual adaptation of information is included in these processes (Calcedo-Barba et al., 2020; James & Quirk, 2017). However, there appears to be a paucity in knowledge regarding the decision making capacity among patients in community mental health care.
This article is protected by copyright. All rights reserved

(CMHC) (Calcedo-Barba et al., 2020). The inclusion of person centered care and user involvement corresponds with the current “best practice” in mental health care (James & Quirk, 2017). When professionals considering patients’ illness-experience as expert knowledge, and collaborate in treatment decision making, these patients regain an element of control over their own life (James & Quirk, 2017). However, there appears to be a gap of knowledge concerning the patients’ perception of what tailored treatment should include, and what is needed to prevent relapse and improve treatment adherence (Johansen et al., 2021a).

Therefore, this paper investigates the experience and perception of psychiatric patients in community care, who were involved in the ERM-treatment strategy. This includes the identification of own early signs of deterioration, and the development of an individual action plan. The aim of the study was to gain insight into how the ERM strategy affects illness insight, management and the sense of control over own life, when patients with schizophrenia or bipolar disorder are involved in ERM. In addition, we studied how patients value the nurse-patient collaboration integrated in the ERM-strategy.

Methods

Design

This qualitative study was based on semi structured interviews (Kvale & Brinkmann, 2009), to explore the experience of patients in community mental health care (CMHC), who were involved in the ERM strategy (Fluttert et al., 2008). The theoretical framework is phenomenological-hermeneutic, inspired by Ricoeur’s theory of interpretation of participant interviews (Ricoeur, 1976; Simoný et al., 2018). The focus of interest was the patients’ life experience regarding insight and management of self and illness, and the sense of control over their own life. The first author conducted the interviews. There had been no previous contact between the patients interviewed and the interviewer.

This study used the Consolidated Criteria for Reporting Qualitative Research (COREQ) as reporting guideline (supplementary file 1) in line with EQUATOR reporting guideline (Tong, Sainsbury, & Craig, 2007).

The ERM-strategy

The ERM-strategy (Fluttert, Bjørkly, & Dale, 2020; Fluttert et al., 2008) aims to assist community mental health nurses (MHN) to collaborate with their patients in identification of personal early warning signs (EWS) of deteriorating behaviours. By means of monitoring patient's behaviour and perceptions, and the recognition of warning signs, timely stabilizing actions could be applied, aiming to prevent the occurrence of severe incidents or readmissions. The EWS, stabilizing actions and monitoring the occurrence of the patient's warning signs are recorded in an ERM-plan. An overview of the ERM intervention strategy is
Setting and recruitment
The study was conducted in a Danish CMHC setting, including six community centers in the Region of Southern Denmark. The participant inclusion criteria were:

- Above 18 years of age.
- Diagnosed with schizophrenia or bipolar disorder according to the ICD-10 diagnostic criteria.
- Affiliated to CMHC.
- Able to comprehend informed consent.

Selection of the study participants is described in the paper (Johansen, Hounsgaard, Hansen, & Fluttert, 2021b). When the patients were included in the ERM intervention, they were approached for participation in pre and post intervention interviews. Of the 56 participants included, 26 consented to be interviewed. See table 2 for demographic details. Of the interviewed participants, 11 were living alone, of which six were diagnosed with schizophrenia and five with bipolar disorder. Fourteen were living with a spouse, five diagnosed with schizophrenia and nine with bipolar disorder. One participant with schizophrenia was living in a municipal residential institution.

Ethical considerations
All patients received written and oral information about the research project on the ERM-strategy and their rights, consistent with the scientific ethical committee guideline. After signing informed consent the patients were approached individually by their MHN and asked if they agreed to be interviewed. The Danish Data Protection Agency (2008-58-0035) and the Regional Scientific Ethics Committee, Southern Denmark (S-20160117) approved the study. The study was conducted in accordance with the Declaration of Helsinki (The World Medical Association, 2018).

Data collection
The first author conducted all interviews. She had professional clinical experience with chronically ill patients. The location for the interviews were at the community center or the patient’s home. The patients could choose to be interviewed alone, with a relative and/or with the MHN present. Eight patients were interviewed at home, 17 were interviewed at the CMHC center. Two patients were interviewed without the
MHN being present, one in his home, and the other at the community center. Two patients had their spouse present during the interview. Twenty-three patients wanted their MHN to be present during the interview. The interview lasted between 20 and 45 minutes. Some patients were interviewed both before and after the intervention, according to the individual level of collaboration (see table 2). The interviews were semi-structured and held questions such as “How did using the treatment strategy of Early Recognition Method affect your illness insight”? and “How did this treatment strategy affect the way you handle your illness?”

The interviews were recorded and transcribed ad verbatim. All transcripts were controlled against the recording by the first author. No other control was undertaken. All interviews were considered in the analysis process. The pre-intervention interviews were coded until data saturation was achieved, and all post intervention interviews were coded (Malterud, Siersma, & Guassora, 2016). First and second author coded the data.

Data analysis

The transcribed interviews were analyzed in accordance with Ricoeours phenomenological-hermeneutic theory of interpretation, including a dialectic process between what the text says to what it speaks about (Ricoeur, 1973, 1976). The analysis was characterized by an iterative process, consisting of three phases, the naïve reading, the structural analysis and the critical interpretation and discussion (Dreyer & Pedersen, 2009; Ricoeur, 1976). The NVivo qualitative data analysis software; QSR International Pty Ltd. New NVivo, 2020 was used for accurate data management (Overgaard & Bovin, 2014) during the analysis of the transcribed interviews.

During the naïve reading a general impression of the raw text was acquired, generating a first impression of what the text conveyed about patient treatment experience (Ricoeur, 1976). An open coding was conducted to create a first impression and insight into the semantic content of the patient’s life experience of living with a mental illness characterized by relapse and remission.

During the structural analysis, direct quotations from the text “What is said” were identified to illuminate the meaning. The “units of meaning” were questioned, leading to an understanding of what the text speaks about, forming “units of significance”. The wording of the units of significance comprise the foundation for the generation of themes and subthemes. This is an iterative process, including reading and re-readings of the text and results by the investigators (Dreyer & Pedersen, 2009). Interpretation of the text gave rise to the themes and subthemes, which again were analyzed, critically interpreted and discussed by the first and second author. The critical interpretation goes from a subjective interpretation, to an objective
generalizable interpretation of the themes, including discussion with other research results (Dreyer & Pedersen, 2009; Ricoeur, 1976). The first and second author conducted the primary structural analysis. This objective analysis provided information about the patients’ experience of living with a SMI presenting a cyclical pattern of remission and relapse, and how life experience was affected by the ERM treatment strategy. The treatment experience was regarding insight in self and illness and the perception of control over own life.

Results

The naïve reading of the analysis process revealed that a change had taken place in the patient treatment experience, during the timespan of the intervention, suggesting a development in patient insight in different aspects of life with mental illness. The structural analysis revealed the two themes, and six subthemes:

1. Patient care
   a) Dialogue and collaboration
   b) Navigation and personal landmarks
   c) Medical treatment
2. Insight and experience
   a) The impact of illness on life experience
   b) Insight and a sense of control
   c) Relations and support

The themes and subthemes describe how the perception of treatment and insight changes across the timespan, from pre-ERM to post-ERM intervention. In presenting the results, all patients are given an anonymized name that is denoted with 0 for pre-ERM quotes, or 1 for post-ERM quotes, and B referring to bipolar disorder or S referring to schizophrenia. All quotations are from the interviews. The analysis results in table 2 shows how “units of meaning” and “units of significance” connect to the themes. The table shows a “pre” and “post” intervention section. The same main- and sub-themes were identified in both the pre and post intervention interviews. In the following sections, each theme is presented including both the pre and the post intervention quotations, for illustration of any development over time.

Theme 1: Patient care

This article is protected by copyright. All rights reserved
The patients express their experience of dialogue and collaboration with health care professionals in a CMHC setting. Through this interaction, an awareness of personal disease-related behaviour and signs emerges, which may guide navigation towards stability, during periods of mood fluctuations. In addition, the patients’ experience of their medical treatment is expressed from a pre- and post-ERM-intervention perspective.

**Dialogue and collaboration**

The pre-ERM dialogue with the personal MHN is experienced as essential for the patient’s wellbeing, and is characterized by the patient’s desire to attain illness insight and stability. The majority of patients expressed that the MHN is the only contact they have to confide in with disease related issues. The collaborative relationship also address challenges such relations and structure.

“… when we have talked about things that are problematic... I call them to mind, it makes me feel at ease inside...” (Esther 0,S).

“...talking with somebody about what is going on in the head... medication ... and... all the arrangements ...in order to include days of rest.” (Monrad 0,B).

The interview disclosed that having somebody to talk to and guide is essential, in order not to lose track, and to create a structure.

“Sometimes when I have been discharged from community care to my GP, it has gone wrong... both in relation to medication... because there was no one to talk to...and then I was admitted to hospital again” (Grethe 0,B).

A transition phase, when discharged from the hospital or ambulant mental health care (AMHC) to the general practitioner (GP), maybe experienced as “no structure”. The interview reveal a sense of isolation, or vacuum, with the experience of no immediate guidance available, resulting in relapse.

“we talk about my life... she asks questions about my plans which helps me to see things from other perspectives...” (Ane 0,B).

Through the interview it emerges that the patients have a profound need for guidance through dialog to acquire insight in illness and management to manage their life in a more satisfying manner.

The post-ERM express an enhanced awareness and control through collaboration with the MHN. It describes a “closeness” between patient and caregiver.

“...I consider this (the ERM strategy) a very good tool...the close dialogue with my caregiver, guiding me through...the tool I have acquired in this process ... I will keep” (Le 1,B).

The majority of patients describe being guided to an increased awareness and consciousness of their personal EWS. They express having acquired a tailored tool, enabling action:

This article is protected by copyright. All rights reserved
“... to be more conscious about seeking help... and not just crawl into the psychosis...” (Hanna 1,S).

Through the collaborative relationship with their caregiver, the patients has achieved illness insight and awareness. This empowers patient illness management, which has the potential to prevent readmissions. A patient expressed her experience as:

“...from laying my life in the hands of my caregiver and say “help me”, “save me”, to taking it back...standing on my own two feet, has been an enormous process to go through” (Le 1,B).

This illustrates the self-efficacy acquired from pre to post ERM. The dialog with a systematic approach to the patient’s symptoms provided a more complete insight, qualifying the collaboration in creating a personal plan for handling mood related challenges.

According to the patient statements, this approach has facilitated the acquisition of the ERM-tool, enhanced illness-insight and awareness, and active help seeking, when needed.

**Navigation and personal landmarks**

Using the ERM-strategy showed its relevance and applicability through identifying individual EWS of increasing illness, and using these signs as personal landmarks to navigate periods of fluctuating mood. The gained knowledge was revealed in the intervention as a considerable development in attitude and ability toward taking action, when signs of aggravating disease presented themselves.

In the pre-ERM interview, only a few patients expressed awareness of own EWS of fluctuations in mood or increasing illness. One patient explained, that he was increasingly curious about his disease, in terms of what could go wrong in various situations, and that he would fight to “gain control” (Monrad 0,B). An awareness of a connection between activity and mood was described:

“When there has been too many stimuli...and too much going on, I cry ... then I don’t sleep well, if I don’t sleep well two successive nights then I know something is wrong” (Ane 0,B).

Without knowing how to prevent it or how to deal with it. “Poor function” as when things are “Getting out of hand”, was experienced as an “inability to be at ease” and a “crackling structure”, which in turn resulted in a cascade of symptoms as declining hygiene, hearing more voices, becoming depressed, sad and irritable, resulting in the feeling that everything crackles resulting in a readmission. This can be elicited by something unexpected, and illustrates a situation out of control.

This describes an experience of passively being subject to uncontrollable episodes of exacerbations, unaware of triggering factors and without the ability to “straighten oneself out”. The interviews revealed a passive help seeking attitude, devoid of solutions and control.

In the post-ERM interview, several patients expressed the benefit of working with monitoring of their symptoms and a personalized plan of action. Some of the reasons presented, were that during “down
periods” one could go back and see improvements, and periods with no symptoms. The ERM strategy was experienced as “going more into depth” concerning own symptoms and EWS, through the conversation with the MHN. This collaboration focusing on specific symptoms was experienced as “tailoring of the tool and making it easy to use”, and mapping out the pattern of reactions turned it into an educational process. Acquiring knowledge and awareness of own symptoms and behavioral patterns was valuable and very comforting and supporting, an experience expressed as

“the ERM-plan is easy to use ... it is in the back of my mind, and it is there when I need it. It” (Rose 1,B)

Especially during periods of transition, such as being discharge from CMHC to general practitioner, during which the patients often felt alone, with no one to turn to. The comfort was revealed as “I got to know myself and my warning signs better...it helped me to think different ... and react faster... you get to know yourself better and become aware of some of your challenges, in a good way.... And that can prevent some admissions....I feel it has done that for me” (Hanna 1,S). Because of the individualized approach, the patients took ownership of the ERM strategy as their personal tool in navigating according to symptoms and circumstances. A young female patient described how she now, when a warning sign is present, reflects and reacts, whereas before, she noticed, but did not know what to do (Gry 1,S). Learning to know oneself was described as empowering, but also as painful, when having to relate to how it feels.

During actively working with own symptoms, an awareness of trigger factors emerged, reflected in knowledge of circumstances posing a risk, and actions, such as behavior change, to avoid the risk. A recognition that led to empowerment and a sense of control. Our findings from the post-ERM interview revealed, that the majority of patients experienced a positive outcome and being enriched from the intervention “better at noticing, and acting, on my symptoms than before” (Grethe 1,B), taking possession of the ERM-strategy as a personal tool. Across the timespan from pre- to post-ERM, the interviews showed a development in the patient behavior, from passively help seeking to reflecting and acting, which was expressed in actively monitoring for early warning sign, and when present knowing what to do. The ability to identify personal signs through increased awareness, to reflect and react, to recognize symptoms, also when it is challenging, and navigate fluctuations for a more stable mood and everyday life.

Medical treatment

In the pre-ERM interviews, a negative attitude towards medication is expressed:

“I made up my mind that routines and structure are crucial...therefore I could manage without medication... (Kia 0,B).

This statement reveal a lack of acknowledgement of the stabilizing effect of medication. This attitude was underpinned by failing to recognize the connection between self-prescribed medication phase-out and a
recent readmission. The pre-ERM interviews revealed a prevalent resistance to medication, and a reluctance to adhere to medical treatment programs. Not only was no medication benefit recognized, but through the pre-ERM interview emerged an attitude that medication had a devastating effect on what was recognized as “self”. Medication was described to cause a “dull and slow personality – plane and boring”. Periods of rising mood was “life”, as opposed to the “low mood and energy” which “others” recognized as “normal”. The patients’ perception of what others regarded as normal, was ranking alongside being a grey and boring little mouse”.

The post-ERM interviews revealed a cautious recognition that medication might have a beneficial effect. “It is difficult to assess if it is the medication that helps or if I have become more conscious... I think it is a combination” (Bertha 1, B). This recognition reveal a reflection on the benefit of a combined effort in obtaining a more stable life.

Theme 2: Insight and experience

The patients describe their experience of illness-impact on various aspects of life, such as working life, social relations, personality, the sense of “normality” and identity. The interviews show how using the ERM-strategy affect insight and life experience.

The impact of illness on the life experience

The pre-ERM interviews reveals how mental illness affects the lived life, disclosing experienced challenges in the cross field between wanting to work, the expectations from the employer and the effect of illness and mood fluctuations on work performance and self-image. One patient expressed her experience as:

“....when I get there (at work).... I think YEAH, now everything is fine. Then I forget myself again.... When I come home ...well, then the energy is low, and the mood drops...and nothing matters...I don’t take responsibility for anything...I become careless” (Line 0, B).

This illustrates a state of being lost to reality, being “in high spirits” and totally imbedded in the “here and now”. When the task is accomplished and the energy is spent, the “high” transforms into feeling “low”, leading to a sense of insignificance, where carelessness takes over, revealing an inability to control the situation, both during and after work. Lack of control and the resulting instability can have serious implications on the work-life, as revealed in

“...... my employer released me from my duties, because he felt he always had to have a plan B ready, because I had been so unstable...”[Sten 0,B].

Which underpins the challenges faced by the patient who want and strive to maintain a work life.
In the pre-ERM interview the illness impact on life in general is experienced as moving fast forward, a sense of being unstoppable, without boundaries or limits “...it went really fast...I was able to do anything” (Line 0, B). This reveals a self-reinforcing strain experienced by the patients, when the disease gets out of hand.

“When I am hypo-manic, I don’t feel pain, but I crash down...it is a stress factor...things become too much…” (Kia 0, B).

When the boundaries are met the resulting mood fluctuations describes a stressful and painful experience and a situation where re-establishing balance is difficult. Patients denotes this as “suffering a defeat” (Rose 1,B) or “superheating” (Grethe1,B). Imbedded in these experiences are the fear of being readmitted to the psychiatric ward, which is generally is experienced as a difficult situation to manage. The pre-ERM interview reveal an experience of no control. The patients’ descriptions disclose a sense of being subject to a fate determined by the fluctuating mood, how it affect the patients and the circumstances and conditions.

The Post-ERM interview reveals an increased awareness of even minor changes in own mood. An awareness that open the possibility reflect and react

“I got a better knowledge of myself...my warning signs...it helped me think different and react faster...” (Hanne 1, S).

The awareness of mood changes, how to handle them and a focus on interpreting own behavior guides toward a more balanced life. The patient express the change in awareness as:

“...to pause and become aware... I am more focused and attentive...” (Ida 1,B).

Anxiety is part of the life experience of patients with mental illness. Recognizing a frame of mind, although painful, is the first step towards managing it, an experience in the process of taking control over own life:

“I wrestle with my anxiety ...it hurts...but it does not go away – it is part of me”....“It is like grieving”. “Now I have become aware of it...I draw a line ... and feel myself” (Erna1,B).

Feeling one-self is expressed as an awareness of own challenges and needs. In the post-ERM interview the influence of mental illness on life and work, is expressed with a higher degree of acknowledging that it plays a part. One patient expressed insight and awareness in how the illness affected her workplace:

“... when mania is full-blown...I stress my colleagues ... it turns into psychosis... and in the end you lose your job”....“Mania is a lonesome ride....nobody can match your level of energy” (Bertha 1,B).

The development from pre- to post-ERM, from the illness controlling work and life, having a considerable impact on personality and self-image, to an active, focused and attentive awareness of the illness, emerges through the interviews. This development affects life in general, and empowerment to make choices to protect oneself. The experiences of the impact of mental illness on work-life and self, is through the work
with the ERM strategy transformed to self-insight, facilitating the ability to act according to symptoms and circumstances.

**Insight and a sense of control**

The pre-ERM interviews reveal how behavior was influenced by the illness, and beyond control, leaving the patient absorbed in own ideas, such as “being wrapped up” in ambitions of “self-fulfillment” and “being significant”, and “going off the rail due to eagerness” (Ane 0,B). The opposite scenario is also presented:

“I cry as soon as there has been too many stimuli...too many things going on...when I sleep badly... then I know something is wrong” (Ane 0,B).

It describes a sense of powerlessness due to lack of insight.

“...my thoughts do not run away with me when... the caregiver and I ... have talked about things that are problematic ...I call it to mind, I feel at ease inside...but sometimes they run away with me – and then there is nothing I can do” (Esther 0,S).

It seems difficult to discriminate between self and disease, as if “disease” in some instances shape “the experience of self”. In patient statements, “self” is described as vulnerable to influence, changing it to a different self – the diseased self, suggesting an experience of being subject to the power of the illness...

“...when I was depressed... I became aware that there is the disease and there is me...the disease and me, we are not the same... the bad thoughts I had ... they come from my disease, not from me” (Ane 0,B).

This illustrates an awareness of how the illness merges into her concept of “self” – while she trying to hold on to her own identity. In the pre-ERM interviews, a sense of helplessness is expressed, not knowing how to react to increasing symptoms.

“...I try to find a reasonable explanation...but sometimes the mood slopes off, and then there is nothing much I can do to stop it” (Esther 0,S)

The lack of insight and knowledge in the course of the disease give rise to hopelessness.

“ I have convinced myself that I don’t need structure... that knocks me off my feet, because I ...I am not in control... I don’t know how to stop” (Kia 0,B).

The pre-ERM interviews disclose a sense of helplessness in terms of controlling what is going on in thoughts and actions of the experienced self. It is experience is expressed with a sense of despair, and a fear, that the distinction between self and disease will vanish, resulting in an unrecognizable self.

The post-ERM interviews describe an experience of insight and control, revealing the importance of insight and acknowledgement of own disease, expressed as the beginning of empowerment, and a sense of self-control entailing self-confidence to meet own needs. Reflections on own warning signs resulting in behaviour change illustrates empowerment and ability to act, ingredients in the taking control.

This article is protected by copyright. All rights reserved
This is expressed a capability to be more rational and take action when experiencing disease.

“It has been very rewarding...both in thought and action...to be in this program...I have gained more self-insight...and accept how things are connected...” “Before I thought I was lazy when there was somethings I couldn’t manage... I became annoyed with myself...” (Esther 1, S).

Insight includes acknowledging the need for support and acceptance from others, which in some situations may feel transgressive to ask for:

“...I think it is ok to say that there has to be room for me...don’t get irritated with me...because then I’d rather not be here...” (Erna 1, B).

The post-ERM interviews reveal different aspect of how increased control is experienced, through insight in illness and management, such as having focus prepares to a higher degree of independence, and a tool, such as knowing own warning signs and having a plan of action provides a sense of control. They facilitates “...having a grip on” the situation, making life more “straight and easier to control. The experience of an enhanced recognition of self, and taking control also expressed as

“...before I would be “carried away”... a web was created in my mind...I don’t have that now... I think more rational now” (Monrad 1, B).

It describes how insight in his own experience has enabled the patient to make the distinction between self and illness. Insight in self and disease empowers the patient to react, and provides an increased sense of stability or control. One patient articulated it as:

“I have become more courageous towards the family”. “I am getting better at allowing myself to say no ...if they (the family) demand or expect things from me...” “I used to be an observer, but I feel a little more in control. I feel whole, and I can remember ... and ... abide to the things I say...it has been a great help...” “I don’t feel so flighty...I am more focused, compared to when I only felt my head...one is more capable when one feels whole” (Esther 1, S).

suggesting the gain of self-confidence.

The pre-ERM illness-insight is described as a powerless sense of being subjected to the fluctuations of the mental illness, including both ambitions of being significant and a humble attempt to discern between own self and diseased self. The entire spectrum was characterized by a lack of control, whereas in the post-ERM interviews, an enhanced understanding of the illness is expressed, and how this provides a sense of control and self-confidence. This suggests that insight transform powerlessness to the beginning of empowerment.

Relations and support
Severe mental illness affects not only the diseased, but also close relations. The interviews reveal how the patient’s state of mind affect the interaction with relations, and the consequences thereof.

During the pre-ERM interviews, patients described how their behaviour was provocative and dominant during episodes of fluctuating mood, and that while in the situation they did not consider own behaviour inappropriate.

“..it was difficult to be around me...I provoked discussions...and did not wait for answers ... I overruled them... at the time I found it (the behavior) normal” (Line 0,B).

When the relatives responded to their behaviour by expressing anger, it was an unpleasant experience, but it did not lead to reflections or change of behaviour by the patient.

“..My boyfriend and my son, and everybody else express anger... that is not a pleasant experience” (Grethe 0,B).

For some patients the consequences of behaviour deviating from the norm were serious. For one patient episodes of mania resulted in divorce and loss of contact with his children (Sten 0,B). This was experienced as a devastating loss, from which he felt he could not recover. From the opposite end of the spectrum an interview disclosed how a patient experienced support from his spouse during his treatment, helping him see things from other perspectives (Monrad 0,B). This illustrates a wide variation, both in illness impact on relations, patient awareness of the strain that relatives experience, and acknowledgement of the burden it placed on the patient. In one case did the patient reflect on the burden of the close relations. Through the interviews an impression emerges, that the patients feel trapped in the power of the disease, where most seemed unable to imagine that the conditions could be different, without help from relatives.

The post-ERM interviews show a changed awareness of own behaviour and reflection on how interaction with relatives affect both patient and the relative. Recognizing that certain situations cause fluctuating mood reveal an awareness allowing precautions to control the situation.

I see it earlier... the selfishness – that I withdraw into myself....talking about it (with wife) helps (Monrad 1,B)

Acknowledging that relatives may be able to recognize when the situation is out of the patients control, reveals a change in attitude, which permits collaboration with the relatives to regain control.

“...others notice before I do... I am in too deep...before I notice...” (Bertha 1,B).

The post-ERM statements disclose how engagement from close relations support the emerging awareness of own warning signs, and enhance illness insight. Support empowers the patient as opposed to the felt loss, when no support is experienced.

Discussion
This study illuminates patient treatment experience, before and after participating in the ERM-strategy in a CMHC setting. It shows how patients, during this time span, through dialog and collaboration, experience a closer relationship with their MHN, resulting in a more active approach to life, based on insight, awareness and help-seeking behaviour. The ability to recognize own EWS and react accordingly, provides stability and a sense of control. In addition, the stabilizing effect of medical treatment was recognized. Going from the experience of life being controlled by one’s illness, to feeling empowered to protect one-self, by making targeted choices, was expressed as satisfying. Understanding own illness gave rise to self-confidence and empowerment, a condition described as enhanced by experiencing support from close relations, especially during times of change, such as the process of personal development through the ERM-strategy, but also in periods of transition between treatment sectors; Whereas lack of support may result in early readmission.

The study highlights dimensions of managing life with SMI. Only few studies have been identified investigating SMI patients’ treatment experience in a community setting (Allard, Lancaster, Clayton, Amos, & Birchwood, 2018; Maassen, Schrevel, Dedding, Broerse, & Regeer, 2017), but none with a treatment approach as elaborate and systematized as the ERM strategy. The previous studies using ERM were conducted in in-patient forensic settings.

There has however, been several investigations conducted in community settings, of patients with SMI focusing on self-management and shared decision-making, and how they relate to issues such as relapse, empowerment and self-efficacy (Farrelly et al., 2016; Lean et al., 2019; Zhou & Li, 2020). According to the international research, self-management is described as the individual’s ability to manage the symptoms, treatment, physical, psychosocial and lifestyle changes, associated with living with a chronic condition (Zhou & Li, 2020). Evidence suggest that self-management has a beneficial effect on symptom severity in patients with SMI. Especially on personal recovery issues of patient’s sense of empowerment, hope and self-efficacy (Lean et al., 2019). The ERM-strategy emphasizes patient self-management of EWS, through collaboration between patient and MHN. We will reflect on this from the angles of dialog, navigation in the course of illness, insight in signs and symptoms and support.

**Dialogue support the patients self-efficacy and self-management**

In this study, we found that patients gained insight through dialogue with their MHN. Pre-intervention, the patients expressed a need for support and insight to manage their lives. The MHN was the primary person of contact for the patient, the only person in whom they could confide and find guidance and support. The patients experienced being subject to uncontrollable episodes of exacerbations, not knowing how to react, or take control. These situations are possibly reinforced by the patient’ reluctance or ambivalence towards
adhering to medical treatment. The patient interviews reveal a development in self-efficacy during the intervention period, expressed as believing in own ability to “take back one’s life”.

A recent study described self-efficacy as an individual’s belief in their own ability to perform specific tasks, and it states that motivation and self-efficacy are directly associated with self-management (Zhou & Li, 2020).

Other studies have found that a caring attitude by health professionals and the experience of being listened to with a non-judgmental attitude is equally important (Maassen et al., 2017). Patients might feel ashamed of their own behaviour, and experience a lack of acceptance. A personal patient-health professional relationship, where patients’ experiential knowledge is taken seriously, facilitates the patient-MHN collaboration (Maassen et al., 2017). This corroborates the findings in our study, where patients expressed how the close relation with their MHN supported and guided in the process of learning individual self-management skills. Empowering and supporting patients in their treatment decision-making may be achieved through self-management interventions (Lean et al., 2019). Through a patient-MHN partnership, training in individual symptoms and disease management skills, patients are empowered to take action and control over their lives (Sterling, Silke, Tucker, Fricks, & Druss, 2010).

Navigating through mood fluctuations

In the pre-ERM interviews of our study, the patients expressed a passive help seeking attitude when things “got out of hand”, wanting to gain knowledge to develop solutions and attain a sense of control. The patients experienced that circumstances associated with exacerbations reinforced the challenges, such as a disturbed sleeping pattern. Transitions as admission and discharge are experiences of helplessness and lack of control, and requires energy to manage.

During the structured process of working with own symptoms, EWS and triggers in collaboration with the MHN, the patients acquired knowledge and insight into own illness. The increased awareness and recognition of EWS provided an opportunity to react to mood-changes. This development in knowledge and attitude describes the process of acquiring self-management skills, in accordance with a previous study (Sterling et al., 2010). An important step in this process is to acknowledge the patients’ experiential knowledge of own disease, while identifying the individual symptoms and EWS. A close patient-MHN relationship is necessary for this collaboration. A previous study described the necessity of a “personal connection” between patient and health care provider, as personal and sensitive experiences are target of conversation (Maassen et al., 2017). It is also described how a disengaged attitude of the health care professional can be a hindrance to establishing a personal relation, not involving the patient in decision making or providing individualized care (Farrelly et al., 2016). This attitude adversely affected the trust of
the patient, and left the patient dis-empowered. Patients wants to be acknowledged as knowledgeable about their own disorder, and appreciates the opportunity to be heard in the context of treatment planning (Maassen et al., 2017). Through focused MHN-patient collaboration, illness experience is transformed to self-insight and the ability to act according to symptoms and circumstances. This in turn provides a sense of control and empowerment, qualified by insight, such as knowing own trigger factors and early signs of deterioration, entailing the possibility to act in situations of mood related challenges. Our study suggests, that increased insight acquired through the ERM-strategy positively affected the patients ability to navigate their behaviours and signs and symptoms within the medical treatment.

Changes throughout the ERM-intervention

Our study shows a development from the patients experiencing their behavior being outside their control, to a sense of being empowered, having the ability to take action and being more rational in situations of fluctuating mood. Based on the acquired and the experiential knowledge, an individual action-plan was developed in collaboration between patient and MHN. The action-plan serves as a tool in the process of self-management. The benefit of patient education, such as psychoeducation, on motivation and treatment adherence among patients with SMI is well known (Aubry et al., 2012; Bauml, Pitschel-Walz, Volz, Engel, & Kessling, 2007; Báuml et al., 2016; Candini et al., 2013; Colom et al., 2003; Schmidt-Kraepelin, Janssen, & Gaebel, 2009). Psychoeducation covers topics such as: The nature of illness, recovery rates, medication, relapse prevention and symptom management (Johansen et al., 2021a). Patients may however, lack the capacity to translate knowledge to practical skills, rendering them dependent on help from MHN. Evidence suggest that self-management positively affects personal recovery, the individual sense of empowerment and self-efficacy (Lean et al., 2019; Terp, Bjørnes, Jørgensen, Mainz, & Laursen, 2017). According to Cook et al (2012), the development of personal management strategies, recognition of triggers and symptoms to prevent crisis, and the development of an action-plan has showed effect in self-management among mentally ill (Cook et al., 2012). In addition, they revealed that when taught by peers, patient-perceived confidence and motivation was enhanced, due to the experience of social support (Cook et al., 2012). The beneficial effect of personal support, especially among patients with schizophrenia, is supported in a recent literature review (Johansen et al., 2021a). This corresponds with the ERM-strategy used in this study, where according to the patient’s desire; a person from the patient social network may be involved as support in the daily work with the strategy.

Support

This article is protected by copyright. All rights reserved
As mentioned in relation to the subject discussed, the patients are dependent on personal support from their MHN, and from their social network or family. In our study, most patients mentioned experiencing support from the MHN, in relation to managing everyday life and worries, while learning to manage life with mental illness. The experience of lack of support from family and the sense of being deserted because of their disease is also reported. Some mentioned the desire of support during phases of transition between hospital and community care, because this situation is particularly difficult and presents a risk of relapse. A recent review of the literature on interventions to support transition from inpatient to community care, described some of the challenges during the transition phase, such as: Medication management, risk to self and others, poor information-sharing and distress (Tyler, Wright, & Waring, 2019). In spite of the different aims of outcome in the studies reviewed, some common facilitators and barriers to successful discharge were identified. Barriers were insufficient communication and knowledge sharing, between and at service-, staff- and patient-levels. Facilitators were effective planning and staff-education, -behaviour and -flexibility, but also facilitators at patient level, such as a sense of belonging to the community, structured daily routines and a stable social network (Tyler et al., 2019). The findings in our study confirm previous findings that transition between inpatient and community care is stressful for the patient, and that personal support is needed in this aspect of life with SMI. To meet this need requires both understanding and flexibility from the MHN. Establishing a MHN–patient collaborative relationship requires well-educated and engaged staff. Such a relationship is important for patient support and guidance in the transition phase, and in many other aspect of life with SMI.

This study has illuminated the patients’ experience of participating in a systematic approach to the individual’s own illness. It has disclosed that the ERM-strategy has increased insight and awareness, and provided a sense of empowerment to take control over own life. However, the study has also confirmed the importance of the MHN-patient collaboration in the process, and in addition, increased the awareness of the need for increased treatment focus during phases of transition. Without individual guidance and education in own illness, in addition to the development of the individual action-plan, the patients would not have experienced the described changes.

As patient care requires time, the workload of the MHN may affect patient care and possible the patient MHN relation. Future research illuminating this issue is recommended.

**Strengths and limitations**

Some methodological limitations should be considered, when interpreting the results.

First, the study included 56 patients with schizophrenia or bipolar disorder, of which 26 consented to be interviewed. It could be speculated that the patients who consented were the most capable, leaving out
the experiences of the more fragile group of patients. Nevertheless, in this in-depth qualitative study, these 26 patients count for a reasonable indication of the results, however without the aim to generalize these to the subpopulation of patients with SMI.

Second, the participants have a skewed gender representation, the majority being female. The post-treatment group is skewed with regard to diagnosis, the majority holding the diagnosis bipolar disorder. Third, the patients in this study were diagnosed with schizophrenia or bipolar disorder; therefore, the results may not be immediately transmittable to other psychiatric diagnoses. Despite the limitations, we have taken steps to ensure trustworthiness of the study. The rigor of the data collection, the systematic structural analysis, supported by NVivo, and discussing the results with the leading international expert in the field, adds to the trustworthiness of the study results. Other strengths to consider are that the interviews were almost exclusively conducted with the patients’ personal MHN present, according to the patient’s wish. It made the patients feel secure, and able to participate in the interview. The interviewer did not have any encounter with the patients besides the pre and post interview. It is of significance that this study, to our knowledge, is the first to explore the experience of patients with SMI, who have participated in the ERM-strategy for relapse prevention in a CMHC setting. This adds new knowledge to the field of tailoring relapse prevention interventions in community care.

Conclusion
Managing life with severe mental illness is complex. Living with fluctuating mood and the experience of helplessness and being spectator to episodes of total lack of control, is a challenge. Key elements to change this situation are personal guidance and support, through a collaborative relationship between the patient and the MHN, employing a systematic approach to patient symptoms. This enhance patient insight, awareness and the ability to act. MHN education, behaviour and flexibility is important in the process of empowering the patient.

Relevance to clinical practice
Collaborative relationship between patient and MHN is important, in order to address the challenges patients living with SMI face. The systematic approach to patient’ symptoms enhance both patient and MHN’s knowledge of the individual patient’ illness. Staff who is flexible and educated are essential for optimal treatment of fluctuating mood. Training staff in the ERM-strategy and incorporating this treatment strategy of relapse prevention in the toolbox in CMHC will enhance the patient-MHN collaboration. Moreover, incorporating the ERM-strategy into in-patient settings, would address the difficult transition
phase between inpatient and community care, by means of the possibility of continuity of care between sectors. Thereby enhancing the possibilities of patient self-management and control in community care.

**Funding**
This research was funded by the
Psychiatric Research Foundation, Region of Southern Denmark
Mental Health Department Esbjerg, University clinic Region of Southern Denmark
HR Mental Services Vejle, Region of Southern Denmark.

**ORCID id**
Kirsten Kjaer Johansen https://orcid.org/0000-0002-0479-5846
Jette Marcussen https://orcid.org/0000-0002-1126-7427

**References**


This article is protected by copyright. All rights reserved
Psychoeducation improves compliance and outcome in schizophrenia without an increase of adverse side effects: a 7-year follow-up of the Munich PIP-study. *Schizophrenia Bulletin, 42*(suppl_1), S62-S70.


This article is protected by copyright. All rights reserved


Overgaard, D., & Bovin, J. S. (2014). How is the quality of nursing research improved through the use of software programs such as NVivo? *NORDISK SYGEPLEJEFORSKNING-NORDIC NURSING RESEARCH, 4*(3), 241-250.


The aim of ERM is to improve collaboration between health care providers and patients in order to prevent deterioration or aggression, by focusing on early signs of an unwanted development in behaviour. The concept of early signs are based on the theory that patients can learn to recognize onset of relapse in the early phases of psychosis, and communicate the need for preventive actions (Fluttert et al. 2010).

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Introduction of the patient to ERM. Clarify patient motivation and state of self-insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>Identify the patients early warning signs (EWS) in collaboration between patient, nurse and close relation</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Describe the identified EWS at 3 levels, mild, moderate and severe in a personal plan (ERM-plan). Systematic monitoring for the presence of EWS</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Development of a personal plan of action to use, when signs of relapse appear.</td>
</tr>
</tbody>
</table>

ERM is a dynamic strategy, with possibility for continuous evaluation of relevant warning signs and corresponding actions.
### Table 2

**Demographic data**

<table>
<thead>
<tr>
<th></th>
<th>Bipolar disorder</th>
<th>Schizophrenia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviewed (n)</strong></td>
<td>14</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>2 ♂</td>
<td>4 ♂</td>
<td>6 ♂</td>
</tr>
<tr>
<td></td>
<td>12 ♀</td>
<td>8 ♀</td>
<td>20 ♀</td>
</tr>
<tr>
<td><strong>Age range</strong></td>
<td>26-61</td>
<td>26-65</td>
<td>26-65</td>
</tr>
<tr>
<td><strong>Pre-intervention interview</strong></td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td><strong>Post-intervention interview</strong></td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>
Table 3a  
**Examples of the systematic process in the structural analysis**  
**pre-intervention**

<table>
<thead>
<tr>
<th>Units of meaning</th>
<th>Units of significance</th>
<th>Main themes and subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is said</strong></td>
<td><strong>What is spoken about</strong></td>
<td><strong>Patient Care:</strong></td>
</tr>
<tr>
<td>&quot;Sometimes when I have been discharged from the community care to my general practitioner (GP), then things has gone wrong...both concerning the medical treatment, and perhaps also because I have no one to talk to...and then I have been readmitted again...&quot;</td>
<td>Seeking dialog to attain illness insight and stability</td>
<td>Dialog and collaboration is essential for guidance and support</td>
</tr>
<tr>
<td>Grethe 245-0B</td>
<td>Being in a transition between sectors is like being in a vacuum, resulting in a sense of nowhere to turn to</td>
<td></td>
</tr>
<tr>
<td>&quot;... when I get there (at work) I think YEAH, now everything is fine. Then I forget myself again...but when I come home...well, then the energy is low, and the mood drops...and then nothing matters...I don’t take responsibility for anything...I become careless...there are no ups and downs...somehow I feel like a very boring and grey little mouse&quot;.</td>
<td>Mania control work-life</td>
<td>Insight and experience:</td>
</tr>
<tr>
<td>Line 451-0</td>
<td>The impact on personality and self-image</td>
<td>The impact of illness on life experience requires management of energy to gain stability of mood</td>
</tr>
<tr>
<td>&quot;... I try to find a reasonable explanation...but sometimes the mood slopes off, and then there is nothing much I can do to stop it...&quot;</td>
<td>When the mood is high, the energy flows, but when the energy is spent, the moods becomes low, and a sense of insignificance and carelessness take over</td>
<td></td>
</tr>
<tr>
<td>Esther 612-0 S</td>
<td>Lack of insight results in powerlessness; lack of knowledge of the course of the disease results in hopelessness</td>
<td></td>
</tr>
</tbody>
</table>

Table 3b  
**Examples of the systematic process in the structural analysis**  
**post-intervention**

<table>
<thead>
<tr>
<th>Units of meaning</th>
<th>Units of significance</th>
<th>Main themes and subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is said</strong></td>
<td><strong>What is spoken about</strong></td>
<td><strong>Patient care:</strong></td>
</tr>
<tr>
<td>&quot;I am able to recognize the warning signs are, and what I can tackle...I think this is a very good tool...and the close dialog with one’s therapist...from laying my life in her hands and saying “help me”, “save</td>
<td>Dialog generate awareness and control. Knowledge and awareness empowers the</td>
<td>Dialog and collaboration is essential for guidance</td>
</tr>
</tbody>
</table>

This article is protected by copyright. All rights reserved
"When the manic episodes have been raging, my colleagues become stressed...and I become psychotic...But now I know that this is not a desirable state of mind, but a warning... The manic episodes are like a lonesome ride—you ride in your own state of energy...nobody are able to follow along...therefore...it is very lonely, and hard to grasp".

Bertha 653-1 B

<table>
<thead>
<tr>
<th>ability to act in own life.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of the effect of mania on work and life creates an understanding of the illness impact on the surroundings</td>
</tr>
<tr>
<td>and support</td>
</tr>
</tbody>
</table>

This article is protected by copyright. All rights reserved