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Contemporary approaches in mental health rehabilitation

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Abstract

In many European countries, deinstitutionalisation has been an ongoing process over the last few decades. Mental health organisations were transformed to provide support in a more integrated and comprehensive manner, preferably in their own homes in the community. Yet, despite the welcome aspiration of community integration for all, people with complex mental health problems (also termed severe mental illness) have continued to require high levels of support, in inpatient settings and in the community. This group's needs make them highly dependent on their caregivers. The attitudes, knowledge and skills of the staff providing treatment and support is crucial to their recovery. Rehabilitation programmes provide a muchneeded framework to guide practitioners and help them organise and focus their recoveryoriented approach. In this editorial, we will provide a non-exhaustive overview of such rehabilitation programmes and interventions to illuminate the wide scope and practical usability of these interventions for this group of people with complex mental health problems.

Introduction

In many European countries such as Italy, the Netherlands and the UK, deinstitutionalisation has been an ongoing process over the last few decades. Mental health organisations were transformed to decentralise care (and funding) away from large hospitals and provide support in a more integrated and comprehensive manner, 'wrapped around' service users in, preferably, their own homes in the community. There were many drivers for this change, including the ideological view that all people, including those with disabilities, should be able to participate in society to their best ability, and the economic necessity for health systems to deliver care more efficiently, through the development of community mental health services in co-operation with social services and housing providers. Yet, despite the welcome aspiration of community integration for all, some individuals with especially complex mental health problems have continued to require high levels of support, in inpatient settings and in the community (Farkas et al., 1987; Munk-Jorgensen, 1999). Parabiaghi et al. (2006) and Delespaul et al. (2013) have defined this group as those with severe mental illnesses who have associated social and functional impairments (e.g. a GAF score \leq 50), a relatively long duration of illness (at least 2 years) and require co-ordinated, intensive, psychiatric rehabilitation services for their complex needs. Since this group's needs make them highly dependent on their caregivers, the attitudes, knowledge and skills of the staff providing treatment and support are crucial to their recovery.

In order to provide recovery-orientated care to people with severe and complex mental health needs, practitioners must be skilled in engaging service users and building trusting relationships over time to allow authentic, collaborative discussions about the person's views and recovery goals. This is no easy task given the complexity of the service user group, many of whom may struggle to reflect and express themselves due to the cognitive impairments associated with their mental health problems. Specific tools and interventions need to be tailored to address the individual's particular problems. Since most service users will have multiple problems, the complex interventions required are often delivered within rehabilitation programmes, providing an important framework to guide practitioners and help them to organise and focus their approach.

The active recovery triad

In recent years, this group of service users has been the centre of attention in the development of a new model for care in the Netherlands named the 'Active Recovery Triad' or ART (van Mierlo *et al.*, 2016). The model aims to implement recovery-oriented care into longer term mental health inpatient and supported accommodation facilities. The ART model was co-developed with service users, family members, mental health care professionals, policy

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CAMBRIDGE UNIVERSITY PRESS makers, social workers and other stakeholders. Central to its three pillars is the service users' Recovery process, which includes recovery of personal identity, daily functioning, community and social roles and health (physical as well as mental health). The importance of co-operation between service user, staff, family and significant others, the Triad, is emphasised at the individual, team and organisational level. There is explicit acknowledgement that the gradual steps needed to make progress are only possible if the process is Active, recognizing that all members of the triad need to engage proactively with it. Operationalising the model aims to enable service users to have much more autonomy in major life decisions (e.g. choosing where they wish to live) and to clarify the specific steps that need to be attained within specific timeframes to achieve their recovery goals. This clarity is welcome, giving all members of the triad clear expectations of the aims of treatment and support within specific timeframes, something that has been shown to be positively associated with successful move-on from longer term mental health settings (Taylor Salisbury et al., 2017). The ART model and its accompanying fidelity instrument is currently being validated and we plan to assess its effectiveness in future studies.

Engaging people

Since people with complex mental health needs have problems with motivation and organisational skills that impact their ability to manage day-to-day tasks, mental health rehabilitation programmes have a major emphasis on engaging individuals in activities. For those who are at an earlier stage of recovery, this may involve identification of incentives to encourage the person to get out of bed, to attend to their self-care or to spend some time in a communal area. Over time, the person may gradually become more confident and be able to engage in one-to-one sessions or groups. There is no 'one size fits all' approach since each person will have different challenges and it will require an individualised approach to help them gain or regain skills for everyday living. As they progress, staff will support them to access community resources that can further enhance their abilities. In recent years, there has been a move away from the provision of mental health day centres that provide less structured 'drop-in' sessions exclusively to mental health service users and greater encouragement to support service users to access mainstream leisure activities, education and employment. Whatever the pros and cons of this, the importance of engagement in activity has been clear for decades, with many studies showing the negative association between 'time spent doing nothing' and poor outcomes (Wing and Brown, 1970; Curson et al., 1992), and that engagement in activities has a positive impact on negative symptoms (Buchain et al., 2003; Cook and Howe, 2003).

Specific rehabilitation interventions

Cognitive interventions

There is a known association between the specific cognitive impairments associated with complex psychosis and functional outcome (Green *et al.*, 2000; Bowie *et al.*, 2006; Koren *et al.*, 2006; Nakagami *et al.*, 2008; Harvey and Strassnig, 2012; Arnon-Ribenfeld *et al.*, 2017). It is this relationship that forms the basis of rehabilitation interventions targeting cognition.

Some of these interventions use compensatory approaches, while others aim at improving functional outcome through improving cognition.

One such compensatory approach is cognitive adaptation training (CAT), a home-based intervention that aims to bypass cognitive deficits by using environmental aids. A number of studies have demonstrated that CAT can be an effective tool to improve everyday functioning of service users with severe mental health problems living in the community (Velligan et al., 2000, 2002, 2008). In a Canadian adaptation of CAT, the sustainability of the intervention was improved by augmentation with case management (Kidd et al., 2014). The approach has also been adapted for family members to assist in sustaining its effects, though this has not as yet been evaluated (Kidd et al., 2018). A pilot study of CAT delivered as a nursing intervention to people with more severe and complex mental health problems demonstrated promising results in terms of improvements in everyday functioning and engaging in daily activities (Quee et al., 2014). A subsequent large-scale randomised controlled trial (RCT) has corroborated these findings but results are not yet published (Stiekema et al., 2015). Even though CAT is not designed to improve cognitive functioning, such improvements have been demonstrated alongside improvements in everyday functioning (Fredrick et al., 2015).

Cognitive remediation (CR) interventions specifically aim to improve cognition. Several meta-analyses demonstrated a small-to-moderate effect on cognitive and functional outcomes, with some differences in effect depending on the type of CR delivered (McGurk *et al.*, 2007; Wykes *et al.*, 2011; Cella *et al.*, 2017). Although there are a number of different types of CR, they generally adopt a 'drill and practice' approach or are more 'strategybased'. The former approach seems to be better at improving cognition, while the latter is more inclined to improve functioning and thus its effects seem more transferable to daily life (McGurk *et al.*, 2007). Evidence also suggests that CR can be effective in reducing negative symptoms (Cella *et al.*, 2017), which may particularly be beneficial for users with more complex mental health problems.

Although cognitive behaviour therapy for psychosis (CBTp) has a very strong evidence base, people with complex mental health problems may be too unwell, at least at the start of their rehabilitation treatment, to be able to engage with such a structured approach. However, there is some evidence that 'low-intensity CBT' (LI CBT) may be effective (Waller *et al.*, 2013). LI CBT aims to reduce affective symptoms and may therefore be particularly relevant to service users with complex needs who have these kinds of co-morbid symptoms (Pokos and Castle, 2006). The intervention uses *behavioural activation* to increase reward by structurally changing behaviour, combined with *graded exposure* to reduce avoidance behaviour. Important advantages of this intervention are that it has a short duration and does not require intensive training of staff in the way that CBTp does.

Finally, narrative enhancement and cognitive therapy is a group-based intervention that aims to reduce service users' internalised stigma through challenging unhelpful cognitions and reconstruction of personal narratives. A number of trials have demonstrated good outcomes (Roe *et al.*, 2010, 2014; Yanos *et al.*, 2012; Hansson and Yanos, 2016; Hansson *et al.*, 2017) and an RCT in Sweden showed enduring effects 6 months after completing the intervention (Hansson *et al.*, 2017).

Lifestyle interventions

The prevalence of obesity amongst people with psychotic disorders is 41-50 v. 20-27% in the general population (Dickerson et al., 2006). A review of studies of lifestyle interventions for people with psychotic disorders by Bruins et al. (2014) concluded that they are effective in helping people to lose weight and preventing weight gain and therefore play an important role in preventing and treating obesity. Individual programmes presented better results than group programmes, but a combined individual/ group programme gave the best results. No specific elements (e.g. physical exercise, diet, psychological intervention) could be appointed that seemed to be particularly effective. Interventions also address cardiometabolic risk factors, associated with the two to threefold higher mortality rates for people with severe mental health problems compared with the general population (De Hert et al., 2009). Nielsen et al. (2013) even demonstrated evidence that this mortality gap has increased in the past 30 years. There is also some evidence that programmes of physical exercise can reduce psychiatric symptoms (Scheewe et al., 2013; Rimes et al., 2015), Anxiety (Wipfly et al., 2008), stress (Hofmann et al., 2005) and depression (Dinas et al., 2011). However, there is a paucity of large trials including service users with more severe and complex mental health problems (Looijmans et al., 2017; Stiekema et al., 2018). The Effectiveness of Lifestyle Interventions in Psychiatry (ELIPS) study adopted a small step approach in which the 'obesogenic' environment was adjusted (e.g. more healthy food options, more awareness of (un)healthy food and lifestyle, walking and talking instead of sitting down, etc.) with the aim to improve both physical health as well as psychosocial wellbeing of severe mentally ill patients living in residential care settings (Looijmans et al., 2017; Stiekema et al., 2018). Results demonstrated a decrease in waist circumference as well as a decrease in metabolic syndrome score after 3 months, but no effects on psychosocial variables. Results do suggest that a continued focus upon the lifestyle programme is required, as the results were no longer significant after 12 months. A comparable study was done in Denmark (Hjorth et al., 2017), as a part of the European HELPS project (Weiser et al., 2009) with similar results. Deenik et al. (2017) carried out a cross-sectional study showing that for inpatients of mental health wards, physical activity is associated with higher quality of life, especially for those patients who are least active. It therefore seems that lifestyle interventions may positively contribute to the recovery and wellbeing of service users with more severe and complex problems but more specific research amongst this group is needed. A continued focus upon these lifestyle programmes is required, however, to reach sustainable results.

Work and education

People with severe mental health problems report unmet needs in employment and daytime activities (Wiersma, 2006; Swildens *et al.*, 2011). Supporting people in these areas can be crucial to their recovery (Slade *et al.*, 2014). Any form of employment (paid or voluntary, supported or not) can add meaning and a sense of fulfilment to someone's life. Moreover, it adds to personal growth in the sense that it helps develop skills, roles and identity. Individual placement and support (IPS) is the best known supported employment intervention for people with mental health problems and the one for which there is the strongest evidence (Drake *et al.*, 1999; Mueser *et al.*, 2004; Burns *et al.*, 2007). It uses a direct 'place and train' strategy where people are supported to find and keep a competitive 'mainstream' job, rather than graduating from 'a sheltered' work environment to mainstream employment. Nuechterlein et al. (2008) also integrated supported education and IPS given that many service users with severe mental health problems have not completed their education, by working with teachers and family members to assist the person in developing study skills. The results of their RCT showed that this integrated programme is successful in supporting people's return to work and/or school. Supported education is a promising practice, although there is no strong evidence yet of its association with educational attainment (Rogers et al., 2010; Ringeisen, 2017). None of these models have been specifically evaluated amongst people with severe and complex mental health problems, but it is likely that they are highly relevant to people as they progress in their recovery and move from hospital settings to the community.

User-led and peer support interventions

Service users are increasingly involved in developing and evaluating mental health care policy, services and interventions. The evidence base supporting the effectiveness of service user-run services and service user-led interventions is growing (Doughty and Tse, 2011). The Wellness Recovery Action Plan (WRAP) is a widely disseminated service user-led self-management recovery programme (Fukui et al., 2011). It produces an action plan that taps into key values of recovery such as hope, autonomy and selfefficacy and identifies factors that precipitate or perpetuate feelings of unwellness and the actions that need to be taken to alleviate them by the person and/or their support network (Doughty et al., 2008; Cook et al., 2012). While WRAP is an individualised plan, there is a growing evidence base for peer group recovery interventions for people with severe mental health problems (Castelein et al., 2015). For example, Van Gestel-Timmermans et al. (2012) report on the effectiveness of a 12-week peer-run course called 'Recovery is up to you'. In an RCT, they found positive effects on empowerment, hope and self-efficacy beliefs of participants.

E-mental health

There are many recent studies investigating the acceptability, feasibility and effectiveness of e-mental health interventions amongst people with mental health problems. Recent reviews of the literature suggest that, although there may be some concerns with regard to safety and privacy, in general web- and mobilebased interventions seem to be well accepted by people with severe mental health problems, mostly independent of clinical and demographic factors (Naslund et al., 2015; Berry et al. 2016). Mobile phone ownership amongst mental health service users has increased with a recent study showing that their 'digital exclusion' has decreased since 2011 (Robotham et al., 2016). Qualitative studies indicate that mental health staff also hold positive views regarding the possibilities of web-based interventions, though a minority hold rather paternalistic attitudes, citing concerns about service users accessing information through the Internet about their illness that might be distressing (Berry et al., 2017).

There have been no specific studies investigating the feasibility or acceptability of e-health interventions amongst people with severe and complex mental health problems. However, a recent study by Whiteman *et al.* (2017) reported on the feasibility of an adapted smartphone-delivered intervention for middle-aged and older adults with severe mental illness. Smartphone and webbased interventions may be of particular relevance to those with more complex problems, providing an alternative approach for those who struggle with verbal communication.

Integrated rehabilitation models

The Boston psychiatric rehabilitation model

Boston, USA, has been a pioneering centre in the development and evaluation of psychiatric rehabilitation approaches since the 1990s and 'the Boston model' or Boston Psychiatric Rehabilitation Approach (BPRA) has been applied in many countries across the world. Current programmes incorporate values, procedures and practitioner skills and technologies to assist staff to deliver multiple, individually tailored evidence-based interventions as part of their daily practice. The programmes have a major focus on assisting service users to develop day-to-day living skills, to achieve their maximum level of autonomy and to live as fulfilling a life in the community as possible (Rossler, 2006; Farkas et al., 2007). Many incorporate specific interventions to address co-morbidities (such as substance misuse) and enable social inclusion (e.g. through supported employment). In the Netherlands, an RCT into the effects of an individualised BPRA programme on, for example, goal attainment and social functioning of people with severe mental health problems suggests that this programme is effective in promoting societal participation and in reaching personal goals (i.e. goal attainment) (Swildens et al., 2011).

The Strengths model

In this model, practitioners use a 'strengths assessment' to help service users identify their skills, talents and resources that can support them in attaining specific recovery goals (Rapp and Goscha, 2011). Problems and barriers to goal achievement are addressed by consideration of specific strengths to overcome the problem, or, where the issue seems insurmountable, to find an alternative route to goal achievement (Fukui *et al.*, 2011). The Strengths model has been incorporated into 'CARe' (Comprehensive Approach to Rehabilitation methodology; Bitter *et al.*, 2017), which aims to help service users improve their quality of life by supporting goal attainment, coping with vulnerability and improving the quality of their social environment.

Summary

Without being exhaustive, this editorial gives an overview of contemporary approaches used to support the rehabilitation and recovery of people with complex psychosis. Given the particularly challenging and diverse needs of this group, this work requires staff who are appropriately trained to deliver a range of effective interventions, tailored to the individual's particular problems. Rehabilitation practitioners need to enjoy working over the longer term with service users, building recovery-promoting relationships that pave the way for the delivery of these interventions to address the person's difficulties effectively. Holding therapeutic optimism is crucial, given that, for many individuals, hope for their recovery may have waned. All mental health services should offer a recovery-orientated approach, but practitioners who work with people with complex psychosis may benefit additionally from frameworks such as 'ART' to ensure that this focus is maintained and central to collaborative care planning.

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