Rehabilitation Programs for Elderly Women Inpatients with Schizophrenia

Carlos M. Coelho, António P. Palha, Daniela C. Gonçalves, and Nancy Pachana

School of Human Movement Studies, University of Queensland, St Lucia QLD, Australia
Hospital de S. João, Serviço de Psiquiatria, Avenida Porto, Portugal
Universidade do Minho, Instituto de Educação e Psicologia, Braga, Portugal
School of Psychology, University of Queensland, Queensland, Australia

To cite this Article

To link to this Article: DOI: 10.1080/08952840801984816
URL: http://dx.doi.org/10.1080/08952840801984816

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
Rehabilitation Programs for Elderly Women Inpatients with Schizophrenia

Carlos M. Coelho
António P. Palha
Daniela C. Gonçalves
Nancy Pachana

ABSTRACT. This study aims to describe rehabilitation and resocialization methods we believe to be appropriate for application to female patients with schizophrenia, in a psychiatric unit with a predominantly older population. We briefly describe the unit and the interventions used as an example of the proposed rehabilitation and resocialization methods applied. The article provides an overview to guide accurate intervention, particularly in inpatient women, in different types of cognitive impairment under the broad category of schizophrenia. Our clinical approach includes a token economy approach, cognitive remediation therapy, and social skills training. The token economy intervention is particularly directed to patients that present with a high mental deterioration and/or debility. Cognitive remediation training is applicable to subjects with both cognitive and social dysfunction, but that do not possess signs of an organic cerebral illness or

Carlos M. Coelho (E-mail: ccoelho@hms.uq.edu.au) is Senior Research Fellow at the School of Human Movement Studies, University of Queensland, Level 5, Building 26, St Lucia QLD 4072, Australia.
António P. Palha, MD, PhD Psychiatry is affiliated with the Hospital de S. João, Serviço de Psiquiatria Avenida, Porto, Portugal.
Daniela C. Gonçalves, PhD Candidate, attends Universidade do Minho, Instituto de Educação e Psicologia, Braga Portugal.
Nancy Pachana, PhD, works with the University of Queensland, School of Psychology, Queensland, Australia.
This work was supported by a grant from the Portuguese Foundation for Science and Technology (ref. SFRH/BPD/26922/2006) awarded to the first author.
of substance abuse. Social skills training can be the third step to resocialization, training verbal and nonverbal communication competencies.

**KEYWORDS.** Schizophrenia, inpatients, token economy, cognitive remediation therapy, social skills training

**INTRODUCTION**

A gradual aging of the population is already the prevailing reality in most developed countries (Kincannon, He, & West, 2005; Lutz, Kritzinger, & Skirbekk, 2006). This fact continually exerts an increasing need for an appropriate response from the health and social sectors (Baldwin & Wild, 2004; Costa, 2004; Lee, Volans, & Gregory, 2003). A decrease in infant mortality, a decline in birth rates, and an increase in life expectancy have led to an inversion of the population pyramid, whereby, for the first time in Portuguese demographic history, the percentage of older adults is higher than that of youths (INE, 2002).

With an average life expectancy of 78 years (75 years for men and 82 for women; INE, 2002), the current Portuguese landscape is characterized by considerably high indices of illiteracy and poor socioeconomic conditions (Botelho, 2005). These factors, along with the functional decline that comes with ageing (Katona & Shankar, 1999, 2004), constitute risk factors for the occurrence and maintenance of psychiatric conditions (Bowling & Farquhar, 1996; Ebmeier, Donaghey, & Steele, 2006; Tafaro, Cicconetti, Zannino, Tdeschi, Tombolilla, Ettore, & Marigliano, 2002; Woods, 1999).

Although cognitive deterioration resulting in significant functional impairment occurs only in pathological aging conditions, and therefore should not be considered a normative stage of aging (Baltes & Baltes, 1990), epidemiologic data point toward an increasing prevalence of symptoms related to dementia. Even though there may be fluctuations in these rates, based on the methodology selected for the assessment (Form, 2000; Paúl, Ayis, & Ebrahim, 2006) or on the samples considered—for example older adults either living in a community or institutionalized—the figures regarding symptoms of cognitive deterioration in older adults are too significant to be ignored. Blazer’s studies indicate that between 15% and 69% of elderly patients committed to psychiatric hospitals and between 35% and 70% of those in long-term institutions show signs of organic mental disorders (Blazer, 1980, 2002a, 2002b).
Population aging inevitably spurs the need for a response by professionals who deal directly with this population group. However, the inability of both older adults and their general practitioners to recognize declining medical and psychiatric states (Löpönen, Räiha, Isoaho, Vahlberg, & Kivelä, 2003; Mills, 2001; Voyer & Martin, 2003), the absence of specific training for professionals (APA, 2004; Murphy, 2000), and the specificities associated with old age psychopathology, which make it significantly different from earlier age pathological conditions (Frazer, Christensen, & Griffiths, 2005; Katona & Shankar, 2004), often obstruct the implementation of effective strategies to work with the elderly.

With the purpose of overcoming some of the difficulties inherent to the use of generalized strategies with older populations, and considering the difficulties that might lead older adults and their caregivers to frustration, we have prepared an article that provides professionals working with this population with a successful framework for treatment in these particular settings and considering the specificities of older female inpatients.

UNIT AND INPATIENT CHARACTERISTICS

At Bom Jesus Health Centre in Braga, Portugal, there are approximately 280 women as long-term inpatients. These patients are distributed into four units, one of which has numerous older patients and, as such, presents different and challenging characteristics. At the time this article was written, there were 77 patients in this building, which has capacity for 80.

We used the Mini Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975), administered by the healthcare unit psychologist, to evaluate mental status. In addition, a questionnaire administered by the social worker, the ward nurse, and the assistant nurse, wherein the number and duration of the patients’ contact with family members or friends is recorded, was used to evaluate the patients’ existing social support.

The age of the patients in this building varies between 26 and 94, with an average of 67.08; (SD = 14.39). The elderly patients (over 65 years) constitute the majority of the population (n = 46), corresponding to 59%.

The patients’ entry diagnoses were made by the psychiatrists in the unit, according to the ICD 10 (1992). The clinical evaluations show a considerable percentage of schizophrenic patients (n = 34, 42%). Considering other psychosis diagnoses (n = 6), we reach a number of patients with psychotic disorders of almost 50%. The patients’ other psychiatric
diagnoses included schizophrenia, Alzheimer’s disease (n = 12), mental retardation (n = 10), mood disorders (n = 10), and antisocial personality disorder (n = 5).

Folstein’s Mini Mental State Exam (MMSE) reveals fairly heterogeneous results. From the 77 assessed patients, 38 present results between 0 and 15; 27 patients score between 16 and 25; and 5 had between 26 and 30 points on the test.

The questionnaire regarding existing social support reveals that 58 patients have some contact with their family (76%), representing around three-quarters of the total population.¹

**SUGGESTIONS FOR PROGRAMS SUITED FOR THE PATIENTS**

Taking into account the characteristics of the environment in which these patients live and their own characteristics, we summarize a few intervention proposals that we believe are compatible with this type of population. The program selection was based on the diagnosis of the patients, their chronological and functional age, the level of mental deterioration, and the existing social support network.

**Token Economy Program**

These programs, based on social learning principles, offer incentives for patients to engage in functional behaviors that increase daily living skills and independence (Tenhula, Bellack, Suarez, Lambert, & Ford, 2003). The operant learning paradigm has been applied in psychiatric environments since the 1950s, with the purpose of changing the behavior of psychotic inpatients (Lindsley & Skinner, 1954) and was progressively generalized to all institutionalized patients in the 1960s. Relevant studies from this period include Ayllon and Azrín’s work (1965, 1968). This procedure is based on a close control of the environment, in order to structure rehabilitating behavior of a person or group of people (Encinas & Cruzado, 1993). In the case of its actual application in institutionalized mental health contexts, the final objective is psychiatric rehabilitation (Lutzker & Withaker, 2005).

The Token Economy was introduced in psychiatric hospitals with the underlying theoretical rationale of operant behavior principles (Skinner, 1953; McMonagle & Sultana, 2000). The first premise, the law of effect, states that behavioral frequency is in part determined by the consequences
of that behavior or its effects. Additionally, reinforcers are more effective in changing behaviors than punishment.

The second operant conditioning law or principle is the law of contiguity association, which states that two events become associated with one another if they happen together. In this case, a neutral stimulus paired with a primary reinforcer will become a reinforcer by its association with satisfying consequences. Money is a good example of contiguity, given that it is not a reinforcer by its inherent characteristics, but by its capability to satisfy us through commodities we can acquire through its use (Dickerson, Tenhula, & Green-Paden, 2005).

It is also important, in order to guarantee the success of this type of intervention, to train and evaluate the staff, who have a decisive role in this kind of work (e.g., Coleman & Paul, 2001; Corrigan, Williams, McCracken, Kommana, Edwards, & Brunner, 1998; LePage, DelBen, Pollard, McGhee, VanHorn, Murphy, Lewis, Aboraya, & Mogge, 2003).

Methodology

Executing the token economy system, according to Rimm and Masters (1974), involves an objective definition of the premises involved, in order to maximize their efficiency. These authors consider it essential to establish from the first moment: i) toward which patients will the intervention be directed; ii) which behaviors are therapeutically desired, are observable, and can be registered; iii) the delivery of tokens with desirable behavior, and non-delivery of tokens without behaviors that are desirable, observable, and that can be registered, and withdrawal of tokens with behaviors contrary to the desirable ones; iii) which reinforcements are effective; and v) how the benefits in tokens and the costs of reinforcements will be balanced.

In order to obtain a good characterization of the behaviors we want to decrease, maintain, or increase in frequency and intensity, we recommend the use of the Time-Sample Behavioral Checklist [TSBC] (Paul, Licht, Mariotto, Power, & Engel, 1987) and REHAB (Baker & Hall, 1983) instruments. Through staff meetings, additional behaviors can also be listed. After listing and understanding the desirable and the inadequate behaviors of the selected patients, the therapists assign points to each of the listed behaviors (Coelho & Palha, 2006). Some of the desired behaviors listed might include “Greeting and starting a conversation with a member of staff or another patient” (1 token) and “Getting dressed” (2 tokens). Behaviors to be extinguished might include “Verbal aggression” (1 token) and “Leaving the table during meals” (2 tokens).
There should be recognition of the patient’s commitment in following his or her program with a contingent reinforcement (token), even if the attempt is not successful, in order to motivate and shape the patient toward increasingly more appropriate behaviors. For example, a patient can receive from 1 to 3 tokens for a given behavior, according to the proximity to the actual desirable behavior and the effort put into it. In the case of absence at a task for justified reasons, the patient can receive the maximum number of tokens the task has to offer.

This intervention is particularly directed toward patients that present with a high mental deterioration and/or debility. Considering that this is a behavioristic rationale intervention, relatively simple in its conceptualization, it presents a significant potential for rehabilitating action, especially when working with patients with challenging or disruptive behaviors (LePage, 1999).

**Cognitive Remediation Training**

Cognitive remediation training (CRT) is a therapeutic technique directed toward patients with schizophrenia. Its main objective is to promote cognitive functioning, which in psychotic states frequently presents prevailing deficits, interfering with the subject’s day-to-day functioning (Coleman & Gillberg, 1996). Some of the most documented cognitive deficits presented with schizophrenia diagnosis are in executive functioning, memory, and attention (Michel, Danion, Grangé, & Sandner, 1998; Warner, 1994). Each one of these deficits impacts the subject’s functioning, resulting in a general state of vulnerability toward recurrences.

Recently, Reeder, Smedely, Butt, Bogner, and Wykes (2006) presented a revised program for cognitive remediation training that has its effectiveness maximized by i) working on specific cognitive functions; ii) using tangible techniques, developed in a laboratorial context; and iii) personalizing the intervention according to a subject’s unique characteristics. The cognitive remediation training is applicable to subjects who have been diagnosed with schizophrenia, with both cognitive and social dysfunction, but that do not possess signs of an organic cerebral illness or of substance abuse (Michel et al., 1998).

**Methodology**

CRT implementation proceeds in two stages: i) early evaluation of the subject based on memory, attention, and executive functioning; and ii) individualized intervention based on the results of the previous
evaluation (Wykes, Reeder, Williams, Corner, Rice, & Everitt, 2003). Therefore, although it is an intervention based on a manual, there are guarantees that the intervention plan is individualized and adapted, considering not only the subject’s specific needs, but also maximizing his or her strengths.

The implementation of the intervention program involves 3 modules (Cognitive Change, Memory, and Planning), administered in the course of 40 individual sessions, 60 minutes long, which happen with a minimum frequency of 3 times a week. The sessions are composed of tasks of increasing difficulty, which the subject should execute, addressing cognitive change, memory, and planning (Wykes et al., 2003). The fact that the therapy starts with tasks of reduced difficulty motivates the subject toward participation; however, the therapist must be alert to the subject’s reaction to the proposed exercise, given that selecting tasks that are too easy might lead to a feeling of infantalization. As long as the tasks are mainly of low difficulty, they can be adapted to each participant’s abilities, with the goal of promoting the acquisition of new competencies in the 3 designated areas.

The CRT’s underlying strategies, which make it particularly useful to work with patients with schizophrenic symptomatology, are learning with minimum error, tasks difficulty adjustment, practice, positive reinforcement, and promoting information processing strategies (Reeder et al., 2006).

**Social Skills Training Program**

With schizophrenic patients—along with cognitive disorders, failure in goal-directed behavior, and affective dulling—there is a serious compromise of social relations. The implications of behavior are evident in social interactions, as they involve responses at the right moment, with the appropriate latency periods (e.g., Bourgeois, Schulz, Burgio, & Beach, 2004).

According to Liberman (1991), the abilities needed for social competency include i) being conscious of the feelings and objectives of the person with whom one is dealing, as well as their rights and responsibilities in that particular situation; ii) translating perceptions into various possible actions and being capable of choosing the best solution; and iii) conveying the chosen response to the other person, using suitable verbal and nonverbal behaviors.

These prerequisites for an effective social contact demonstrate the need for training in verbal and nonverbal communication competencies and
training in problem solving (Bourgeois et al., 2004), as well as in comprehension and in following the social rules and norms regarding limits between the individual and others (Chen, Ryden, Feldt, & Savik, 2000; Moore & Davis, 2002).

The paranoid symptomatology in an older individual might indicate schizophrenia, dementia, or paranoid psychosis, with different prevalence and prognosis for each, making the evaluation and consequent diagnosis a complex process, albeit a necessary one (Hopkins, Kilik, Day, Bradford, & Rows, 2006). Therefore, this program for training social competencies focuses on patients with that same symptomatology, not provoked or affected by dementia, in other words, for those patients with diagnosed schizophrenia and with MMSE results that reveal an absence or low index of mental deterioration.

Schizophrenia promotes social losses, which limits support (e.g., Pentland, Miscio, Eastabrook, & Krupa, 2003); support which is important in reducing stress, depressive symptoms, and recovering from illnesses (Siegler & Poon, 1989). It follows that this support implies a reciprocal relationship, and that the vehicle of social support (caregiver) might experience extreme stress and depression (Bruce, Paley, Nichols, Roberts, Underwood, & Schaper, 2005). It is therefore helpful to endow the receptor with social abilities so that he or she benefits more from the caregiver.

**Methodology**

Given that a person with psychosis experiences a loss of his sense of boundaries and, consequently, his sense of identity, the group might, at any moment, lose objectivity of speech. However, group intervention is possible as long as some crucial aspects are considered, for example, maintaining a structured and friendly environment. In this type of intervention, the therapist should also stop criticisms between patients, offer positive feedback, and avoid telling the patient that his or her answers are wrong (Coelho & Palha, 2006).

The choice of positive behaviors that can be promoted should be favored over unwanted behaviors that one intends to extinguished (Liberman, 1991). The chosen behaviors should also be those that bring the most benefits to the patient and those the patient applies more frequently, for example, knowing how to ask for help.

Social skills training (SST) teaches the patient to think in terms of communication competencies, problem solving, and assessment of
environmental resources. The nonverbal communication competencies include eye contact, body posture, body movement, facial expression, voice volume, and speech fluency (Carballo, 1993). These competencies serve simultaneously two purposes for the patient: expressing his or her needs as a patient and understanding the interest of the interlocutor in continuing the interaction. Finally, the evaluation of environmental resources includes negotiation with the patient about the resources available and the most effective way to use them. Examples of resources are time, space, people, objects, the telephone, money, and transportation.

Basic training with these subjects includes operationalization of apparently obvious abilities, for example, starting a conversation. Even basic activities such as this can be divided into small steps: choosing an appropriate place and time, greeting, saying some words about the present situation or of general interest, assessing if the other person is listening and wants to continue the conversation, and taking the conversation with the subject in the actual desired direction (Goldstein, 1976). Each of these steps could be subdivided and trained separately according to social learning principles.

The great diversity of cognitive problems and social deficits that exist in psychiatric illnesses requires an adaptation of social skills training to each subject. A generalization of the benefits, however, depends on the chances patients have to apply their learning to different contexts and different people (Martin-Cook, Davis, Hynan, & Weiner, 2005), which is ideal if there is a therapeutic involvement between all the individuals dealing closely with the patient.

CONCLUSION

The description of this unit intends to show and relate the patients and their context in order to select appropriate methods of treatment. Older women with schizophrenia that began in early adult life continue to need psychiatric treatment (Dickerson, 2007), although treatment considerations may require modification with age (Lehmann, 2003). The intervention programs presented aim to prevent the deterioration caused by biological, psychological, and social factors related to age, institutionalization, and lack of social support, among others. The Token Economy, Social Skills Training, and Cognitive Training described are some of the intervention possibilities that can be used with the population of interest, namely older inpatients. It is important to consider that the selection of a
strategy for working with older institutionalized patients should contemplate all idiosyncrasies associated with the context, the patients, and the competencies of the therapists administering interventions (Baldwin & Wild, 2004). The existing stereotypes underlying a negative image of mental illness are frequently associated with prejudiced behavior toward older adults, attributing to them characteristics of fragility and incompetence (APA, 2004). Additionally, therapists’ attitudes often associate work with older adults to a lesser need for training (Kimuna, Knox, & Zusman, 2005) to close existing gaps in the offering of specific training for work with this group (Murphy, 2000). In order to help professional caregivers working in these types of impatient facilities, we have proposed different rehabilitation methods that we believe to be most appropriate considering each clinical situation.

NOTE

1. Family contact is considered nonexistent when the patient has had no visitors for more than six months, and this is the case for over one-fifth of the sample.

REFERENCES


