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Redevelopment of tertiary psychiatric services in British Columbia: A prospective study of clinical, social, and residential outcomes of former long-stay inpatients

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ABSTRACT

Objective: The objective of this study is to assess the clinical and social outcomes for a cohort of patients who were part of the redevelopment of psychiatric services in British Columbia.
Method: This study used a naturalistic, quasi-experimental design, to examine the outcomes of a cohort of 189 long-stay patients at Riverview Hospital (RVH), some of whom moved into Tertiary Psychiatric Residential Facilities (TPRFs), some into the community in less structured facilities, and some remained at RVH. Data was collected from clinical files at RVH and at each participating site, semi-structured interviews and self-report measures were completed with patients. In addition, semi-structured interviews were also conducted with staff members.
Results: There was very minimal evidence of transinstitutionalization to prisons or homelessness; one participant resided in a correctional facility, one resided in a forensic facility, and one participant spent some time homeless. In addition, the majority of participants remained in residences that provided 24 h care. Eighty percent of our population was diagnosed with a schizophrenia spectrum disorder. Psychiatric symptoms remained fairly stable; some embarrassing social behaviors increased; however, aggressive behaviors showed no increase; neuropsychological deficits did not deteriorate, there were even some improvements. Participants demonstrated increases in several independent living skills including: money management, food preparation and storage, job skills, and transportation skills. In addition, participants experienced a significant increase in their perceived quality of life.
Conclusions: This study builds on existing research demonstrating that well-planned and appropriately resourced hospital closures can lead to positive psycho-social outcomes for participants and can successfully avoid negative outcomes such as transinstitutionalization to the judiciary system and homelessness.

1. Introduction

1.1. Redevelopment of psychiatric services in British Columbia: Prospective study of clinical, social and residential outcomes

Deinstitutionalization of severely and persistently mentally ill individuals has been one of the most significant developments in mental health policy and practice in the last 50 years. Recently, deinstitutionalization has received considerable attention in the media and is often prominent on political agendas (Bryeton, 2006; Smyth, 2006; Grindlay, 2009). This has been particularly true in British Columbia, where the only tertiary psychiatric hospital has been downsizing for several decades (Morrow et al., 2008). Many researchers have asserted that community-based care is inadequate and leads to negative outcomes such as homelessness, inadequate treatment, and/or transinstitutionalization (i.e., patient care transferred to correctional facilities, or forensic psychiatric facilities) or death (Bachrach, 2001; Lamb and Bachrach, 2001). However, these unfavorable results have been attributed to underfunding and poor management at the system level rather than limitations with community-based care models (World Health Organization, 2003).

Despite the academic debates and popular discourse focusing on perceived obstacles and evidence-based challenges to deinstitutionalization, there is evidence that replacing long-stay inpatient beds in

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large scale psychiatric hospitals with community-based residential facilities leads to positive outcomes when properly managed. Several programs of research examining hospital closures and transitions to community-based care have been conducted in diverse countries have been evaluated, for example: Italy (Lesage and Tansella, 1993; Barbato, 1998; D'Avanzo et al., 2003), the United States (e.g., Indiana) (McGrew et al., 1999a,b; Pescosolido et al., 1999), the United Kingdom (UK) (Leff and Trieman, 2000; Leff et al., 2000), Australia (Newton et al., 2000; Hobbs et al., 2000, 2002), Canada (e.g., Quebec) (Lesage et al., 2000; Trudel and Lesage, 2006), and The Netherlands (Amsterdam) (Duurkoop and van Dyck, 2003). Each of these studies has demonstrated that properly executed programs of deinstitutionalization are feasible and do not lead to negative clinical or social outcomes. Specifically, perhaps the most important longitudinal study in this field of research is the Team for the Assessment of Psychiatric Services (TAPS) project conducted in the UK (Leff et al., 2000). With results that generally echo other studies, the TAPS study found no amelioration of participants' clinical profiles or undesirable social behaviors; however, improvements in domestic living skills, community living skills, and quality of life were reported. In addition, patients developed more friendships and enjoyed increased freedom after leaving hospital and relocating to the community. The TAPS study showed no increase in mortality, homelessness, or criminal activity among its participants (Dayson, 1993; Leff et al., 1994, 1996, 2000; Leff and Trieman, 2000). Over and above clinical and social–cultural evidence that community-based care is the best practice, there is also evidence that it is a cost–effect method of service delivery (Reinharz et al., 2000). It is these positive results that have encouraged provinces, such as British Columbia (BC), to pursue the redevelopment of psychiatric care and the closure of its only tertiary psychiatric hospital. Despite positive results from earlier studies, one significant question remains, will the redevelopment of psychiatric services with a more handicapped population be achieved with similar effectiveness (i.e. clinical and social outcomes) and efficiency (i.e. at similar or lower costs) in the Canadian context.

Patients who remain in long-stay inpatient hospitals have more severe and persistent mental disorders and greater levels of disability than the patients who were deinstitutionalized before them (Knapp et al, 2011). It has been argued that as patients are moved into the community, less disabled patients are 'creamed off' and the most difficult to place patients form a 'remnant group' (Ford, 1987). This trend was supported by findings from the TAPS project which found a selection bias such that patients who initially left the hospitals were younger, had spent less time in psychiatric hospitals, had fewer social problems, had larger social networks, and were less likely to be diagnosed with schizophrenia (Jones, 1993). As deinstitutionalization has progressed in many countries, several authors have estimated that about 10% of severely mentally ill patients (the 'remnant group') require more comprehensive care than can typically be provided in the community (Gudeman and Shore, 1984; Trauer et al., 2001). Numerous countries have developed parallel strategies to address the needs of this unique sub-population. For example, the UK has developed 'hostel wards' and Australia has established 'community care units,' both of which are intended to be home-like facilities providing intensive treatment and rehabilitation in normalized living conditions as an alternative to long-term hospitalization (Wykes and Wing, 1982; Garety and Morris, 1984).

In British Columbia (BC), a province of approximately 4.6 million people, as in many industrialized countries, psychiatric services have been undergoing reorganization and redevelopment since the 1960s (BC Government, 2012). Although this process was far from linear and was punctuated by various delays and interruptions, Riverview Hospital (RVH), BC's only tertiary care psychiatric hospital, underwent downsizing from approximately 4000 beds in the early 1960s to approximately 500 beds in the early 1990s (Macfarlane et al., 1997; British Columbia Mental Health and Addiction Services, 2010a,b). The current phase of the RVH Redevelopment Project, which began in 2002, was instigated by the release of a new Mental Health Plan for BC in 1998. The BC Mental Health Plan called for the continued redevelopment and decentralization of Riverview Hospital and the building or renovating of small purpose-designed, community-based facilities. In addition, in 2002, BC health services were reorganized into five geographically-based regions, each responsible for the health care needs of their populations (BC Ministry of Heath, 1998; Priebe and Turner, 2003). The Ministry of Health committed CAN$138 million in capital funding to construct new facilities or renovate existing facilities where appropriate (BC Ministry of Health, 2010). Additionally, CAN$4,050,000 of annualized funding was pledged (Provincial Health Services Authority, 2005). The current and final phase of the RVH Redevelopment Project is anticipated to be complete in 2012. In a process that parallels that of other countries, BC is developing regionalized Tertiary Psychiatric Residential Facilities (TPRFs). These facilities are intended to be smaller and more home-like than hospitals and provide intensive long-term treatment and rehabilitation intended to support recovery for tertiary psychiatric patients. The funding and construction of the facilities necessary to receive the final ~500 RVH patients has taken place over more than eight years.

The state of the field demonstrates that there is still much to be learned about deinstitutionalization and community-based care, warranting further research (Priebe and Turner, 2003). This study was designed as a large-scale, prospective program evaluation of the RVH Redevelopment Project. The results report on a cohort of patients who moved out of RVH and into TPRFs in the Vancouver Island, Interior, Northern, and Fraser Health Authorities between 2001 and 2004. The objectives of this first paper are to provide a description of the study population and methodology, to report the variety and characteristics of the facilities participants moved to over the course of the study, and to describe the baseline clinical and psychosocial characteristics and associated outcomes over a 5-year period.

1.2. Method

The research was approved by the research ethics committees of the University of British Columbia, Simon Fraser University, Riverview Hospital and all participating regional health authorities.

1.3. Design

This study used a naturalistic, quasi-experimental design, comparing measurements across multiple time points. The goal was to examine the outcomes of a cohort of 189 long-stay patients at Riverview Hospital (RVH) in British Columbia, Canada, some of whom moved into TPRFs, some relocated into the community in less structured facilities, and some remained at RVH. Most patients who remained at RVH did so generally because their region of origin was not yet scheduled for redevelopment.

1.4. Procedures

Data was collected from clinical files at RVH and each participating site, semi-structured interviews and self-report measures were completed with patients, and interviews were also conducted with staff members. Baseline data collection was conducted at RVH and data collection was repeated annually for a period of five years in the location of the participant's residence at the time. Residential facility results report the location of the participant at each follow-up. If a participant was unavailable for a follow-up interview due to, for example, physical illness, the location of the participant was recorded and the characteristics of the facility ascertained. Approximately 17% of our participants declined participation at some point in the study. Statistical analysis indicated no difference in baseline characteristics of participants who dropped-out from those who completed the study.