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Mental Health Institutionalisation in a Small Caribbean Country:

Patient Factors Contributing to Long Term Hospitalisation

Master's dissertation in Mental Health Policy and Services

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Abstract

Psychiatric institutions have evolved in function over the last 2000 years. Modern mental health services have moved away from institutional care to community-based models. This study sought to evaluate the patient related factors which may contribute to long-stay hospitalisation. These institutionalised persons differ in some ways from persons with mental illness who have not been institutionalised, and therefore it is vital to address these concerns in the discharge process. These factors include severity of illness, social skills and support, illness related factors such as compliance with treatment and insight, and the support provided by the institution to facilitate recovery and self-sufficiency.

Institutionalised patients suffered predominantly from psychotic illnesses, were involuntarily detained in hospital at initial admission, showed moderate function on assessment, and were prescribed multiple psychotropic medications. Staff ratings reflected concerns regarding compliance with medication and residual symptoms. Although half of patients interviewed were dissatisfied with the ward, surprisingly patients were not generally dissatisfied with the staff or other patients. Comorbidity with a second mental illness or medical illness was noted in the cohort examined.

In institutionalised patients the recovery model as a guiding philosophy may enhance the likelihood for discharge. This focusses on hope and resilience in the presence of ongoing illness. Mental health programs in institutions must first reorient attitudes of the staff towards patient empowerment, provide resources for rehabilitation and encourage community involvement and connectedness.

Key words: deinstitutionalisation, psychosis, comorbidity, ward atmosphere, recovery model

Resumen

Las instituciones psiquiátricas han evolucionado en su función en los últimos 2000 años. Los servicios modernos de salud mental han pasado de la atención institucional a los modelos basados en la comunidad. Este estudio buscó evaluar los factores relacionados con el paciente que pueden contribuir a la hospitalización de larga estadía. Estas personas institucionalizadas difieren de alguna manera de las personas con enfermedades mentales que no han sido institucionalizadas y, por lo tanto, es vital abordar estas inquietudes en el proceso de aprobación de la gestión. Estos factores incluyen la gravedad de la enfermedad, las habilidades sociales y el apoyo, los factores relacionados con la enfermedad, como el cumplimiento del tratamiento y el “insight”, y el apoyo brindado por la institución para facilitar la recuperación y la autosuficiencia.

Los pacientes institucionalizados sufrieron predominantemente de enfermedades psicóticas, fueron detenidos involuntariamente en el hospital al ingreso inicial, mostraron un funcionamiento subóptimo y se les recetaron múltiples medicamentos psicotrópicos. Las calificaciones del personal reflejaron preocupaciones con respecto al cumplimiento de la medicación y los síntomas residuales. La mitad de los pacientes estaban insatisfechos com la sala; todavia, sorprendentemente, no estaban generalmente insatisfechos con los prefesionales y los otros pacientes. La comorbilidad con una segunda enfermedad mental o enfermedad médica se observó en la cohorte examinada.

En pacientes institucionalizados, el modelo de recuperación como filosofía guía puede aumentar la probabilidad de alta. Esto se enfoca en la esperanza y la capacidad de recuperación en presencia de una enfermedad en curso. Los programas de salud mental en las instituciones primero deben reorientar las actitudes del personal hacia el empoderamiento del paciente, proporcionar recursos para la rehabilitación y fomentar la participación y la conexión de la comunidad.

Palabras clave: desinstitucionalización, psicosis, comorbilidad, atmósfera de sala, modelo de recuperación

Abstrato

As instituições psiquiátricas evoluíram na sua forma de funcionar nos últimos 2000 anos. Os serviços modernos de saúde mental mudaram de um modelo institucional para modelos baseados na comunidade. Este estudo procurou avaliar os fatores relacionados com o paciente que podem contribuir para internamentos prolongados. Estas pessoas institucionalizadas diferem de algumas formas das pessoas com doença mental que não foram institucionalizadas e, portanto, é vital abordar estas preocupações no processo de alta. Estes fatores incluem a gravidade da doença, habilidades sociais e apoio, fatores relacionados com a doença, como a adesão ao tratamento e o “insight”, e o apoio fornecido pela instituição para facilitar a recuperação e a autossuficiência.

Os pacientes institucionalizados sofreram predominantemente de doenças psicóticas, foram internados involuntariamente na admissão inicial, apresentaram um funcionamento deficiente e tomaram vários medicamentos psicotrópicos. As avaliações da equipe mostraram preocupações em relação à adesão à medicação e aos sintomas residuais. Apesar de metade dos pacientes revelarem insatisfação com a enfermaria, surpreendentemente, em geral, não estavam insatisfeitos com os profissionais e os outros pacientes.. Comorbilidade com uma segunda doença mental ou doença médica foi observada na coorte examinada.

Em pacientes institucionalizados, o modelo de recuperação, visto como uma filosofia orientadora, pode aumentar a probabilidade de alta. Este modelo foca-se na esperança e na resiliência na presença de doenças em curso. Os programas de saúde mental nas instituições devem primeiro reorientar as atitudes da equipe para o empoderamento do paciente, fornecer recursos para a reabilitação e incentivar o envolvimento e a conexão da comunidade.

Palavras-chave: desinstitucionalização, psicose, comorbidade, atmosfera da ala, modelo de recuperação

Table of Contents

INTRODUCTION

This study titled **Institutionalisation in a Caribbean Country,** was conducted in a psychiatric hospital with long-stay patients. These patients would be considered institutionalised due to the duration of stay in hospital and other practices in keeping with the definition of institutionalisation as conceptualised by Goffman. He proposed that in an institution the residents are isolated from the surrounding community, their lives are structured by the hierarchy of the institution and this occurs in the company of other persons experiencing similar events. Some residents of the Psychiatric Hospital Barbados have been there for decades, and formal studies to determine reasons for ongoing hospitalisation have not been published.

The World Health Organisation Assessment Instruments for Mental-health Systems identifies that Barbados allocates 7% of its health budget to mental health, and reports that 100% of this budget is allocated to the Psychiatric Hospital. With this command of resources, it would be hoped that rehabilitation of persons with severe and chronic illnesses could be included in service provision. Nonetheless there is a cohort of patients who have not been discharged to the community but remain hospitalised for extended periods of time. At the time of this study there were extensive community outpatient medical services for persons with minor or common mental illnesses, and hospital-based services for admission in times of acute relapses, but there were no intermediary services for those require additional support in the community, especially for those with severe mental illnesses. These patients may have some characteristics which should be addressed to prepare them for discharge from hospital and facilitate their integration into community-based settings.

The Psychiatric Hospital Strategic Plan 2015-2020 lists goals including reducing the physical plant, reintegration of long-stay persons into the community and decentralisation of outpatient services. Unfortunately, the shifting political landscape and an economic downturn may prompt rapid downsizing of services and/or implementation of service fees, affecting both hospital and community-based services, both of which are managed by the hospital's budget. Reducing in-patient numbers without a commensurate plan for reintegration into society will only replicate the negative outcomes for deinstitutionalisation seen in other countries.

This study will focus on one of several links necessary for a successful deinstitutionalisation process. Specifically, it will evaluate the current long-stay patients and determine patient factors which are contribute to their long-term hospitalisation.

It is recognised that severity of illness is a likely contributor to ongoing hospitalisation. The study will collect information on primary diagnostic category, functional capacity, medical and psychiatric comorbid diagnoses. Patients will be interviewed to determine the severity of the primary diagnosis and staff will be interviewed regarding observed symptoms of mental illness. Rating scales will be used to collect information on patient views regarding medication and willingness be compliant with treatment. Patients will also be interviewed to determine their opinion on the ward and their quality of life.

The findings will be correlated statistically. It is hoped the results could be used to improve rehabilitative services and influence their release from hospital.

LITERATURE REVIEW

History of mental health treatment

Descriptions on the care of the mentally ill has existed for over 2000 years. Institutions for persons with mental and physical disorders can be found as early as the 6th century BC[1]. Over the centuries they were mainly run by religious orders as "sanctuaries" with an emphasis on custodial care. During the Middle Ages in Europe the mentally ill were often isolated, maltreatment was common, therapy was dehumanizing, invasive and painful. For example, patients were chained "for protection", they were administered emetics and bowels purgatives, venesection (blood-letting), with low salt and restrictive diets.

This treatment has changed dramatically over the last 250years. Philippe Pinel (1793, Paris) published "Traite Medico-Philosophique sur L'alienation mentale", outlining a more humane approach to these patients. William Tuke (late 1700's, England) proposed the establishment of an institution for "milder and more appropriate system of treatment", and established of the York Retreat, with an emphasis on exercise, light work and recreation.

19th century America saw a movement towards Moral Treatment, which referred to open wards, pleasant surroundings, minimal restraints and regular activity. Unfortunately, they evolved into large isolated and regimented facilitates. In the Britain and the United States of America there were the establishment of *psychopathic hospitals* which emphasized short-term observation and treatment (rather than custodial care), and psychiatry became associated with medical schools. The 20th century saw the Biologic Era with the discovery of organic etiologies to some illnesses and as a result the general utilization of

medications as treatment (such as insulin therapy) followed by discovery of specific drugs such as chlorpromazine.

The deinstitutionalisation movement followed, prompted by several overlapping issues. With the discovery of effective treatments for ill persons hospitalisation rates fell, with fewer new admissions and shorter lengths of stay. Concurrent with this, the hospitals had become large and expensive at a time when custodial care was becoming less relevant and cost-cutting measures were politically appealing. Additionally, a burgeoning human rights movement insisted upon civil liberties for all persons. Human rights abuses within institutions again became a focus for attention, and patients and care-givers insisted upon less restrictive alternatives, a move away from a paternalistic medical practice, and more community-based care models. Institutionalization was no longer the acceptable standard for providing care.

The "Total Institution"

The term "total institution" was coined by sociologists to describe the life of persons in settings where residents were isolated from social interaction with the surrounding community, and all aspects of their daily lives occurred within the institution, regulated by the leadership of the institution, and in the company of other similar persons who were experiencing similar events. Goffman[2] described it as a closed system, where even the buildings and location create a barrier to society, and proposed 5 subtypes (including prisons and monasteries), of which mental health facilities were classified as

> “places established to care for persons thought to be at once incapable of looking after themselves and a threat to the community, albeit an unintended one”.

He described a clear divide between those who reside there and have little interaction with the outside community, and those who supervise them and routinely return to society. A total institution contrasts with the social arrangements of general society whereby there is variability in exposures to others and the environment on a frequent basis. This variability promotes an element of self-sufficiency, fosters decision-making skills, allows persons to learn how to adapt to change (both positive and negative), build inter-personal skills and to set personal boundaries between themselves and others. Very few of these characteristics can be honed within total institutions where decisions are made for the patients and the range of experiences were limited.

Although the deinstitutionalisation process was prompted by calls for social justice, rapid deinstitutionalisation, based predominantly on financial reasons, lead to the release of persons from these total institutions who were ill-equipped to reintegrate back into society due to blunting of the necessary social skills while hospitalised. Trans-institutionalisation, the housing of mentally ill persons in non-mental health facilities such as prisons and homeless shelters has been documented but was not the desired outcome [3,4]. This has become an untenable situation in modern times.

Institutions and Human Rights

In mental health facilities a patient's actions are subjected to constant scrutiny, with the risks of punishments and privileges that are artificially determined by those in charge [2]. The total reliance on the institution lead to human rights abuses towards the patients, who had little recourse with the outside world [5]. The United Nations Special Rapporteur on Torture has published on abuse in healthcare settings which can be considered torture or cruel, inhuman or degrading treatment or punishment. Torture is defined as

> "any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such a purpose (…) when such pain and suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity".

Torture therefore includes four elements: (1) inflicted pain and suffering, (2) an intent to produce pain and suffering, (and therefore not an unintended consequence of an action), (3) a purpose for such infliction, and 4) the involvement or acquiescence of State officials. An act falling short of this definition can be considered cruel, inhumane or degrading treatment or punishment. In healthcare settings some of these violations are promoted or protected by policies or justified by their perpetrators as necessary part of behavioural modification, medical necessity or administrative efficiency. Perpetrators may also suggest there is no intent to produce pain and suffering (and therefore not torture), and that restricting these procedures may deny a person's right to health-care. The rapporteur argues that in these cases intent may be implied if the procedure is chosen on the basis of disability, at a minimum negligence can be considered ill-treatment and "conditions that give rise to ill-treatment frequently facilitate torture". The right to good healthcare has

been infringed and may be considered secondary to the right to protection. The State's obligation to prevent torture extends to all state-run facilities, including healthcare agencies. The Rapporteur highlighted 3 guiding principles which are highly relevant to mental health care and institutions, namely legal capacity and informed consent, powerlessness and the doctrine of medical necessity, and stigma.

Human Rights, Stigma and Involuntary Hospitalisation

Institutions which lack of legislative oversight persist for several reasons including the stigma associated with mental illness. Stigma refers to the negative views held by society towards a defined group, usually associated with a lack of knowledge, compounded by prejudiced attitudes and discriminatory behaviour [6,7]. It reduces the sense of worth and dignity and inhibits the stigmatized party's ability to exercise their human rights.

In mental health, stigmatising attitudes can arise from societal beliefs such as persons with mental illnesses are all dangerous, incompetent or unreliable [8,9]. The discrimination faced by persons with mental illness persists worldwide reducing their civil, cultural, political and social rights. This is in contravention to the basic human rights charters to which most countries have been signatories [10].

The Convention on the Rights of Persons with Disabilities (CRPD) [11], adopted by the United Nations General Assembly 2006, is an international treaty that outlines the obligations placed on governments to protect and promote rights of persons with disabilities, including persons with mental and psychosocial impairments. It has been signed by 161 countries to date, including Barbados [12]. It states that

> “Disability results from the interaction between persons with impairments and the attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others”.

These barriers include access to housing, education, social security and employment. Persons with mental health diagnoses are less likely to be employed, may be excluded from educational settings, and have fewer housing options [13,14,15].

Although mental illness is managed in health care settings it is the exception to the standard for voluntary admission and informed consent. Involuntary hospitalisation is linked to involuntary treatment and procedures. The insistence on informed consent originated after World Wars in response to atrocities committed in the name of science. Ethical standards were developed, specifically respect for persons, beneficence and justice.

- Respect for persons: all individuals are autonomous agents, with a right to determine what happens to their body. Vulnerable persons, whose autonomy may be limited due to cognitive capacity or dependent status, deserve protection. Long-stay in-patients are considered a vulnerable population based in their dependence on the institution.
- Beneficence: there is an obligation to secure a persons’ wellbeing, to do no harm, to minimise potential harm and maximise benefit. Some advocacy groups suggest that institutional practices do not adhere to these principles.
- Justice: all persons should be treated equally. Human rights activists assert that those with disabilities are not treated equally with others in the population, including in healthcare settings.

It is unfortunate that healthcare practitioners also show stigma and discrimination towards those with mental illness and complicit in infringements on human rights [16,17,18]. The stigmatising beliefs held by professionals reduces the effectiveness of interventions and care provided [19]. Mental illness increases morbidity and mortality of general medical illness as patients with severe mental illnesses are less likely to have their primary complaints diagnosed accurately, are less likely to be offered comprehensive treatment or invasive procedures, and have poorer outcomes during treatment [20,21,22,23].

When mental health practitioners themselves exhibit stigmatising beliefs, it is even more tragic [25,26]. Studies have demonstrated contrasting views on this topic, including mental health practitioners simultaneously supporting community-based care and involuntary detention, mental health practitioners showing positive attitudes towards treatment but not endorsing the concept of recovery, and being willing to discuss medical aspects to mental illness but less willing to endorse social determinants of health. Although practitioners may endorse the community care models and human rights, they have been shown to have more pessimistic views about patients as individuals, and distance themselves socially. This was most noticeable in younger practitioners and those working in forensic settings [27,28,29,30,31,32]. In a local study examining this topic, staff members endorsed the concept of human rights while simultaneously limiting some of those rights [33]. The right to community care is relevant to this research; staff members who endorse this right will be more likely to be focussed on rehabilitation and discharge planning, while those with more pessimistic views may focus on maintaining patient adaptation to hospitalisation. This is also shown in other rights such as the right to participate in health care, as it is suspected that many of the inpatients are hospitalised involuntarily.

Involuntary hospitalisation has been cited as a form of discrimination under the United Nations Convention on the Rights of Persons with Disabilities (CRPD). The CRPD prohibits involuntary confinement and treatment when the only criteria used to justify hospitalisation is disability. The definition of disability as a social construct rather than a medical definition, makes inclusive societies a human right and placing the responsibility on governments to put measures in place which promote and protect these rights. It contrasts with the views of most medical practitioners, including healthcare practitioners who provide treatment to the mentally ill. Ongoing hospitalisation in such circumstances are likely linked to ongoing symptoms of illness. It may be determined that involuntary hospitalisation may be necessary to provide treatment. Involuntary hospitalisation and treatment contravenes CRPD Article 14.

The CRPD Article 14(1b) states that

> "States parties shall ensure that persons with disabilities, on an equal basis with others, …. are not deprived of their liberty unlawfully or arbitrarily, and that any deprivation of liberty is in conformity with the law, and that the existence of disability shall in no case justify a deprivation of liberty."

The CRPD, although widely ratified worldwide, is not without controversy, especially as it relates to mentally ill persons[73]. In an examination of the application of this convention as it relates to human rights and mental illness Bartlett revealed that conflicting views are especially notable regarding mental capacity, required diagnosis of a mental disability, the need for treatment, ideas of dangerousness to self and others, and provision of the least restrictive environment to provide treatment. It was suggested that an attempt to resolve these overlapping concepts within the current framework may shift the prevailing

legal and medical paradigms from overt discrimination to indirect discrimination. For example, general medical diagnoses do not inevitably lead to detention due to a “need for treatment”, but this has been used as justification for involuntary hospitalisation rather than a specific diagnosis (or disability). However, the end result is the same, and the CRPD insists that discrimination on the basis of disability includes any procedure that has the purpose or effect of limiting human rights and fundamental freedoms. It is recommended that enhanced governance, transparency and clarity in the law is required.

In contrast, Freeman et al[74] suggest that some items in the CRPD are incompatible with others, and “that where some interpretations of the CRPD in fact derogate human rights, governments will not change their laws and practices.” This was in response to General Comment 1 by the Committee on the Rights of Persons with Disabilities, and other directives issued by the Committee, which was vested with the responsibility of interpreting the Convention. General Comment 1 discussed CRPD Article 12, Equal Recognition Before the Law[75], including its relationship to other CRPD Articles. The General Comment (para 40-42) speaks against involuntary detention in institutions and forced treatments. Freeman et al argue that there may be circumstances where cognitive capacity is impaired, at which point legal capacity should be reassessed, and that General Comment 1 presumes an absolute implementation of Article 12, which may paradoxically worsen stigma and infringe on other human rights such as the right to the highest standard of health, right to liberty, right to justice and right to life. These concepts of providing healthcare and preserving life have also come under scrutiny in the courts of law. Specifically, legal rulings in the United Kingdom still have some impact in Barbados, and as a member of the British Commonwealth such rulings have legal weight as a matter of

Common Law[76]. In cases of Savage vs South Essex Partnership NHS Foundation Trust, and Rabone vs Pennine NHS Foundation Trust, the UK courts ruled against medical practitioners in their management of mentally ill persons, especially suicidal persons. In cases where the right to life and the right to liberty are in conflict, these judgements suggest the right to life is paramount, irrespective of competency and its corresponding right to autonomy. In Barbados therefore, any related case brought before the courts may use these rulings as precedent for decisions. The power to overrule them must come from a higher court.

Illness, Social Determinants and Quality of life

Quality of life is inherently subjective and looks at how a person may feel about their current life circumstances. Research has attempted to quantify this in a measurable way. In mental health this is usually done by a combination of expressed feelings about illness, but also measures about the illness itself, along with social factors. There has been debate as to how this should best be evaluated. Measurements of the illness severity are quite standard, most scales using the diagnostic criteria for a specific disorder. For example, Becks Depression Inventory, Hamilton Depression Scale and the Patient Health Questionnaire all essentially ask the same questions regarding depression, albeit in different formats and allowing for rating of severity versus dichotomous answers to determine the presence or absence of depression. This is not the same for quality of life evaluations, which can ask a variety of questions in different formats, with varying emphasis being placed on symptoms severity or beliefs about illness and treatment, versus social factors such as housing, relationships, finance [35]. Although the researcher

may be given an overall numerical value, it does not represent how the person feels about the domains in aggregate, or the emphasis placed on one set of criteria versus another.

Symptom severity and socioeconomic status has been highly correlated in mental health. Two theories, social drift and social causation hypotheses, have been used to suggest explanations for the lower socioeconomic standing of persons with severe mental illnesses. Social drift theory posits that persons with severe mental illnesses such as schizophrenia are unable to optimally function in society and consequently fall to lower social status. Social causation hypothesis suggests that adverse societal stressors predispose to poor mental health, especially the common mental disorders such as depression and anxiety. Whichever theory applies, mental health is undeniably linked to social determinants.

The World Health Organisation defines social determinants of health as[36]

> "the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies and politics."

These determinants are highly relevant in the effective management of mental health. It links genetic predisposing factors with the influence of life experiences, providing opportunities for individual and population wide interventions, including health promotion and prevention [37]. The mentally ill often suffer adversity in the social factors, even in high income countries. It has been shown that an important element is the relative deprivation when comparing the most affluent and least affluent members of society. In high income countries economic inequality has been shown to be linked to mental ill-health, both on

an individual level and community level. Similarly, there are beneficial effects on mental health when employment, education and housing deficiencies are addressed.

Taking these issues in aggregate, improved symptom severity increases the likelihood that persons can utilise available social security and improving quality of life and reducing societal pressures on an individual and community level improves mental well-being. Subjective well-being has been discussed as a method which can contribute to policy decisions [38,39]. However, terms such as quality of life and well-being so far has lacked the kind of evidence which policy makers require, and some do not believe these programs can be funded [40]. Concepts of ill-health, quality of life and well-being may be correlated but are not identical and should not be used as proxy measures for each other.

A local study identified that formal sources of support, including healthcare providers, sometimes address more patient needs than personal and social supports [34]. Attitudes of healthcare providers modifies patient outcomes and may be a crucial factor in determining the likelihood of discharge from chronic setting, and the success of a deinstitutionalisation process. Healthcare providers must also play a role in accessing community-based social supports necessary to enhancing the quality of life of their patients.

Barbados' Mental Health Laws, Policies, Plans and Services

World Health Organisation Assessment Instruments for Mental Health Services (WHO AIMS) 2013 states that almost all countries in the non-Latin America Caribbean have specific mental health laws, usually passed down from the colonial British rule [41,42]. However only 3 countries have updated their laws within this millennium, 7 were updated

between 1960-2000 and 5 countries still had laws predating 1960. The Barbados Mental Health Act, initially passed 1985, was updated in 1998, and a Mental Health Policy passed 2004. A draft policy paper recommending amendments to the Act was submitted to the legislature. The amendments were intended to address mental health services in the community and to bring some portions of the Act in line with the United Nations Convention on the Rights of Persons with Disabilities.

Barbados is a former colony of the British Empire, and like other colonies, the laws which covered the treatment of mentally ill persons were titled the Lunacy Act. Under these laws persons with mental illness were admitted to asylums under voluntary and involuntary provisions. Some elements persist today in the current laws. For example, under the Lunacy Act 1890, persons admitted against their consent to private asylums must have admission papers signed by 2 doctors and a Justice of the Peace. These forms simply stated that the named person was “certified as a lunatic”. There was no time limit to these admissions, and until this law was repealed there were persons housed under this status for decades. This requirement for 3 signatures was maintained in the current Mental Health Act (CAP 45) of Barbados but was changed to 2 doctors and a person who has personal knowledge of the patient (whether as a relative or otherwise). This is one of the 3 forms for involuntary admission, each of which is time limited. Specifically, a person can be admitted by a mental health officer or police officer ranked sergeant or higher for a maximum of 72 hours, remanded from court of law for a maximum of 56 days, or medically recommended by 2 doctors at the request of a person who is familiar with the patient for a maximum of 365 days. Persons could also be admitted voluntarily, under which status there is no time limit.

Currently the Mental Health Act only applies to the country's only mental health institution, simply named the Mental Hospital or Psychiatric Hospital. The Act does not directly apply to the psychiatric services provided in the general hospital nor other facilities that provide mental health care, whether directly or indirectly. The Act was written based on the premises as outlined in the Principles for the Protection of Persons with Mental Illness (MI Principles) which itself does not comply with current recommendations regarding the protection of human rights especially the Convention on the Rights of Persons with Disabilities. The Act outlines the roles of the management of the hospital and includes provisions for the Mental Health Review Board to address complaints.

Health Services Act 2009 briefly mentions services provided outside of hospitals, including provisions for complaints. Regarding community-based services which provide acute care, there is a ward at the general hospital for the mentally ill, but no intermediary services such as day hospitals or crisis centres. The half-way house at the time of this study was under repair, and there were no community based supported employment opportunities. Supported housing opportunities were limited. The determinants of health are an important part of mental health prevention and promotion programs. Improving the lives of persons in the community must not only focus on health spending but other sectors including housing, education, justice system and social welfare, improving continuity of care and access to a range of services, along with integrated services whereby there is reduced redundancy or overlap. Worse, when persons with mental health problems must relate their concerns repeatedly to different agencies it reduces likelihood of maintaining consistency. Even in high resource settings there must be processes in place which seek to focus attention on mental health, and the health of

specific populations, with goals and targets address the identified needs, one of which includes research into the current landscape, along with understanding the needs of the population being served[43]. The National Mental Health Reform Commission is documented to have responsibility for improving mental health services in Barbados and review of existing legislation.

World Health Organisation Assessment Instruments for Mental-health Systems identifies that Barbados allocates 7% of its health budget to mental health, the second highest health services budget compared with other Caribbean countries [44.] Reportedly 100% of this budget is allocated to the Psychiatric Hospital, and this is a similar trend among countries allocating 5% or more of their total health budget to mental health, where these funds are utilised primarily by institutions. Conversely Barbados is listed as 1 of 7 high income countries, 5 of which have no listed budget for a psychiatric facility.

The Psychiatric Hospital Barbados, also known as the Mental Hospital, was opened for its current purpose in 1893 on a former plantation. The original capacity was 400 beds which rose to 700 in the 1940's. Following the invention of chlorpromazine and other psychotropic medication, the treatment of the mentally ill has proceeded along a medical model, with fewer and shorter lengths of stay in hospital. Similar to the processes in other countries there has been a gradual reduction in bed capacity. There are now 500 persons in hospital, of which approximately 400 are long-stay (or chronic) patients. The hospital statistics does not disaggregate these numbers by age, however there are twice as many males as females [45].

As the largest provider of mental health-care the hospital is also responsible for the provision of community-based services. In 1972 the first cohort of community based

psychiatric nurses were allocated to make home visits, and in 1986 a mental health service was piloted in a semi-rural clinic [46]. The successful program has been expanded and now services every state-run primary health care facility. Therefore, although the Psychiatric Hospital consumes 7% of the health budget, and on paper 100% is spent by the hospital, in practice this budget maintains both hospital based and community-based services [47]. In the last year 8902 visits were made by persons seen in the mental health clinics in primary health care as compared to 8357 at the Psychiatric Hospital clinics. These services are not yet comprehensive in nature; they consist only of doctors and nurses who work entirely outside of hospital. Other specialists such as psychologists, occupational therapists and social workers are still based at the hospital compound. Increased training in community nursing has not met with commensurate increase in opportunities to practice in the public sector.

The Psychiatric Hospital Strategic Plan 2015-2020 lists several macroeconomic issues which impact on the ability to achieve the ideals of the Strategic Plan including a change in political priorities regarding health care, changing social and cultural norms related to the care of elderly and mentally ill relatives, and stigma towards those with mental illness. It also sees challenges related to the ongoing institutionalisation of males and the elderly.

Rationale

Barbados is a small country in the eastern Caribbean, with a population of 269 000 [48]. It has a single Psychiatric Hospital. The staff within the hospital are all trained mental health

professionals, and therefore it would be expected that a high level of care can be provided to the patients.

The hospital has outlined its intention to downsize inpatient numbers in its Strategic Plan 2015-2020. It was hoped that this can be achieved by various interlinking processes within the hospital. The Plan does not outline the mechanisms for the deinstitutionalisation process

Unfortunately, the number of long-stay patients has not declined in recent years. Attempts by hospital administration to reduce bed capacity has not reduced the reliance on hospital based acute admissions, and census figures suggest that some of these acute admissions have been converted to a new cohort of long-stay patients, replacing those who have passed away or transferred to less restrictive environments such as the half-way house. It is unclear why the attempts to reduce a reliance on the Psychiatric Hospital would have shown only partial success. The “new” long-stay patients are of particular concern as it would suggest that the current standard of care, which has improved due to training and retraining of staff, is still inadequate to meet their needs. Individual care plans have been promoted as one of several steps in the deinstitutionalization process [49]. This study seeks to develop a first step in the analysis of deficits and barriers to be addressed in preparation of persons for independent living. The needs of the clients should be known, to plan a response on an individual and system wide level [50].

A prior study by this author looking at acutely ill revolving door patients identified that the most frequent needs were illness related factors, rather than social ones, and their recovery was the reason for discharge from hospital [34]. Those who remain in hospital are chronically ill and will be the focus of this study. There may be some barriers to discharge

which have not been examined. Other studies have shown that even persons with complex illnesses can be managed in the community[69], but developing these resources requires a good understanding of the needs and capabilities of long-stay patients, following which the appropriate services can be developed.

Chow and Priebe in a thematic review broke down institutionalization according to 4 factors; building infrastructure, policy and laws, clinical responsibility and clinician-patient relationships, and patient's adaptive behavior in institutions. Although these are distinct themes, they demonstrated overlapping factors, with some studies in their review analyzing more than one theme. This study will look at patient related factors, while future studies can look at staff and ward factors [52]. It is hoped that this study could inform service providers on the unique characteristics of long-stay patients.

AIMS AND OBJECTIVES

Aims

- To examine illness related factors (severity, type, medication compliance) in patients hospitalised for less than ten years
- To examine impact of perceived quality of life in hospital and ward atmosphere

Objectives

- To determine the demographic characteristics such as age, length of stay, admission status (voluntary versus involuntary)
- To determine primary diagnosis and comorbid diagnoses
- To evaluate patient functional capacity
- To record staff observations of symptoms of illness
- To record patient views on the ward atmosphere and quality of life
- To evaluate patient views regarding medication, and staff observations on patient compliance with treatment

METHOD AND MATERIALS

Location

The Psychiatric Hospital, Barbados, was the location for the study. It is the only facility that caters to the long-term care persons with severe mental illness on the island. It provides 24hr care for residents. Wards are dormitory style, with individual rooms used for aggressive behavior; there are no private ward units.

Study population

The research focused on persons who have been hospitalized for over 1year. This study will focus on the clients who have been admitted for less than 10years as the time-frame for “new” long-stay patients.

Sampling procedure

The hospital has separate acute care and chronic care wards. This study focused on clients housed in some of the chronic care wards, of which there were 2 female and 3 general male wards.

Additionally, there were one male and one female ward which housed only persons with severe intellectual disabilities, one male forensic ward and two male wards which housed mainly severely physically ill persons. These wards were not part of the sampling procedure.

On each eligible unit a senior staff member was asked to identify all the persons competent to be included. On the chronic care wards a maximum of 10 persons were

randomly selected to for interview. If fewer than 10 persons were eligible for participation, then all eligible persons were interviewed.

Senior staff were interviewed on some elements of patient care.

Inclusion criteria

All hospitalized persons within the study population over age 18years were eligible for inclusion. There was no upper age limit applied. Persons must be deemed competent to participate in the study. Senior staff members on the ward were requested to determine competency to participate, and an appropriate form was completed. (Appendix)

Exclusion criteria

Persons who had not yet reached their 18th birthday were excluded as they were not legally competent to participate. Persons who were also otherwise lacking capacity to give consent were excluded. Persons hospitalized for forensic reasons were excluded since their admission and discharge criteria fell outside the control of the hospital and medical staff, and therefore not in keeping with the aims of this study. Staff members selected the cohort of patients for interview. Persons who were considered by the staff to be severely ill were not included.

Research instruments

Demographic information was obtained for participants on the selected wards – gender, age, length of hospitalization, current and initial admission status (voluntary, involuntary), diagnoses (psychiatric, medical), medication.

Persons to be interviewed were administered a battery of testing instruments. All patients were administered the Global Assessment of Functioning Scale to evaluation their current functional status. The Global Assessment of Functioning (GAF) was described in the Diagnostic and Statistical Manual of Mental Disorders Fourth edition Text-revised (DSM-IV-TR) which used a multi-axial system to describe patient characteristics. The GAF was the 5th of 5 axes, using a Likert scale of 0-100, subdivided into blocks of 10. It documented the patient's psychological, social and occupational function at the time of interview, with superior functioning rated 91-100 and grossly impairment rated 1-10. Zero rating is only given in cases of inadequate information. The GAF was a revised version of the Global Assessment Scale [53] It was no longer included in DSM 5 edition

Staff were administered the Nurses Observation Scale for Inpatient Evaluation (NOSIE)[54,55]. This evaluation looked in detail at some elements of illness and functioning such as social interest and competence, irritability, psychomotor retardation, psychosis. The detailed list would allow for comparison of problematic behaviours between participants and may identify specific characteristics which the staff consider to be a hindrance to discharge from hospital.

Understanding of illness and voluntary compliance with the treatment regimen maybe one of the considered factors when determining fitness for discharge. Patients were administered the Drug Attitude Inventory 10 (DAI 10) [56,57] and staff members the Clinician Rating Scale (CRS),[58,59].

The ward setting is a vital part of the recovery process. Patients were administered the Good Milieu Index and MANSA Quality of Life scale.

The primary psychiatric diagnosis was recorded and based on this information the relevant evaluation for severity of symptoms will be made. Patients were not administered all scales, only those in keeping with the recorded diagnosis. Scales to be used are Positive and Negative Symptoms Scale (PANSS)[60], Mood Disorders Questionnaire (MDQ)[61], Hamilton Depression Scale (HAM-D)[62], Hamilton Anxiety Scale (HAM-A)[63], Drug Abuse Screening Test 10 (DAST-10)[64] and Brief Michigan Alcoholism Screening Test (MAST) [65,66].

Method

This was a cross-sectional study.

The protocol was submitted to the ethical review boards at the Ministry of Health and the University of the West Indies as required for any research conducted in the hospital.

Patients who were competent to participate are identified by staff members on the ward. The reason for the study was explained and written informed consent will be obtained from each participant. Data was collected in a confidential setting on the ward. The structured questionnaires were administered to each patient by the principal investigator. Information was recorded using a patient identifier which will be a number uniquely coded to each test. No identifying details were stored.

Hospital patient files were used to collect or verify demographic information.

The information was analyzed using the Statistical Package for Social Sciences version 21 (SPSSv21).

RESULTS

Demographic information

The study population of persons admitted less than 10 years consisted of 12 women and 35 men. The sample population consisted of 10 women (35.7%) and 18 men (64.3%) who participated in the interviews.

Length of stay

Length of stay was capped in this study to persons who have been hospitalized 10years or less. 53.6% of respondents were hospitalized less than 3 years, and 92.9% were hospitalized 5 years or less.

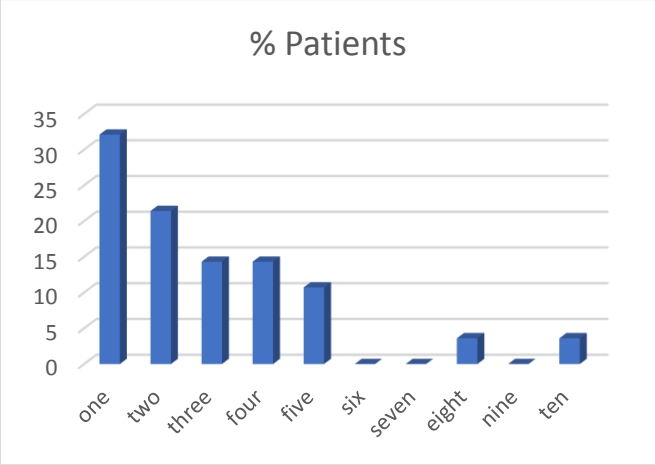


Figure 1 Patient Length of Stay

Psychiatric and medical diagnoses

The primary diagnosis was Psychosis (78.6%) followed by Bipolar disorder (10.7%). Substance dependence was the secondary diagnosis for 21.4%, all of whom were men; half of all patients had no secondary diagnosis. Patients were prescribed range of 1-5 psychotropic medications, with a mean of 3.07 (sd 1.052). There was no statistically significant correlation between gender and number of medication or length of stay in hospital.

Fifty percent of men and seventy percent of women had a comorbid medical illness. The most frequent medical illness was the category Chronic Non-Communicable Diseases (hypertension, diabetes mellitus and hypercholesterolemia), affecting one fifth of both men and women.

Voluntary and involuntary admission status

Involuntary status for admission was the predominant format - only 1 patient (3.6% of the sample) was admitted voluntarily at initial hospitalization while 96.4% was involuntarily detained, but half of all patients had been converted to voluntary status at the time of interview.

	Male N (%)	Female N (%)
Initial Admission Status		
Involuntary	17 (94.4)	10 (100)
Voluntary	1 (5.6)	0 (0)
Current Admission Status		
Involuntary	7 (38.9)	7 (70)
Voluntary	11 (61.1)	3 (30)
Primary Diagnosis		
Psychosis	15(83.3)	7 (70)
Substance Dependence	1 (5.6)	0 (0)
Bipolar disorder	1 (5.6)	2 (20)
Depressive disorder	0 (0)	1 (10)
Other	1 (5.6)	0 (0)
Secondary Diagnosis		
None	8 (44.4)	6 (60)
Psychosis	0 (0)	1 (10)
Substance Dependence	6 (33.3)	0 (0)
Bipolar disorder	1 (5.6)	1 (10)
Depressive disorder	1 (5.6)	0 (0)
Other	2 (11.1)	2 (20)
General Medical Condition		
None	9 (50)	3 (30)
Chronic Non-communicable disease	4 (22.2)	2 (20)
Infection	2 (11.1)	1 (10)
Cardiovascular	0 (0)	1 (10)
Respiratory	2 (11.1)	0 (0)
Gastrointestinal	2 (11.1)	1 (10)
Neurologic	3 (16.6)	0 (0)
Psychotropic Medication		
Typical antipsychotics	16 (88.9)	10 (100)
Atypical Antipsychotics	5 (27.7)	1 (10)
Antiepileptics	4 (22.2)	1 (10)
Lithium	0 (0)	1 (10)
Benzodiazepines	12 (66.6)	7 (70)
Anticholinergic	15 (83.3)	10 (100)
Antidepressant	1 (5.6)	0 (0)

Table 1 Demographic Data

Patient's Functioning

The Global Assessment of Functioning evaluates patient characteristics on a Likert Scale. It gives an overall rating of functional ability and illness severity. The Modal distribution for both scales was 51-60, which demonstrated moderate symptoms and moderate impairment in social, occupational or school functioning (Figure 2).

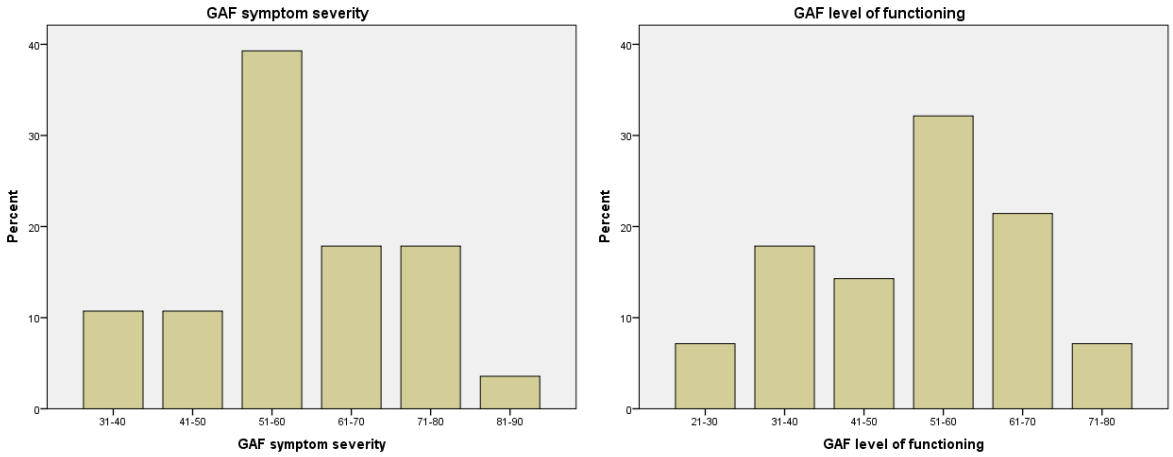
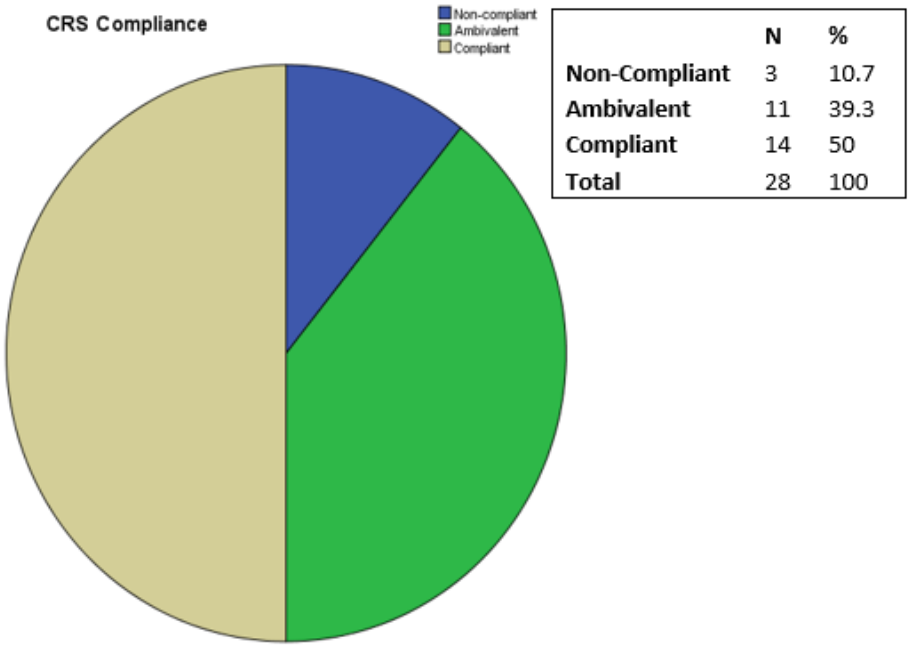


Figure 2 Global Assessment of Functioning

Compliance with treatment

The Clinician Rating Scale (CRS) uses an ordinal scale 1-7 to evaluated patient adherence to therapy. In this study the ratings were clustered for analysis; 1-3 (non-compliant), 4-5 (ambivalent) and 6-7 (compliant). Half of the respondents were compliant with treatment, but half were rated as either non-compliant or ambivalent to treatment (see Figure 3).



	N	%
Non-Compliant	3	10.7
Ambivalent	11	39.3
Compliant	14	50
Total	28	100

Figure 3 Clinician Rating Scale

Attitude towards medication

The Drug Attitude Inventory (DAI-10) evaluates patient views to medication. Only half of patients took medication by choice, or feel that taking medication is normal, and more than half disagreed with the statement that good outweighed the bad elements of medication. When the CRS (staff rating of compliance, shown above) was correlated with DAI (patient views on medication) results approached significance for patients who stated medication made them feel tired and sluggish (0.089) or conversely relaxed (0.087).

	TRUE %	FALSE %
Good outweighs bad	42.9	53.6
Feels strange, "doped up"	25	71.4
Taken by choice	46.4	50
Feel relaxed	57.1	39.3
Feels tired & sluggish	35.7	60.7
Taken only when ill	32.1	64.3
Feels normal	50	46.4
Unnatural to take medication	39.3	57.1
Thoughts are clearer	57.1	39.3
Prevents breakdown	53.6	42.9

Table 2 Drug Attitude Inventory 10

Symptoms of mental illness

The Nurses Observation Scale for Inpatient Evaluation is a 30 item list of various symptoms of mental illness. In other studies the item list loads to the following factors: irritability (Q2,6,10,12,29), manifest psychosis (Q7,20,26,28), personal neatness (Q1,8,16,30), retardation (Q5,22,27), social competence (Q11,25,13,21,24), social interests (Q4,9,15,17,19) and depressed mood (Q3,14,18,23). As shown in Table 3 half the patients did not often show interest in activities, did not try to be friendly, and did not start conversations (as rated as “never” or “sometimes”). Similarly almost half sit unless directed to activities (as rated “usually” and “always”) with a further 17.9% who did this “often”.

When correlated with the Global Assessment of Function there was a statistical correlation with moving slowly ($p=0.009$), being easily upset, sadness ($p=0.001$), messy eating ($p=0.001$), and curiosity about the environment ($p=0.009$).

	Never	Sometimes	Often	Usually	Always	Missing data
Is sloppy	71.4	21.4	0	7.1	0	0
Is impatient	39.3	39.3	14.3	7.1	0	0
Cries	75	10.7	14.3	0	0	0
Shows interest in activities	7.1	46.4	7.1	14.3	25	0
Sits unless directed to activities	32.1	3.6	17.9	3.6	39.3	0
Gets angry/annoyed easily	35.7	42.9	14.3	7.1	0	0
Hears things not there	67.9	17.9	10.7	3.6	0	0
Keeps clothes neat	7.1	35.7	21.4	32.1	0	3.6
Tries to be friendly	21.4	25	14.3	10.7	25	3.6
Becomes upset easily	42.9	32.1	17.9	0	7.1	0
Refuses to do ordinary things	53.6	46.4	0	0	0	0
Is irritable, grouchy	53.6	46.4	0	0	0	0
Has trouble remembering	60.7	35.7	0	0	0	3.6
Refuses to speak	82.1	14.3	3.6	0	0	0
Laughs/smiles appropriately	14.3	10.7	10.7	21.4	42.9	0
Is messy when eating	82.1	3.6	7.1	3.6	3.6	0
Starts conversations	21.4	28.6	3.6	17.9	28.6	0
Says he/she is sad	71.4	25	3.6	0	0	0
Talks about interests	57.1	21.4	3.6	10.7	7.1	0
Sees things not there	82.1	7.1	10.7	0	0	0
Has to be reminded what to do	60.7	32.1	7.1	0	0	0
Sleeps unless directed to activity	57.1	14.3	7.1	3.6	17.9	0
Says he/she is no good	100	0	0	0	0	0
Has to be told follow routines	57.1	39.3	0	0	0	3.6
Has difficulty completing tasks alone	64.3	21.4	3.6	10.7	0	0
Talks/mutters to him/herself	46.4	42.9	3.6	3.6	3.6	0
Is slow moving	53.6	39.3	3.6	3.6	0	0
Giggles/smiles for no reason	60.7	17.9	7.1	14.3	0	0
Quick to fly off handle	60.7	28.6	7.1	0	3.6	0
Keeps him/herself clean	0	7.1	50	42.9	0	0

Table 3 Nurses Observation Scale for Inpatient Evaluation (NOSIE)

The two staff evaluations, Clinician Rating Scale (CRS) and Nurses Observation Scale for Inpatient Evaluation (NOSIE) were correlated via Chi-squared analysis. The CRS

value was positively correlated with patients rated as having a quick temper (p=0.003), has to be reminded of activities (p=0.032), hallucinations (p=0.006), poor memory (p=0.012), neatness (p=0.022), auditory hallucination (p=0.026), interest in activities (p=0.018), and sloppy (p=0.011).

Current admission status was correlated with NOSIE ratings: using Chi squared analysis involuntary status was positively correlated with those who were defiant (p=0.008) and approached significance for those with a quick temper (p=0.073), sadness (p=0.068), mutism (p=0.067) or tearfulness (p=0.063).

Ward atmosphere

The ward atmosphere was assessed with the Good Milieu Index, which asked patients to rate their satisfaction with the ward, its staff and other patients on a Likert scale 1-4. As seen in Table 4 almost half of the patients were dissatisfied or very dissatisfied with the ward, while only 14% expressed dissatisfaction with the staff or other patients.

	Ward %	Staff %	Patients %	Maintain Abilities %	Maintain Confidence %
Very dissatisfied	14.5	0	7.1	17.9	21.4
Somewhat dissatisfied	25	14.3	7.1	21.4	32.1
Somewhat satisfied	39.3	71.4	67.9	32.1	32.1
Very satisfied	21.4	14.3	17.9	32.1	7.1
Missing data	0	0	0	3.6	7.1

Table 4 Good Milieu Index

Quality of Life

The MANSA (Manchester Short Appraisal) records patient views on quality of life along several domains. Some answers are recorded in open-ended format, some presented dichotomous responses (yes/no) and others were rated on a Likert scale with 7options. Over a fifth of respondents were dissatisfied with life, similar numbers rated friendships negatively, a third were not happy with the accommodation nor leisure activities. A third were not happy with family relationships, with a further fifth expressing mixed feelings. Almost three-quarters were satisfied with their health and almost two-thirds were satisfied with their mental health and personal safety. Although some patients had a close friend most did not receive visitors.

Satisfaction with…	The worst	Displeased	Dissatisfied	Mixed	Satisfied	Pleased	The best	Missing data
Life	7.1	7.1	7.1	17.9	10.7	28.6	7.1	14.3
Friendships	3.6	10.7	7.1	17.9	21.4	25	0	14.3
Leisure activities	0	17.9	17.9	3.6	7.1	25	10.7	17.9
Accommodation	10.7	21.4	7.1	14.3	14.3	14.3	3.6	14.3
Personal safety	3.6	0	3.6	14.3	7.1	39.3	17.9	14.3
Family relationships	7.1	21.4	3.6	21.4	10.7	21.4	0	14.3
Health	3.6	3.6	3.6	3.6	10.7	32.1	28.6	14.3
Mental health	0	3.6	3.6	14.3	7.1	46.4	10.7	14.3

Table 5a Quality of Life

	Yes (%)	No (%)	Missing data (%)
Do you have close friend?	46.4	39.3	14.3
Do you receive visitors?	21.4	64.3	14.3

Table 6b Quality of Life

Symptom severity

The Positive and Negative Symptom Scale in Schizophrenia quantifies symptoms on a Likert scale from absent to severe. 22 patients with diagnoses of Psychotic Disorder were administered this test. The most common symptoms rated as moderate or higher were positive symptoms hallucinations (27.2%) and delusions, suspiciousness and hostility (22.7% each), along with the negative symptom of blunted affect (22.7%).

PANSS	Absent	Minimal	Mild	Moderate	Moderately Severe	Severe
Positive scale						
Delusions	36.4	22.7	18.2	9.1	13.6	0
Conceptual disorganisation	36.4	27.3	31.8	4.5	0	0
Hallucinations	27.3	27.3	13.6	13.6	13.6	4.5
Excitement	45.5	18.2	22.7	13.6	0	0
Grandiosity	63.6	18.2	13.6	4.5	0	0
Suspiciousness	50	13.6	13.6	22.7	0	0
Hostility	45.5	13.6	18.2	22.7	0	0
Negative scale						
Blunted affect	54.4	9.1	13.6	18.2	4.5	0
Emotional withdrawal	63.6	9.1	18.2	9.1	0	0
Poor rapport	68.2	18.2	9.1	4.5	0	0
Passive/apathy/social withdrawal	54.4	22.7	13.6	9.1	0	0
Abstract thinking	45.5	9.1	31.8	9.1	4.5	0
Lack of spontaneity	54.4	9.1	27.3	4.5	4.5	0
Stereotyped thinking	54.4	13.6	18.2	4.5	4.5	4.5
General Psychopathology						
Somatic concerns	77.3	4.5	9.1	9.1	0	0
Anxiety	81.8	9.1	9.1	0	0	0
Guilt	90.9	9.1	0	0	0	0
Tension	63.6	13.6	13.6	4.5	4.5	0
Mannerisms/posturing	90.9	9.1	0	0	0	0
Depression	77.3	9.1	9.1	4.5	0	0
Motor retardation	81.8	4.5	4.5	4.5	4.5	0
Uncooperativeness	77.3	4.5	9.1	4.5	4.5	0
Unusual thought content	68.2	13.6	13.6	4.5	0	0
Disorientation	72.7	22.7	4.5	0	0	0
Poor attention	72.7	22.7	4.5	0	0	0
Lack of judgement/insight	50	22.7	13.6	9.1	4.5	0
Disturbance of volition	81.8	9.1	9.1	0	0	0
Poor impulse control	72.7	4.5	22.7	0	0	0
Preoccupation	77.3	9.1	4.5	9.1	0	0
Active social avoidance	86.4	9.1	4.5	0	0	0

Table 7 Positive and Negative Symptom Scale

DISCUSSION

This study sought to evaluate the patient related factors which may be considered when a long-stay patient is to be integrated back into society. These institutionalised persons differ in some ways from persons with mental illness who have not been institutionalised, and therefore it is vital to address these concerns in the discharge process.

Age, gender and length of stay

The long-stay patients in this study ranged in age from 19 to 68. Analysis by Donisi et al[67] showed older age was protective of readmission on initial assessment but this was not maintained after multivariate analysis.

The gender disparity has been notable. The hospital has approximately 400 long-stay beds with approximately 250 males hospitalised in the chronic wards compared to 150 females. A predominance of male patients has been documented in other studies of persons with severe mental illness, and of schizophrenia in particular. This study did not evaluate whether a higher number of admissions suggests more severe illness versus fewer community support mechanisms. Both males and females had similar rating in the Global Assessment of Function in terms of levels of functional impairment and severity of illness. This was likely related to competency to participate in the study. The male wards had a larger population but only a few of the clients were capable of being assessed as they were either severely ill or otherwise unable to participate as determined by the nursing staff.

Length of stay was artificially capped in this study to examine the newly institutionalised. As in many institutions some persons are hospitalised for decades, however the majority of respondents in the study were hospitalised 5 years or less. There is sometimes a concern that persons are unable to be discharged or that the risk of relapse is high. Donisi et al did not demonstrate that length of stay was a consistently significant factor in risk for relapse, but other studies have suggested frequency of admission is a concern. It is therefore important to maximise recovery and maintain hope for discharge irrespective of the prior length of stay.

Involuntary admission and treatment

This study identified that 96.4% of all patients interviewed were initially admitted involuntarily. Some studies of deinstitutionalisation reduced bed capacity at the beginning of the process along with improved community care, but this may not effect a change on involuntary admission rates. An ecological study headed by Keown et al [68] of the NHS system in England showed an increase in non-forensic compulsory admissions, suggesting that improved community care may reduce voluntary but not involuntary hospitalisations. It was also suggested that a lack of social supports may be a contributing factor. Involuntary admissions are not uncommon among those with severe mental illness who require either long-term or rehabilitative placements[69]. Almost all long-stay patients in our study were initially admitted involuntarily, although half were later converted to a voluntary status. The reasons for this conversion of status were not evaluated, but several factors may have played a role. Patients may have truly felt that hospitalisation was the better option, but their decision may have been influenced by non-illness factors such as

lack of financial resources, limited support from family and other caregivers or self-stigma which shows itself as a lack of confidence in the ability to navigate society. In assessing quality of life 39.3% did not have a close friend, 64.3% did not receive visitors, and 32.1% were dissatisfied with family relationships. These elements must be considered when planning for future discharge to reduce the possibility locally of similar findings to Keown et al.

Involuntary admission also implies involuntary treatments rather than informed consent. Only half of patients took medication willingly as rated on the Drug Attitude Inventory. The process of informed consent involves divulging to the patient the risks and benefits of a treatment and allowing that patient to freely choose whether to accept the treatment.

In medical settings it is not acceptable to provide routine medical treatment in the absence of informed consent. However involuntary treatment remains a daily practice worldwide in mental health institutions, where medical paternalism persists, and the standard of decision making is measured against what a physician would deem important. Newer standards in general medical care point to disclosure based on the standard of what a reasonable patient would need to know to make an informed decision[70]. In mental health institutions the best interests of the patient are not determined by the patient themselves, but by the institution. These persons can be considered a vulnerable population due to uneven power dynamics in an institution. Decisions made by the patients, after overview by the institution, can be overturned or subject to coercion and not truly voluntary[71].

It has been determined that forced medical procedures can meet criteria for cruel, inhumane or degrading treatment when there is pain or suffering, including psychological suffering, inflicted in a State-run institution, even if the purpose is believed to be treatment

of a medical condition. Re-evaluation of institutional practices under a lens of the Convention Against Torture intensifies and strengthens the call for justice for vulnerable persons and promotes the understanding that practitioners must be held accountable for their actions. Recommendations by the Special Rapporteur on Torture include prohibition on involuntary treatments in institutions and the community, including forced administration of neuroleptic medication, and revision of laws which permit involuntary hospitalisation[72].

International conventions can supersede domestic legislation, once ratified States Parties are obligated to bring domestic laws into alignment with these conventions. This process varies depending on the legal systems, and in countries with case law such as the United Kingdom and the British Commonwealth, additional steps are required to incorporate these treaties into domestic legislation. Barbados has signed and ratified the CRPD, and the local Mental Health Act is under revision. Change has been a slow process, the revisions to the Act started prior to the CRPD and has been in draft format for several years. The local CRPD implementation committee has made progress in addressing deficits related intellectual and physical disabilities, and so it is hoped that mental health can be placed on the agenda. Although stakeholder meetings were held, there were few consumer advocate groups locally and (almost) none representing the views of those affected by severe and persisting mental illnesses such as psychosis, the disorder shown in this study to be disproportionately hospitalised involuntarily.

Medication & compliance issues

Severe mental illnesses require medication to reduce morbidity and contributes to the ability to function in society[85]. Those who are hesitant to take medication or show little insight into their illness are at increased risk for relapse. Compliance with treatment as rated by staff demonstrated that 10.7% patients were distrustful (CRS 1-3) or 39.3% were ambivalent (CRS 4-5) about medication use, with 50% willing to accept the recommended treatment (CRS 6-7). On the other hand, in the Drug Attitude Inventory (DAI) 50% patients rated a willingness to take medication (DAI #3) and the scale also evaluated positive attributes to medication (DAI # 1,4,7,9,10). Patients consider side effects (DAI # 1,2,5) and beliefs about the necessity of medication (DAI # 6, 8) in their decision-making process. This is not a difficult concept to understand when compared to other chronic illnesses. Medication management, psychoeducation, and collaboration on treatment options are essential in preparing persons to manage their own mental healthcare. Persons discharged from hospital will eventually be expected to take responsibility for their own health, but in an institutional system this would be the exception rather than the rule, and patients are expected to comply with treatment without addressing their views on the subject. In a retrospective evaluation of persons with complex long-term mental health problems Killaspy and Zis identified that poor non-compliance with medication was associated with poor outcome following discharge from rehabilitation services[86].

The first antipsychotic chlorpromazine was discovered in the 1950's, following which a number of dopaminergic drugs came onto the market. Theses first generation drugs were more effective at controlling positive symptoms such as hallucinations and delusions but were less effective at managing negative symptoms such as social withdrawal. Second

generation antipsychotics marketed themselves as being more effective overall with a better side-effect profile. Under patent they were expensive, and not affordable to those with the most severe illness. Trials to compare first and second-generation drugs were commissioned in order to document unbiased research evidence of their claims. The Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE)[87] and the Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study (CUtLASS)[88] were important studies over 10years ago looking at the comparisons between these groups of medication. With the exception of clozapine, one group was not found to me more efficacious than the other[87,88], cost-effectiveness of newer drugs was not proven[89] and quality of life was found to improve with older drugs. Side effect profiles were clearly defined, and this could play as significant a role in drug choice as efficacy. It must be noted that 2nd generation antipsychotic medication carries an increased risk for metabolic syndrome and as such must be taken into consideration in a population already at risk for these disorders, which will be discussed further.

Most persons received a cocktail of drugs, which can be indicative of the severity of their illnesses. Most were prescribed first generation antipsychotics of which some were long-acting depot injections, while 21.4% were prescribed oral second-generation drugs. Patients received combinations of two or more typical antipsychotics, of typical and atypical antipsychotics, and antipsychotics with non-antipsychotic drugs. Antipsychotic polypharmacy is not uncommon in the management of severe mental illnesses, including combinations of typical and atypical drugs, along with augmentation strategies with combinations of non-antipsychotic medication such as mood stabilisers. 89.2% of patients were also receiving anticholinergic drugs and 67.9% received benzodiazepines. There

are risks associated with prolonged use of these agents including memory deficits[51]. The NICE guidelines have not shown any significant improvement in persons receiving more than one antipsychotic medication, with the lone exception of clozapine augmentation. Polypharmacy increases the risk of unwanted effects, both minor and serious, and reduces likelihood of compliance to treatment compared to those on monotherapy in the community. The aims of this study did not include specific drug evaluations, and the use of clozapine was not recorded separately. It would be highly recommended that patient education should include discussions regarding medication, and patient views on this subject be adequately addressed.

Comorbidity and lifespan

Comorbidity was recorded in patients, of whom 50% had a comorbid psychiatric disorder and 64.3% had a comorbid medical disorder. 71.4% of persons were satisfied with their health (MANSA #24) and 64.28% were satisfied with their mental health (MANSA #25). A major local study[90] indicate that the general population is affected with chronic non-communicable diseases such as diabetes mellitus and primary hypertension with 26.4% of adults receiving medication for hypertension and 13.8% for diabetes. There were also high rates of morbidity associated with these diseases; it became politically expedient to focus on chronic non-communicable diseases over the last 5years, with public health interventions and other policy related programs being launched. The population in our study 21.4% were diagnosed with a chronic non-communicable disease. Persons with severe mental illnesses are at increased risk for poorer health outcomes compared to the

general population[91,92,93]. This has been related to poorer health seeking but also less intense and invasive treatments offered to the mentally ill.

The Global Burden of Disease study documents local and international statistics on health-related indices such as life expectancy, mortality rates, years lived with disability (YLD), disability adjusted life years (DALY) and healthy life expectancy (HALE)[94,95]. Worldwide mortality rates for many disorders are decreasing, but YLD is stagnant or increasing due to population growth and aging populations, with the largest absolute increases occurring in the age ranges 40-69years. The largest disease group contributing to non-fatal disease burden in 2016 was mental and substance use disorders (18.7%). The highest YLD's for women included dementias, depressive disorders and anxiety, and for men it included substance use disorders, diabetes mellitus and cardiovascular diseases.

Psychotic disorders were diagnosed in 82.1% of persons interviewed, which is associated with increased morbidity and mortality in community-based populations. The all-cause mortality at all ages is higher in persons with schizophrenia, especially related to circulatory problems, respiratory illness, suicide and injury. In a 10 year retrospective study by Kredenster et al the mortality for persons with schizophrenia was double that of the general population, and among other predisposing factors patients had less favourable socio-economic conditions[96].

All patients in the study were prescribed medication, most commonly first generation antipsychotics, along with benzodiazepines and anticholinergic agents. It has been suggested that first generation drugs contribute to the excess mortality observed due to natural causes[97]. Antipsychotics promote weight gain with prolonged use, including first

and second generation medication, and are independent risk factors for other metabolic illnesses such as impaired glucose tolerance and hypercholesterolemia[98]. CATIE demonstrated that similar efficacy between older and newer antipsychotics, but the time to discontinuation was longer with newer drugs and the side-effect profiles were different.

Several international agencies have collaborated on the management of persons with severe mental illnesses and metabolic syndromes, and to stratify risk[99,100,101]. In 2004 the first consensus statement by the American Diabetes Association et al published their first guidelines on the management of persons receiving antipsychotic medication. It has since been updated and includes annual screening for persons receiving antipsychotics for prediabetes and diabetes, monitoring weight and cholesterol levels, incorporating diabetes management into overall treatment goals, and coordinated management with other medical professionals[102]. The National Institute for Clinical Excellence (NICE) guidelines in the United Kingdom has included “persons with mental health problems” in the list of people at high risk for developing type 2 diabetes mellitus; their management includes intensive lifestyle changing programs and medication to manage glycaemic control. For those who have already experienced weight gain, interventions such as nutritional advice, exercise, and even cognitive-behavioural therapy have been evaluated for their usefulness, both on individual level and group therapy. Research has been conflicted in terms of life-time improvements in outcomes, aggressive interventions aimed at primary prevention has been suggested and a tailored approach to individual weight loss regimens may be necessary to achieve the desired outcomes.

The mood disorders depression and bipolar disorder are also associated with cardio-metabolic diseases. Martin et al[103] evaluated a large population-based sample, analysing

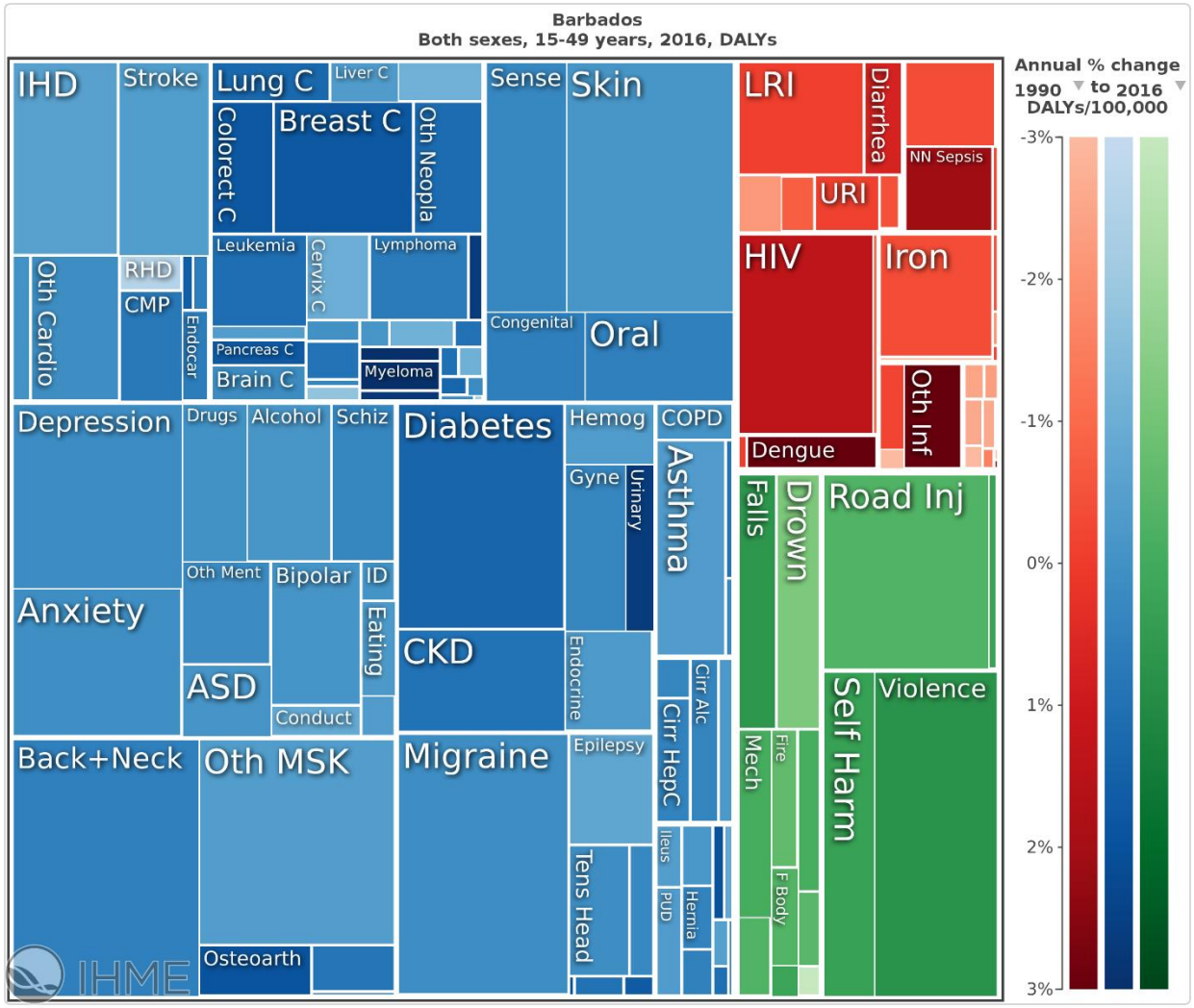
associations between mood disorders and any cardio-metabolic diseases including diabetes, body mass index, hypertension, angina, myocardial infarction and stroke. Associations were found with between mood disorder symptoms and the vascular disorders, but not diabetes. These associations were independent of socioeconomic status and lifestyle factors such as smoking and alcohol use. There were also associations between adverse cardio-metabolic outcomes psychotropic medications, with the size of the associations increasing with the severity of mood disorders (bipolar disorder more than depressive disorders).

Conversely a meta-review summarised that antipsychotic and antidepressant medication may improve mortality in patients who are compliant with treatment. It is likely this is related to better mental health and functioning, which in turn increases the likelihood that persons can manage their overall healthcare[104]. Other interventions which may improve mortality included integrative community care programs, preventative programs and improved medical care, however more data is required. National Institute for Health and Care Excellence (NICE) guidelines include advice on lifestyle modifications but even in high resources settings this has not been consistently used[105]. Although benefits have been shown in short term follow-up, more studies are needed to assess the long-term efficacy.

Persons who are less likely to be compliant with recommendations for long-term chronic illnesses included those who were non-compliant generally, persons distressed about their health and those who demonstrated impaired function in some way[106]. Our study showed 10.7% were not happy with their physical health. Our research did not evaluate

whether best practice guidelines were being used in the management of medical disorders in this population.

Mortality and morbidity have been linked to the social determinants of health. It has been shown that deinstitutionalisation must be linked to social supports and community-based care. Nonetheless even in countries with a high level of social security, where there has been an increased life expectancy for the mentally ill after deinstitutionalisation, there is still a mortality gap between persons with mental illness and the general population likely due to health inequalities and violence[107]. Some persons in this study has shown a history of violent behaviour, and this may be a major contributor to their on-going hospitalisation. Community based services must be equipped to take this into account if discharged long-stay patients are to remain in the community.


Barbados
Both sexes, 15-49 years, 2016, DALYs
IHD
Stroke
Lung C
Liver C
Colorect C
Breast C
Oth Neopla
Sense
Skin
LRI
Diarrhea
NN Sepsis
URI
Leukemia
Cervix C
Lymphoma
HIV
Iron
Oth Cardio
RHD
CMP
Endocar
Congenital
Oral
Pancreas C
Brain C
Myeloma
Oth Inf
Dengue
Depression
Drugs
Alcohol
Schiz
Diabetes
Hemog
COPD
Gyne
Urinary
Asthma
Falls
Drown
Road Inj
Oth Ment
Bipolar
ID
Eating
Anxiety
CKD
Endocrine
Cirr Alc
Cirr HepC
Violence
Self Harm
ASD
Conduct
Epilepsy
Mech
Fire
F Body
Back+Neck
Oth MSK
Migraine
Ileus
PUD
Hernia
Tens Head
Osteoarth
IHME
Annual % change
1990 to 2016
DALYs/100,000
-3%
-2%
-1%
0%
1%
2%
3%

Illness severity and functionality

Diagnostic criteria for the hospital was not collated centrally, and so no comparison can be made regarding the association between diagnostic category and chronicity. Nonetheless, long stay patients overwhelming exhibited severe mental illnesses, namely Psychotic Disorders. Severity was also a factor as they are more likely to have more complex illnesses than acutely ill persons who are eventually discharged. Illness severity plays a role in the ability to function in society, reflected in the ability to navigate the various roles in the workplace, family and educational settings. Global assessment of functioning was on average 51-60. Staff rated severity in areas which are likely to hamper independent living. It must be noted that these are also factors which may dissuade staff from discharging a patient from hospital. Signs of irritability, overt psychosis, poor self-care and psychomotor retardation are interpreted as impaired function, while personal interests and social competence may increase the likelihood for discharge. Poor mental health and the presence of psychiatric comorbidities such as substance use increase the likelihood for adverse outcome after discharge, such as homelessness[77,78] . Clients with complex and persistent symptoms of mental illness will be the most challenging to manage; these factors which led to institutionalisation will demand a disproportionate amount of resources to manage outside of hospital, including emergency health services and social supports.

Neurocognitive deficits have occurred in major mental illnesses[79], especially schizophrenia, but also mood disorders. Cognitive deficits are found in executive functioning along with specific skill sets such as attention span and working memory. More relevant to this study, cognitive deficits impair social and other functioning, with

impairment in executive functioning and verbal skills being highly relevant to several social dimensions[80]. Impairments may begin prior to the disease symptoms and are persistent; they correlate minimally with the severity of positive symptoms, and moderately with negative symptoms, but are present even when symptoms are controlled. The severity and degree of impairment vary with each patient, reflecting on deficits in self-care, social skills, interpersonal relations, etc. First generation antipsychotics are not useful in combatting this problem, and when anticholinergic medication is added for extrapyramidal side effects, cognitive deficits can be exacerbated. Although initial claims that second generation antipsychotics were more likely to address this problem, effect sizes were modest at best, and specific drugs target some tasks better than others but none were globally effective on all tasks[81,82]. Psychosocial improvements were also modest across drug groups. It can be implied therefore that some of the limitations to discharge are not likely to respond only to medication, but psychosocial interventions will be necessary[83].

Ward atmosphere and the recovery model

The ward atmosphere plays a role in maintaining functional abilities or blunting them. Patients reported they were satisfied with the ward, the staff and other patients, they felt the ward helped them to maintaining functional abilities and confidence. It is unfortunate therefore that 57.1% do not perceive that the ward assists their improvement. Long-stay patients can benefit from good quality care in rehabilitative settings. In-patient rehabilitation has been demonstrated to be cost-effective, reducing the length of hospitalisation and promote independent living.

The recovery model promotes the view that recovery is a lifelong process, and mental illness forms only one part of the person's overall life. Recovery itself is a series of steps. A patient may proceed along a trajectory based on the severity of mental and physical illness, provision of good mental health care, including a satisfying relationship with service providers, and acknowledging personal resources and limitations.

In-patient rehabilitation services can be utilised to enhance the possibility of community placement. The REAL study evaluated costs and clinical outcomes of persons with severe illness. Among its findings were the negative association between length of hospitalisation and fitness for discharge; long lengths of stay reduced the likelihood for discharge, hypothesised to be due to more severe illness requiring long hospitalisations. In the context of this study one can also hypothesize that lack of prompt enrolment into a rehabilitative process may impede success, and the institutionalisation process itself dampens social skills as previously discussed. This theory was not supported by the REAL study whereby more involvement in other treatment modalities was also negatively associated with discharge; more severely ill patients who required CBT were less likely to be discharged. A tailored response to the individual may be the best way to improve the odds of successful transition to community care.

Limitations

The study was a small sample size and the expected cohort was not reached. The author chose to focus on a subset of newly hospitalised persons, with the long term aim of providing the necessary data to formulate plans and services to meet their needs. Also it

was hoped that this demographic would be best suited to innovative or additional input to facilitate discharge. As shown in the data, severe illness limited their competency to participate. A different type of study method would be required to evaluate these persons indirectly.

The study was performed in a local setting with resource limitations and the results may not be generalisable. It is hoped that the data can assist local service providers in prioritising the allocation of available resources, and further to expand the services available as they continue to build capacity.

Due to resource limitations it was not possible to make a comparison to persons acutely admitted and fit for discharge. It may also have been useful to compare the current cohort of institutionalised persons with those who had successfully graduated from the Quarter-way House program, a pilot program which aimed to discharge long-stay patients from the hospital. In the absence of community services such as residential programs and supported employment, these clients were enrolled in a 18 month – 2 year program to prepare them for independent living. It has been difficult to replicate those initial successes, and further research may be needed to clarify the reasons.

This study focused mainly on illness and hospital related factors. Other elements such as family support, social support and the efficacy of interventions available were not assessed.

There may have been some biases in the samples selected. Patients were chosen by staff members and deemed competent to participate. It is possible that patients who were

difficult to manage may have been excluded, these persons would likely give different opinions to those who were more cooperative.

RECOMMENDATIONS

Mental health policy and programs

Developing policy and programs can be a lengthy process. The policy outlines the broad priorities and establishes the framework for creating the resources to meet these priorities. In any planning process it is necessary to obtain data on the population to be served, to determine the gaps in service provision, and any culturally relevant requirements of the population to be served. Policy should also be informed by data regarding effective interventions and strategies to target the deficits identified in the data gathered. The evidence base can be local or international, culturally acceptable and relevant to the problem at hand. Interchange of ideas with other regions or countries may be helpful. This can provide technical expertise required. Alternatively, exchanging ideas with other regions currently facing similar challenges may help to clarify the problems at hand.

The ward atmosphere

The recovery model is a useful format for rehabilitation on the ward and in a hospital. This philosophy will influence the day to day processes and activities for patients. It aims to incorporate patient views in their care, empowering them to be integrated into society, respects their wishes and encourages them to participate in remaining well. Patients may need to have educational sessions regarding their illness and medication, along with non-medical interventions such as occupational therapy and psychotherapy.

Physical health concerns are relevant as well, both for patients who are already diagnosed with a medical illness and those who are otherwise well. The general population of Barbados carries a high risk for non-communicable diseases, and primary prevention is highly recommended. This must include those who are mentally ill, as they have a right to good health care in hospital and in society.

It can be argued that persons who have been recipients of long-term hospitalisation may need some “hand-holding” after discharge. This was the thought process behind the creation of a transition unit on the hospital compound which has less nursing supervision that other wards, allowing patients a degree of autonomy in certain aspects without placing responsibility on them for self-sufficiency. This pilot program has successfully transitioned its first cohort of patients from the hospital to the half-way house in the community. The challenge has been duplicating these success in subsequent groups. Balancing the need for intensive support, versus avoiding the translation of similar disempowering dynamics of institutions to the community-based programs may be difficult for patients and staff alike.

One commentary suggested that that full spectrum of mental health care is necessary, rather than a polarised debate regarding community versus hospital-based care. Focusing resources on solely one type of service provision weakens other necessary areas. For persons with the most severe illnesses hospitalisation will likely be necessary, as these persons on will have complex needs and poorer outcomes due to the illness itself.

Cognitive rehabilitation is a time-consuming option but can be implemented in persons hospitalized for extended duration[84]. The main types of cognitive rehabilitation are

remediation and compensatory approaches. Remediation methods stimulate learning tasks with an aim to improve deficits. Compensatory methods avoid areas of deficit and utilize other intact cognitive domains to improve activities of daily living, or alternatively create a supportive external environment to reduce the impact of cognitive deficits. These programs can continue after discharge to optimize likelihood of maintaining community placement. These methods are most effective when paired with other forms of psychosocial rehabilitation such as vocational training or social skills training.

Community based care

Severity of illness affects the needs for care of chronically ill persons. Interventions aimed at improving patient outcomes may not change the overall needs for care for the individual, although over time some needs are met and new ones arise. There has been disagreement as to whether this is a function of good community care (versus hospital-based care) or related to the illness severity itself. Needs for care vary between individuals and among different societies and healthcare infrastructures, therefore it can be argued that these assessments are not generalisable. Generally, populations with limited community services were shown to have a greater need for these services, and the discrepancy was most notable in relation to social care. Healthcare needs occur even in countries with high resources, and illness related factors are expected to be widespread. Planning for services should start with maintaining then improving health care services. Locally services for hospitalisation are present but intermediate services are absent for those who may have transient relapses. This was a factor in an analysis of

repeat admissions to the hospital, where the most frequent needs of the revolving door patients were related to illness rather than social needs.

In an analysis of community placements Lamb argued that community care is inappropriate for some persons who remain difficult to manage, as this can create environments which are dangerous to staff and other patients alike. His cohort of patients were persons with ongoing psychotic symptoms, poor medication compliance, and comorbid substance use. Similar factors were noted in this research; although patients exhibited moderate functioning they still showed some psychotic symptoms, comorbid medical and psychiatric diagnoses, and in males there was substance use. In the small local society, failures in the deinstitutionalisation process can become magnified in the public domain. It undermines the scant public support for these initiatives, confuses those responsible for creating policy, and maintains stigmatising barriers to progress.

Thornicroft and Tansella proposed a balanced care model which stratifies low, medium and high resourced settings, which is a system that incorporates hospital and community-based services. Based on their classification schema Barbados would be considered a medium resource country. Some elements of this level still need to be addressed if the shift from institutions to community-based care is to be successful. In the last 10years there has been a gradual building of capacity regarding trained mental health personnel, mainly doctors and nurses through the public education system, but also persons who sought educational opportunities privately as social workers, psychologists and occupational therapists. Affordable medication in every drug class is available in the public clinics. Ambulatory clinics and some community mental health services are available. The next step would be provision of community-based emergency services,

such as Assertive Community Teams and day hospitals. In the context of a deinstitutionalisation process, these services can provide emergency interventions prior to hospitalisation, reducing the numbers of persons admitted to institutions, and reducing the rehospitalisation rate of those already discharged.

Among those released from institutions, long term residential community care may be required for some persons who have not yet achieved full self-sufficiency, but care must be taken that the same institutionalised mindset is not translated into the community setting. Locally most of the mental health training occurs in conjunction with the institution, and training in community psychiatry occurs as an elective. Additionally the legal framework for managing emergencies in the community is vested with a handful practitioners designated as Mental Health Officers, and within the current Mental Health Act this authority is mainly executed when facilitating readmission of ill persons. An expanded community mental health service must not only look at available personnel but the social and legal framework within which they function. When the only available options in times of illness revolve around hospitalisation, which ideally should be restricted to serious incidents, then mild to moderate relapses suffer a disservice.

Deinstitutionalised persons have improved quality of life and prefer community-based care. Social contacts and personal skills can be improved or consolidated even when clinical illness parameters remain stable. Community integration is a slower process, requiring reciprocation of relationships between discharged persons and society. Persons in the study felt that the ward assisted them in maintaining their skills, but some also recognised that they were more active when living in the community. Maintaining friendships was limited to those in the hospital as well, reflecting the “total institution" as

described in the introduction. Study participants did not reflect good support from relatives while in hospital. There is a local belief that once admitted to the institution the mental ill "belong to" the hospital and are no longer a part of society. Engaging with the wider society reduces likelihood of reinstitutionalisation after discharge.

Social determinants of health

The social determinants of health are defined as the conditions in which people are born, grow, work, live and age, and the wider set of forces affecting these circumstances. Multisectoral approaches will be necessary to fully integrate persons into society. Studies which analysed social characteristics have frequently found lower risks for admission related to higher education, employment and higher socioeconomic status. It can be argued that the ability to attain these ideals are related to illness severity, while persons with early onset severe mental illness are less likely to attain these goals. The World Health Organisation has launched the Health in All Policies (HiAP) initiative, to promote health as part of the Sustainable Development Goals. As it relates to mental health, local advocates can promote inclusion of supported employment and housing policies, maintain the financial support available to those with disabilities, and poverty alleviation schemes. It may also include including mental health in Occupational Health and Safety procedures, anti-stigma campaigns, including mental health advocacy as part of the non-health NGO programs and events.

Vocational and educational opportunities can be enhanced in society. Preparing patients for these opportunities can commence as early as feasible, taking into account patient's

capabilities. For persons discharged therefore financial and social stability could be available to optimise their successful reintegration.

Fostering community and family linkages are also crucial in the reintegration process. Visiting NGO's can mentor and befriend patients as part of their discharge process. The resources are not yet available. It is hoped that future studies will highlight these deficits.

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APPENDICES

PSYCHIATRIC HOSPITAL

TELEPHONES:
HOSPITAL DIRECTOR'S OFFICE (246) 536-3004
PSYCHIATRIC HOSPITAL P.B.X. (246) 536-3001
FAX (246) 536-3107

BLACK ROCK,
ST. MICHAEL,
BARBADOS

REF: 17/PUB

December 12, 2017

Dr. June Price-Humphrey
#340 Ruby Park
ST. PHILIP

Dear Dr. Price-Humphrey,

Request to Conduct Study on Long-Stay Patients

I refer to your request for approval to conduct a study on long-stay patients dated October 15, 2017. Please be advised that approval has been granted to conduct the study at the Psychiatric Hospital.

It is however considered that interviews of one hour's duration may be too lengthy for patients and staff alike. You may therefore wish to consider dividing the interviews into a series of shorter segments. The duration and scheduling of the interviews, for both patients and staff, should be finalised in consultation with Nursing Administration.

We wish you success in the completion of your thesis and look forward to the results and recommendations coming out of the study.

Yours sincerely,

Heather Payne-Drakes
Hospital Director (Ag.)

cc: Senior Consultant Psychiatrist
Principal Nursing Officer

Permission to conduct study from Ethics Board

THE UNIVERSITY OF THE WEST INDIES
FACULTY OF MEDICAL SCIENCES
Formerly The School of Clinical Medicine and Research
Cave Hill Campus *and* **Queen Elizabeth Hospital**
Bridgetown, Barbados

In reply please quote
our reference

Pre-Clinical, Cave Hill Campus:
Tel.: (246) 417-4000/4694/4703 Fax: (246) 438-9170
Clinical, Queen Elizabeth Hospital:
Tel.: (246) 429-5112 or 437-8335 Fax: (246) 429-6738
PBX: (246) 436-6450 Ext: 6229/6239

November 21, 2017

Dr. June Price-Humphrey
c/o Psychiatric Hospital
Black Rock, St. Michael
Barbados

Dear Dr. Price-Humphrey

Re: Mental Health Institutionalisation in a Caribbean Country

I write on behalf of the University of the West Indies-Cave Hill/Barbados Ministry of Health Research Ethics Committee/Institutional Review Board to convey **approval** of your study.

However, please ensure that participants are assessed for competency to consent by a qualified staff member not involved with the study.

Please note that ethical approval does not imply endorsement of your research design.

This approval is for **one year** from the date of this correspondence.

Please remember that you must also secure approval from any individual site or organization, *i.e.*, the relevant ministry, agency, or company, if this is required. Please furnish a copy of this approval.

If you have not already done so, please forward your certificate of completion for ethics training at www.citiprogram.org to kristina.bryant@cavehill.uwi.edu.

All research data and forms must be kept for no less than **five years** after completion of the approved project. The standard process for data security is data encryption. When your research is complete (even if earlier than the approval period ends), please notify the Board in writing to officially close your protocol.

If you anticipate the duration of data collection to exceed one year, please send a letter to the Board at least one month prior to the expiration date. You should indicate why you want the research to remain open (*e.g.*, additional accrual necessary for more robust results, funding from an outside source to continue). Continuation is contingent on Board approval.

Please remember that any changes to the protocol will require the submission of a revised protocol via a complete application to the IRB before implementation of the revision.

You must report any unanticipated adverse event experienced by a research subject within five days to the Chair of the IRB through this letterhead address or via e-mail kristina.bryant@cavehill.uwi.edu.

The Committee wishes you the best of luck in your research endeavors. Please feel free to contact us at any time should you have questions or concerns. I remain,

Yours sincerely,

Dr. Mike Campbell, Chair

CC:
Dr. Thea Scantlebury-Manning, Deputy Chair
Graduate Studies
Ms. Kristina Bryant, Office of Research
IRB File

Information Sheet

Title: Mental Health Institutionalization in a small Caribbean country

You are being invited to take part in a research study. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If you are unable to understand this form please ask questions.

You are being asked to participate because you have been admitted to the psychiatric hospital for more than 1 year. If you agree to participate you will help us to better understand your illness and how this contributes to your hospitalisation.

It is up to you to decide whether to take part. It is completely voluntary.

If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

If you decide to take part you are still free to stop at any time.

Your decision to participate will not affect your discharge or follow-up care.

You will be asked questions from a questionnaire. This process should take 60 minutes. You may take a break during the interview if you become tired.

This process is confidential; your name will not be recorded with this questionnaire.

Thank you for your time.

Dr June Price-Humphrey

Patient Consent Form

Title: Mental Health Institutionalization in a small Caribbean country

I agree to answer some questions about myself.

The reasons for these questions have been explained to me.

I have been given a copy of the information sheet to keep.

I have been told that this information is confidential.

I have been told that I can choose or refuse to take part, and that I may stop at any time.

I have also been told that my decision will not affect my care in hospital,

nor my discharge from hospital.

Name: _____

Signed: _____

Date: _____

Witness: _____

Staff Consent Form

Title: Mental Health Institutionalization in a small Caribbean country

I agree to answer some questions about some patients.

The reasons for these questions have been explained to me.

I have been given a copy of the information sheet to keep.

I have been told that this information is confidential.

I have been told that I can choose or refuse to take part, and that I may stop at any time.

I verify the patients for interview are competent to do so based on the following criteria.

He/she understands it is voluntary.

He/she understands that there is a choice to accept or refuse participation.

He/she believes the information provided.

He/she has communicated his/her choice.

Name: _____

Signed: _____

Date: _____

Witness: _____

Demographic Information

Case # _____ **Date** _____

Gender □Male □Female **Age** _____years

Ethnicity □Black □Caucasian □Indo-Asian □Other

Date of admission _____year _____month **Length of stay** _____years _____months

Admission Status: *Initial* □Involuntary □Voluntary

Current □Involuntary □Voluntary

Diagnoses □Psychosis □Bipolar □Anxiety □ Depression

□Personality disorder □ Substance Dependence

□Other _____

General Medical Illnesses _____

Medication: Psychotropic

□Typical Antipsychotic □Atypical Antipsychotic □Antiepileptic

□SNRI □BZD □Lithium □TCA □SSRI □MAOI

□Anticholinergic □Other_____

Medication: General medical _____

_____

_____