Correlations between clinician and self-rated measures of programme completion and recovery and self-rated quality of life in a National Forensic



Service

Catherine Rock¹, Caroline Synnott¹, Hania Amin¹, Eimear Ni Mhuircheartaigh¹, Harry G Kennedy^{1,2}, Mary Davoren ^{1,2}

¹ National Forensic Mental Health Service, Central Mental Hospital, Dundrum, Dublin, Ireland

² The Dundrum Centre for Forensic Excellence, Trinity College Dublin, Ireland.



Introduction

Inpatient forensic services provide care and treatment to mentally disordered offenders at high, medium and low levels of therapeutic security. These patients typically have very complex needs. Optimising Quality of Life (QOL) for patients in a forensic hospital is an important objective of treatment and there are moral, ethical, clinical and legal reasons for its consideration. The WHOQOL-BREF is a structured questionnaire, developed by the WHO, to measure QOL¹. It is comprised of 26 questions assessing an individual's perceptions of their own health and well-being over the previous two weeks, rated on a Likert scale. It is divided into four domains; physical health, psychological health, social relationships and environmental health. The measure has been extensively validated across multiple cultures and among healthy and non-healthy participants.

For patients admitted to secure forensic hospital settings who have mental health needs and needs in the area of violent offending, as well as other domains, it is vital that they successfully complete therapeutic programmes and interventions. These should be relevant to the reasons they were originally admitted and take place prior to discharge back to the community. If they are not offered and successfully complete such programmes, the chances of recall to secure settings are very high. Discharge prior to making successful therapeutic change in such domains is not in the interests of the patient who may be recalled, the public in terms of potential violence, and the services in terms of bed usage and resource issues. The DUNDRUM-3 programme completion scale and the DUNDRUM-4 recovery scale are validated scales designed to assess a patient's current readiness to move to a less secure setting². These tools rate the successful completion of therapeutic programmes by the patients and rate the patient's overall recovery in a holistic manner, respectively. There are clinician-rated and self-rated versions, which are mirror images of each other. The aim of the self-rated DUNDRUM tool is to support patients self-rating their own progress, by rating their own view of their programme completion and their own view of their recovery across the domains of the tool.

Within the forensic mental health services, there is an emphasis on demonstrating health gains using objectively measured outcomes such as rates of discharge, relapse and reoffending. There is limited research into subjective measures, including patient self-rated measures. Previous research in the area however, has shown that patients' absolute self-rated scores are less accurate predictors of outcomes including conditional discharge. The aim of this study was to ascertain if there were correlations between clinician and self-rated measures of therapeutic programme completion and recovery and the patient's own self-reported QOL in a complete national inpatient forensic cohort.

Methods

This study was conducted at the Central Mental Hospital (CMH), Dublin, Ireland, which is the only secure forensic hospital in the country. The male wards are divided into acute, medium and rehabilitation clusters. There are separate wards for females and patients with intellectual disabilities. A naturalistic, cross-sectional, observational design was used.

The self-rated DUNDRUM-3 programme completion scale and self-rated DUNDRUM-4 recovery scale were offered to all inpatients in the CMH, Dublin. All patients were offered to self-rate their own subjective QOL, using WHOQOL-BREF. Clinician-rated DUNDRUM-3 and DUNDRUM-4 scales were completed for all patients. Ethical approval for this project was granted as part of the Dundrum Forensic Redevelopment Evaluation Study (D-FOREST study).

Results

The self-rated DUNDRUM-3 programme completion, DUNDRUM-4 recovery scale and WHOQOL-BREF were offered to all 96 patients in the hospital. 33 patients completed all three measures. Of these, the mean age was 41 years (SD 8.7, range 22.6-64.9 years). All 10 female patients in the hospital completed the self-rated measures. The most common diagnosis was Schizophrenia (64%), followed by Schizoaffective disorder (14%), Bipolar Affective disorder (6%) and Autistic Spectrum disorder (4%).

Results

Clinician-rated DUNDRUM-3 therapeutic programme completion was significantly inversely correlated with the WHOQOL-BREF social and WHOQOL-BREF environment scales (Table 1).

Neither the WHOQOL-BREF physical, psychological nor environment domains correlated significantly with self-rated DUNDRUM-3 or DUNDRUM-4 scales. The WHOQOL-BREF social domain did correlate significantly with self-rated DUNDRUM-4 scale (-0.319, p=0.039) but not with DUNDRUM-3 (as seen in Table 1). It is also noted that the self-rated DUNDRUM-3 therapeutic programme completion and self-rated DUNDRUM-4 recovery scale did not correlate with any of the self-rated QOL measures.

Table 1. Correlations between WHOQOL-BREF and clinician and self-rated DUNDRUM-3 and DUNDRUM-4 scales. **p<0.001.

n=33	Clinician-rated		Self-rated	
	D-3	D-4	D-3	D-4
WHOQOL Physical	-0.319	-0.174	-0.237	-0.227
WHOQOL Psychological	-0.292	-0.183	-0.102	-0.045
WHOQOL Social	-0.499**	-0.327	0.057	-0.303
WHOQOL Environment	-0.473**	-0.195	0.221	0.179

On an item-to-outcome analysis, we found that DUNDRUM-3 clinician-rated physical health was significantly correlated with the environment domain of WHOQOL-BREF. We found that clinician-rated DUNDRUM-3 mental health was correlated with the WHOQOL-BREF environment scale (-0.463**). Clinician rated DUNDRUM-3 substance scale was correlated with WHOQOL-BREF psychological scale (-0.371*) and WHOQOL-BREF environment (-0.463**). The clinician-rated DUNDRUM-3 offending behaviour item was correlated with WHOQOL-BREF psychological (-0.361*), social relations (-0.552**) and environment(-0.397*). We found that self-rated DUNDRUM-3 physical health was correlated with WHOQOL-BREF physical (-0.339*). Self-rated DUNDRUM-3 mental health was correlated with WHOQOL-BREF social relations (0.509**).

Discussion

Clinicians' views of patients' progress in the domains of programme completion and recovery correlated with aspects of patients' own views of their QOL. These domains included therapeutic rapport and working alliance, insight, stability of mental state, victim sensitivity and public confidence issues. Patients' own views of their progress in these domains were not correlated with their perceived QOL. This is an interesting finding as those patients who the clinicians rated as having made more progress on their therapeutic domains rated their own quality of life better; however patients who self-rated that they considered they had made more progress on their therapeutic domains did not rate their quality of life better.

The DUNDRUM-3 and DUNDRUM-4 are not risk assessments, but are needs assessments. They aim to guide the clinician towards areas that can be targeted with a combination of medication, individual therapy, group therapies and other psychosocial interventions.

In recent years, definitions of recovery within mental health services have focused on the importance of QOL and not necessarily remission from psychiatric symptoms. However, here we found that those patients who had done better across clinician rated treatment domains were those who self-reported better quality of life. In addition, QOL among forensic inpatients has been identified as a positive protective factor in reducing both short and long-term criminal recidivism and therefore, focus on this outcome contributes to public protection.

In conclusion, aspects of WHOQOL-BREF correlated well with clinician-rated DUNDRUM-3 programme completion. Because the self-rated DUNDRUM-3 and DUNDRUM-4 scales did not correlate with any of the WHOQOL-BREF subscales they appear to be measuring independent patient related outcomes. Patients' subjective reports of their own QOL may be linked to their own illness experiences.

References

- 1. World Health Organisation. Development of the World Health Organization WHOQOL-BREF Quality of Life Assessment. Psychological Medicine, 1998; 28(3), 551-558.
- Davoren M, Hennessy S, Conway C, Marrinan S, Gill P, Kennedy HG. Recovery and concordance in a secure forensic psychiatry hospital the self rated DUNDRUM-3 programme completion and DUNDRUM-4 recovery scales. BMC Psychiatry, 2015; 15: 61.

Correspondence: rockc@tcd.ie