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Psychiatric–Medical Comorbidity

The Psychiatric–Medical Comorbidity section will focus on the prevalence and impact of psychiatric disorders in patients with chronic medical illness as well as the prevalence and impact of medical disorders in patients with chronic psychiatric illness.

Chronic disease self-management interventions for adults with serious mental illness: a systematic review of the literature

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ABSTRACT

Objective: While there is strong evidence in support of chronic disease self-management programs, much less is available with regard to individuals living with serious mental illness (SMI). The objectives of this review are to identify and appraise chronic disease self-management studies tested with samples of US adults living with SMI. We include an appraisal of methodological quality of the chronic disease self-management (CDSM) studies that met our final criteria.

Methods: Systematic search methods were utilized to identify intervention studies published before 2012 that describe CDSM outcomes for adults with SMI.

Results: Eighteen unduplicated articles were identified that included outcomes of CDSM studies, while 10 met all inclusion criteria. Favorable treatment effects were observed for adults with SMI across 10 studies that took place in different types of clinical settings. CDSM studies that met all search criteria had a wide range of methodological quality, indicating that this is a nascent field of study.

Conclusions: Given the high chronic disease burden experienced by individuals with SMI combined with our nations health care reform, emphasis on self-management to improve population health, coupled with advancing the quality of research to evaluate CDSM programs for adults with SMI, is critically needed.

1. Introduction

People with serious mental illness (SMI) experience higher rates of chronic care conditions (CCCs) (e.g., cardiovascular disease, diabetes, hypertension) and experience many years of lost life compared to the general population [1–4]. We define SMI as meeting criteria for one *Diagnostic and Statistical Manual of Mental Disorders (DSM), Fourth Edition*/Structured Clinical Interview for DSM disorders (SCID) diagnosis (e.g., schizophrenia, bipolar disorder), other than a substance use disorder, and having serious functional limitations [5]. Poor management of CCCs is a major source of disability and can lead to unnecessary health care expenditures including emergency room use [6,7] and increased mortality [2]. People with SMI are particularly vulnerable to the negative consequences of mismanagement of CCCs resulting from psychiatric symptoms [2,4], unhealthy lifestyles [4], limited access to quality medical care, stigma and discrimination [8]. Successful management of CCCs requires behavioral and lifestyle adjustments to minimize functional limitations and disability.

Chronic disease self-management (CDSM) has emerged as a viable strategy to initiate such changes [9,10] and improve the health of adults with CCCs [11–13]. Drawing from the work of Lorig and Holman [10], we define CDSM as behavioral interventions that alleviate the consequences of CCCs through medical management, maintenance or creation of new meaningful behaviors or life roles and management of emotional reactions to CCCs. CDSM programs systematically facilitate acquisition of lifestyle behaviors that minimize disability resulting from disease and delay the progression of chronic disease [9,10]. These activities can include monitoring one's health, improving medication adherence, changing the way one carries out expected roles and activities, finding and utilizing resources, or otherwise improving self-efficacy in illness management, including working collaboratively with health care providers [9]. CDSM programs can occur singularly or in combination with other health activities, such as nutrition groups or primary care visits, and often occur in collaboration with peer providers [14].

Published reports of CDSM studies conducted with the general population suggest that these programs can have manifold benefits [10], occurring across multiple treatment domains including increased physical activity, improved communication with physicians, decreased fatigue, health distress and health care use [10]. Studies have evaluated the effects of CDSM education on biological and anthropometric outcomes, and there is strong evidence [11] suggesting that such programs can contribute to improvements in HbA1c and systolic blood pressure.

Like CDSM, proponents of the mental health recovery movement have embraced self-management programs, such as illness management and recovery (IMR) [15], to develop skills for managing psychiatric symptoms among people with SMI. Both models evoke

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the themes of consumer empowerment, patients and providers as equal partners, and a goal of wellness through symptom management. An important distinction is that IMR focuses on self-management of psychiatric symptoms, while CDSM programs emphasize self-management of CCCs. Within both types of programs (as well as in usual care), care managers can also be an important source of self-management education. However, in the absence of a self-management curriculum, care management alone does not constitute CDSM.

Table 1
Description of search process and results by database source and parameters.

Source	Search terms	Other parameters	Results[b]
PUBMED	Schizophrenia [MeSH] Bipolar disorder [MeSH:NoExp][a] Depressive Disorder, Major [MeSH] Diabetes Mellitus [MeSH] Hypertension [MeSH] Asthma [MeSH] Cardiovascular diseases [MeSH] Arthritis [MeSH] Chronic Disease [MeSH] Life Style [MeSH] Health Status [MeSH] Risk Reduction Behavior [MeSH] Risk Reduction Behavior [MeSH] Behavior Therapy [MeSH] Health Behavior [MeSH] Health Promotion [MeSH] Self Care [MeSH] Disease Management"[MeSH] Health Education [MeSH]	MeSH MeSH major topics All terms were exploded Unless noted English ONLY	947 articles
PsycINFO	Mental disorder Schizophrenia Bipolar Disorder Major Depression Self Management Self-Efficacy Diabetes Hypertension Asthma Cardiovascular Disorders Arthritis Client Education Intervention	Subject headings All terms were exploded English only Peer-reviewed journals Participants' age ≥18	391 articles
Cochrane Library	Asthma Diabetes Cardiovascular disease Arthritis Major depression Schizophrenia Bipolar Disorder Self-care Self care Self-management Self management	Searched Center of Registered Controlled Trials Searched title, abstract, or keywords	9 articles
CINAHL	Chronic disease, Diabetes type 2 (major Concept; NO EXPLODE AVAILABLE) Hypertension (Explode; Major Concept) Cardiovascular Diseases (Explode; major concept) Asthma (Explode; major concept) Arthritis Self-care Health promotion Wellness Mental Disorders Schizophrenia Bipolar Disorder	All terms exploded or considered "Major Concept" Peer-reviewed journals All adults	150 articles
Journal of Psychiatric Services ; *Schizophrenia Research*; *American Journal of Psychiatry*; *American Journal of Clinical Nursing*; *General Hospital Psychiatry*; *American Journal of Public Health*; *Medical Care*	Chronic disease self-management Physical health intervention Review or systematic review Meta-Analysis Serious mental illness[c]	Key words	5 systematic reviews

[a] Term not exploded to eliminate articles including people with symptoms of mental illness.
[b] Results are not mutually exclusive across all sources. Duplicate articles were found across databases and journals searched.
[c] Term only searched in *Journal of Clinical Nursing* and *American Journal of Public Health*.