ABSTRACT: The wide-ranging benefits of physical activity for consumers with mental illness are acknowledged within the mental health nursing field; however, this is not commonly translated to practice. The primary aim of this paper is to argue that mental health nurses are well positioned to, and should, provide leadership in promoting physical activity to improve the quality of care for people with mental illness. Topics addressed in this paper include the relationship between physical activity and both physical and mental health, the views and experiences of consumers with physical activity, the efficacy of physical activity interventions, the attitudes of nurses to physical activity as a component of care, barriers to a physical activity focus in care for mental illness, and the role of mental health nurses in promoting physical activity. There is a clear and important relationship between physical activity and mental health. Mental health nurses are well positioned to encourage and assist consumers to engage in physical activity, although they might lack the educational preparation to perform this role effectively.

KEY WORDS: barrier, mental health nurse, nursing education, nursing care, physical activity, physical health.

INTRODUCTION

Physical activity, ranging from daily walking to structured exercise regimes, is internationally recognized as a key prevention and health management strategy (U.S. Department of Health and Human Services et al. 1996; World Health Organization 2007). Physical activity is a stated priority in health policy in Australia (Commonwealth of Australia 2006; 2008; 2009) and globally (World Health Organization 2007).

The concept that physical activity is conducive to the health of general populations (Biddle & Mutrie 2001; Sallis & Owen 2000) is now recognized within mental health-care contexts (Faulkner & Biddle 2002a; Wand & Murray 2008). There are identified side-effects associated with a medication approach to care, and physical activity is a clear alternative or adjunct (Wand & Murray 2008). Although the benefits of activity for mental illness prevention and management is long recognized, inclusion at a policy level is relatively recent and yet to be fully incorporated into relevant practice (Wand & Murray 2008).

People with mental illness experience poorer physical health and decreased longevity compared to the general population (Brown 1997; Brown et al. 2010; John et al. 2009; Robson & Gray 2007), partly due to neglect in health-care coordination and provision (Hyland et al. 2003). Lower levels of activity in consumers with mental illness might contribute to lower physical health (Richardson et al. 2005), and represent a major form of institutionally-shaped inequality. Structural factors in neglect of physical health and physical activity include separation of physical and mental health-care services.
(Lawrence et al. 2003), an absence of activity-friendly physical spaces, and lower levels of attention and guidance on physical health matters (Fleischhacker et al. 2008; Vreeland 2007).

Nurses have reported less regular discussion of physical activity levels for those consumers with depression, than for those with physical illnesses, such as diabetes and heart disease (McDowell et al. 1997). There is a need for greater access to physical activity information, opportunities, and professional standards for staff in mental health care (Wand & Murray 2008). The provision of physical activity for people with mental illness is developing, but remains sporadic and fragmented.

Nurses are the largest group of health-care professionals in the Australian health-care system (Australian Institute of Health and Welfare 2010), and can provide impetus in addressing inattention to physical activity in mental health care. In particular, mental health nurses are well placed to support consumers in doing activity and rally support for their participation in this domain. Despite this, physical activity is on the margins for consumers with mental illness and for mental health nursing.

In the current paper, it will be argued that mental health nurses should not only pay more attention to physical activity for consumers, but make it central to their profession practice. Mental health nurses can drive the incorporation of physical activity into daily mental health care, in collaboration with consumers and other members of the multidisciplinary team. Demonstrating why mental health nursing should make physical activity central will clarify several issues on physical activity, consumers with mental illness, and health care, including the role of physical activity in physical and mental health; consumer receptiveness to physical activity; nurse views on consumer activity and their confidence in providing care in this area; and the place of physical activity in mental health nursing policy, education, training, and practice. Barriers to foregrounding physical activity and what mental health nursing as a field can do to improve physical care for consumers with mental illness will be considered.

Physical activity, health, and consumers with mental illness

Physical activity is understood as any bodily movement that results in energy expenditure, while exercise is a component of physical activity that is generally directed at improvements in health- or skill-related physical fitness (Caspersen et al. 1985). Thus, exercise might involve structured and intentional activities, such as running for physical fitness or organized sport participation, while physical activity might additionally include incidental activities associated with occupational or household duties, as well as travel.

Physical activity and well-being: Mechanisms of action

There is a vast body of empirical literature suggesting that physical activity improves overall health in general populations. Regular physical activity reduces the risk of a number of long-term physical illnesses, such as cardiovascular disease, type II diabetes, and some forms of cancer (Haskell et al. 2007). This reduction in long-term illness might be attributed to a multitude of biological and physiological effects that appear to be exerted by participation in regular physical activity. These mechanisms include improved body composition, lipid profiles, glucose homeostasis, insulin sensitivity, autonomic tone, endothelial function, and coronary blood flow, as well as reduced blood pressure, systemic inflammation, and blood coagulation (Warburton et al. 2006).

Biochemical and physiological mechanisms might also explain in part the apparent positive dose–response relationship between mental health status and physical activity (Hamer et al. 2009). Potential biochemical influences include physical activity-induced alterations in the release and/or action of β-endorphins, norepinephrine (noradrenaline), the hypothalamic–pituitary–adrenal axis, atrial natriuretic peptide, dopamine, and serotonin; these biochemical changes might contribute to relaxation, enhanced mood states, or reduced depressive symptoms (Ströhle 2009). Also, physical activity might indirectly stimulate the release of acetylcholine, which has a calming effect (Callaghan 2004). Physiological changes that occur during and after physical activity, such as elevations in body temperature, muscle relaxation, cerebral blood flow, and neurotransmitter efficiency, might play a role in the relationship between physical activity and mental health (Faulkner & Carless 2006). However, improvements in mental health appear to be more strongly linked with physical activity, rather than changes in functional capacity derived from activity (Faulkner & Biddle 1999). This finding lends weight to the argument that the psychosocial effects of engaging in physical activity might be the most important predictors of improvements in mental health.

Psychosocial mechanisms might include increases in self-esteem attributable to skill acquisition, improvements in physical ability or body composition resulting from physical activity, as well as the distracting role of physical activity in diverting participant attention away from stressful stimuli, thoughts, and feelings (Daley 2002;
Paluska & Schwenk 2000). Exposure to physical activity might also reduce anxiety sensitivity (Smits et al. 2008), thereby enabling participants to more effectively cope with subsequent stressful stimuli, and participation in physical activity might represent a behavioural activation therapy, potentially leading to more positive thoughts and moods (Hopko et al. 2003). Additionally, improvements in self-esteem and depressive symptoms might result from increased social interaction, which might act to alleviate feelings of isolation and is a common component of structured physical activity (Craft 2005).

It is evident that the influence of physical activity on overall health remains unclear, but is likely to be a multifactorial process. Particularly for mental health, further research is required to enhance understanding of the ways in which physical activity-induced biochemical, physiological, and psychosocial responses interact to promote potential benefits. Nevertheless, given that mechanisms that might promote a deleterious effect on mental health have not been widely reported in the literature, the urgent integration of physical activity into consumer care would seem to warrant further consideration. However, this does not seem to be forthcoming. This might be partly due to views that consumers are not receptive to or interested in activity, and even if they were so, would not respond to physical activity care and interventions (McCabe & Leas 2008).

Views and experiences of consumers with physical activity

The socializing component of physical activity participation appears to be a commonly identified benefit in qualitative research of consumer attitudes (Carless & Douglas 2008a,b). Consumers also report other positive experiences during physical activity, such as enjoyment, involvement, and achievement (Craft 2007), and patients have described anxiolytic and antidepressive effects lasting up to 2 days’ post-physical activity (Pelham et al. 1993). Furthermore, consumers involved in physical activity interventions recognize it as an important contributor to improvements in overall health, and appear to appreciate a non-pharmaceutical approach to treatment (Craft & Guy 2008; Fogarty & Happell 2005; Ussher et al. 2007). Indeed, patients treated in hospital for major depression ranked physical activity ahead of counselling and pharmacotherapy as the most important component of a comprehensive treatment regimen (Martinsen & Medhus 1989).

Inevitably, consumers report several barriers to physical activity that might be specific to this population. These barriers include lack of motivation, tiredness and illness, weight gain attributable to psychiatric medication, lack of leadership or support from fellow patients or clinicians, low self-efficacy, and cost (Crone & Guy 2008; McDevitt et al. 2006; Ussher et al. 2007). Consumers report that they would exercise more, however, with the support and advice of a professional (Ussher et al. 2007), and also appear to respond positively to interventions that are individually tailored (Fogarty & Happell 2005).

This evidence indicates that those with mental illness have generally positive attitudes to physical activity and its utilization as a treatment strategy, and demonstrate a willingness to undertake physical activity interventions. Some barriers to physical activity might be addressed by assessment, promotion, and support on an individual level from trusted health professionals. This raises the question: what is the evidence for effectiveness of physical activity programmes for consumers with mental illness?

Efficacy of physical activity interventions

A systematic review demonstrated that interventions can result in individuals with mental illness engaging in healthier lifestyle behaviours; however, the quality of randomized, controlled trials examining the potential for consumers to increase physical activity has been generally poor (Bradshaw et al. 2005). Recently, however, a 6-week intervention for patients with serious mental illness reported a significant increase in self-reported moderate exercise for patients attending weekly individually-tailored, health-promotion sessions, while no increase was observed for patients receiving usual treatment (Brown & Chan 2006). Also, a 3-month trial in women with depressive symptoms revealed that participants randomized to a clinic- or home-based exercise intervention increased their self-reported physical activity similarly, although at follow up, physical activity was significantly greater for the clinic-based group when objectively assessed by pedometer (Craft et al. 2007). These intervention studies indicate that individuals with mental illness can achieve significant changes in physical activity behaviours in relatively short periods of time.

Adherence to a treatment strategy for mental illness is an important predictor of the effectiveness of that intervention (Wing et al. 2002), and there is a consensus that adherence to physical activity programmes is not high for those with mental illness (Dunn et al. 2005). In fact, the proportion of consumers who complete a physical activity programme is similar when compared to that observed in general populations (Blumenthal et al. 1999; Brosse et al. 2002; Martinsen 1993; Paluska & Schwenk 2000). Moreover, adherence to physical activity interventions appears similar to adherence to pharmacological treatment strategies (Blumenthal et al. 2007; Dunn et al. 2005;
Stathopoulou et al. 2006). Physical activity adherence is also comparable between group- and individual-based activities, indicating that adherence is not wholly attributable to increased social interaction or supervision (Blumenthal et al. 2007; Craft et al. 2007). Overall, openness to physical activity is evident in consumers as a whole: does this generalize to nurses, and mental health nurses in particular?

Attitudes of nurses to physical activity as a component of care

Research from general practice indicates that high proportions of nursing staff report regular promotion of physical activity to their clients (Burns et al. 2000; McDowell et al. 1997; Ribera et al. 2005). Mental health nurses are positive regarding the potential benefits of physical activity for consumers, and approximately half supported physical activity promotion as a component of their role (Faulkner & Biddle 2002a). Others report enthusiasm for physical activity promotion, and have recognized significant changes in patient health and behaviours following physical activity interventions (Fogarty & Happell 2005; Owens et al. 2010). This evidence suggests that the nursing profession is generally supportive of physical activity as a target for lifestyle modification in clients, and is also willing to adopt the role of promoting activity.

Physical activity: A leadership role for mental health nurses?

Given the level of inequality with respect to physical activity and interest of consumers and nurses in physical activity, what can be done to incorporate physical activity into everyday mental health care? Mental health nurses are particularly well placed to play an important role in making this potential therapy accessible to consumers.

Mental health nurses have the capacity to develop holistic approaches to the health care of those with mental illness (Hogan & Shattell 2007; Jensen et al. 2006b; Saxena et al. 2005; Wand & Murray 2008), and physical activity is an important component of holistic care (Vreeland 2007). Mental health professionals might be also be the ideal candidates for assessing and promoting physical activity in this population, in part because barriers that might be specific to consumers can be more effectively addressed by staff with appropriate training in this field (Richardson et al. 2005). In this context, mental health nurses take pride in securing a holistic approach to care that is recovery focused and that considers the concept of well-being from a consumer point of view (Fisher & Happell 2009; Hewitt 2009; McAllister 2010; Zahourek 2008). Mental health nurses can identify what types of activity align with personal circumstances, link consumers with physical activity referral and community-based opportunities, and provide individual-level guidance without stigmatization (Faulkner & Biddle 2002b; Fogarty & Happell 2005; Wand & Murray 2008).

In the midst of scarce funding and high workload demands, mental health nurses are resourceful in finding sources of help and care. There is growing investment by local and state governments, sporting clubs, and organizations and community groups in providing recreation from casual walking to formal structured exercise. As a group that works with community health-care teams and close communication with consumers, mental health nurses are often well situated to identify physical activity opportunities and experiences that are social, enjoyable, and personally salient for consumers.

The close relationship nurses enjoy with consumers also helps in optimizing risk management issues related to physical activity. Although fitness enhances recovery and rehabilitation, and activity promotes bodily structure strength, thus reducing overall risk of injury, there are risks of injury incidence during activity (Raglin & Moger 1999), and exercise itself might be problematic for people diagnosed with anorexia nervosa (Loumidis & Wells 2001). Mental health nurses, in coordination with the health-care team, can assist in determining when physical activity might not be appropriate or when heightened management is needed.

As a multidisciplinary profession and field, nurses in mental health also appreciate physical activity as generally important and can convey its integrative value. Activity benefits are wide ranging and serve as a consensus point of action across philosophies of care and models of health that are normally in conflict: from an economic perspective (Cobiac et al. 2009), holistic with respect to mind-body (Faulkner & Biddle 2002a), in medical terms essential to primary and secondary prevention (U.S. Department of Health and Human Services et al. 1996), and important to more experiential and social conceptions of health (Crone & Guy 2008; Jensen et al. 2006a).

Barriers to a physical activity focus in mental illness care

Despite the relevance of mental health nursing, consideration of physical activity and its important relationship with mental health has only recently become an obvious issue in mental health nursing through the published literature and conference presentations (Adams 2008; Brimblecombe et al. 2007; Hargate et al. 2008; Leventfeld & Happell 2009). For some time, standards
for mental health nursing have identified the need for increased focus on the physical health of consumers (Gournay & Beadsmoore 1995; Gray et al. 2009; Hardy & Gray 2010).

This lack of attention creates barriers to nurses seeking to support consumers by way of physical activity guidance and promotion. Commonly cited barriers include lack of time and specific training regarding physical activity protocols (Burns et al. 2000; Douglas et al. 2006; McKenna et al. 1998; Ribera et al. 2005), and it is likely that these barriers are common to the mental health discipline. A number of barriers have been identified to incorporating physical health issues into routine clinical practice, such as a lack of knowledge and confidence on the part of health professionals, or the belief that it is not their job (Hyland et al. 2003; McCabe & Leas 2008). In order to effectively implement a therapeutic strategy, mental health professionals must believe they are well trained and competent in its administration (Torrey et al. 2001).

Therefore, a lack of physical activity promotion for consumers might be reflective of insufficient education and training, rather than nurses’ negative or indifferent views of the role of physical activity in mental health. Despite acknowledgement of the importance of physical activity for physical and mental health, no literature could be found describing the inclusion of physical activity in nursing curricula. Even the broader area of health promotion receives little attention in nursing curricula, despite the espoused view that the nursing profession has an important health-promotion role (Whitehead 2003; 2007; 2008).

**Role of mental health nurses in promoting physical activity**

An important starting point is education for people preparing to work as mental health nurses, and training in physical care in primary and secondary care settings for mental health nurses currently in the health workforce. Further education is necessary to improve the understanding of physical activity benefits for mental health among these professionals. Furthermore, increases in competency in the assessment and prescription of physical activity might aid in providing nurses with self-efficacy to more readily and regularly examine physical activity as a therapeutic intervention for consumers. Training programmes for nurses working in mental health need to be developed and implemented to facilitate the capacity of nurses to adopt specific interventions aimed at promoting physical activity for consumers of mental health services.

There are no published accounts describing the extent to which undergraduate nursing education prepares nursing students to consider the importance of physical activity for people with mental illness. However, the literature does describe the underrepresentation of mental health content within curricula (Curtis 2007; Happell 2009; 2010; Henderson et al. 2007; Holmes 2006; McCann et al. 2009; Mental Health Nurse Education Taskforce 2008; Stevens & Dulhunty 1997; Surgenor et al. 2005; Wynaden et al. 2000). Therefore, it would be reasonable to conclude that this topic is not clearly articulated in most undergraduate nursing curricula.

While nursing education and re-organization of care is important, given physical inactivity and mental ill health is a broad issue across society, mental health nurses need to adopt a range of strategies at all levels. Mental health nurses can contribute from macro policy and advocacy to changing daily care practices and cultures, to representation of consumer interests outside the health-care sector. Even with high mental health nurses’ support, physical activity promotion and actual increases in activity and health are contingent on numerous factors: cultural, social, geographic, and economic (Baum 2008; Boone-Heinonen et al. 2010; Cerin & Leslie 2008; Pampel et al. 2010; Stahl et al. 2001; Van Dyck et al. 2010); ultimately a cross-sector, coordinated, and synthesizing approach is the best way to optimize activity levels and health (Bull et al. 2004; Commonwealth of Australia 2009). Mental health nurses can serve the critical function of ensuring promotion of physical activity also reaches consumers with mental illness.

**CONCLUSIONS**

Physical activity is widely recognized as an important behavioural means of risk prevention and illness management, or alternatively, recovery and the realization of well-being. However, people with mental illness exhibit lower activity levels than the general population, and the emphasis on physical activity in general is not reflected in mental health nurses’ research, practice, or mental health care. The low attention to physical activity in mental health nursing is due to a range of factors, including questionable views on consumer and nurse orientations to physical activity as a form of care and well-being.

This paper integrated evidence of the potential for physical activity to reverse inequalities in physical health for people with mental illness, as well as serve as a direct therapeutic form of care. This is encouraging, but considerable progress in research and practice is required. Pathways for concentrating mental health nurses’ contributions to activity-focused care were proposed and discussed.

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Mental health nursing can provide strong leadership in placing physical activity in everyday mental health care for consumers with mental illness. Views that people with mental illness and mental health nurses are not receptive or interested on the whole in physical activity, and that the efficacy of physical activity programmes are unclear are not strong grounds for the current neglect of physical activity in mental health care. Nurses can advance physical activity care for consumers across various levels and in close collaboration with a wide range of partners, including consumers. Mental health nurses can provide direction in understanding physical activity in this consumer group on the evidence-based research front, and mainstream physical activity in mental health care. Physical activity for consumers might represent an integrative form of care rather than an ‘add on’ to a host of services, and ultimately be an integral part of mental health nursing identity.

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