



City Research Online

City, University of London Institutional Repository

Citation: Cullen, C. & McCann, E. (2015). Exploring the role of physical activity for people diagnosed with serious mental illness in Ireland. *Journal of Psychiatric and Mental Health Nursing*, 22(1), pp. 58-64. doi: 10.1111/jpm.12179

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: <https://city-test.eprints-hosting.org/id/eprint/27914/>

Link to published version: <https://doi.org/10.1111/jpm.12179>

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Exploring the role of physical activity for people diagnosed with serious mental illness in Ireland

Caroline Cullen MSc RPN BSc

School of Nursing and Midwifery, University of Dublin, Trinity College, Dublin, Ireland

Edward McCann PhD MSc MA RPN FHEA

Lecturer, School of Nursing and Midwifery, University of Dublin, Trinity College, Dublin, Ireland

Correspondence:

Caroline Cullen

5 New Park Road,

Blackrock

Co. Dublin

e-mail: cullence@tcd.ie

Exploring the role of physical activity for people diagnosed with serious mental illness in Ireland

Accessible Summary

- The aim of the study was to elicit the views and opinions of people diagnosed with serious mental illness in relation to physical activity.
- Ten people who were attending a community mental health centre participated in semi-structured interviews.
- The main results showed that participants found physical activity beneficial in terms of psychological and social well-being and perceived clear gains in relation to recovery and quality of life.
- Physical activity should be routinely included in plans of care.
- Mental health policy guidelines globally should contain physical activity as a key component.

Abstract

The aim of the current study was to explore the subjective experiences of people diagnosed with serious mental illness (SMI) in relation to physical activity. The study was conducted using a qualitative exploratory descriptive approach. The participants (n=10), who were out-patients attending a day centre, were interviewed to elicit their views and opinions about physical activity. The data was thematically analysed using a recognised framework. The main themes that emerged included physical activity as a meaningful activity, physical activity as a mental activity, quality of life and recovery, and perceived challenges to physical activity. The unique perspectives of service users provides fresh insights on the topic and

the findings support the justification for the inclusion of physical activity in plans of care and to be contained in global mental health policy directives.

Keywords: Exercise, physical activity, schizophrenia, recovery, quality of life

Introduction

Research studies have shown that exercise has positive outcomes in mental illnesses such as depression and anxiety (Morrissey 1997, Biddle & Mutrie, 2001). More recent international literature suggests that physical activity may be useful in severe and persistent mental illness such as schizophrenia (Fogarty & Happell 2005, Ellis *et al.* 2007, Gorczynski & Faulkner 2011, Vancampfort 2012). A number of studies have shown that people diagnosed with serious mental illness (SMI) are less physically fit, have higher mortality rates and increased health problems, such as obesity, diabetes, coronary heart disease and respiratory disease (Brown *et al.* 1999, De Hert *et al.* 2011). There is increased recognition of the benefits of physical activity in psychological and social well-being and the need to address mental health as an integral part of improving overall health and well-being (Fox 1999, Priest 2007, Holley *et al.* 2011). However, there remains a disparate use of physical activity within care plans for service users (Crone & Guy 2008, Owens *et al.* 2010). Consequently, the psychosocial aspects remain neglected in the provision of holistic care for people diagnosed with mental health problems (Callaghan 2004, Faulkner 2005). Some studies suggest that physical activity may have a role in recovery and quality of life for people with SMI (Acil *et al.* 2008, Carless & Douglas 2008a). However, barriers may exist related to the impact of the condition, side effects of medication, lack of social support and stigma (Johnstone *et al.* 2009). Relevant studies also demonstrated a pivotal role for nurses and other practitioners in promoting exercise and physical activity within mental health settings (Crone 2007, Happell *et al.* 2012). The current study aims to contribute to the discourse, illuminate issues that are

important to people diagnosed with SMI and to inform future mental health practice and policy initiatives.

Methods

Aim and objectives

The aim of the study was to explore the role of physical activity for people in Ireland who experience serious mental illness (SMI). The objectives were to:

- Explore participants' experiences of physical activity in relation to SMI
- Identify the role of physical activity in terms of quality of life and recovery
- Highlight challenges to physical activity in relation to SMI
- Make recommendations in terms of mental health nursing practice, education and research.

Design

The study was an exploratory qualitative descriptive design. The participants (n=10) were outpatients attending a day centre. Data were collected using semi-structured interviews that were coded and analysed using a recognised framework (Newell & Burnard 2011).

Recruitment and interviews

A Clinical Nurse Manager agreed to act as gatekeeper whose role was to distribute the information pack to potential participants. The information pack contained participant information leaflet, letter of invitation to the study, letter of expression of interest and consent form. This pack was distributed to those participants who met the inclusion criteria. Ten people eventually agreed to take part in the study. The authors developed a semi-structured interview schedule that addressed the objectives of the study. The schedule was piloted and alterations made such as making questions more clear, unambiguous and open-ended. The

interviews were conducted in a room in a quiet area to avoid distraction and to ensure ethical considerations were upheld. All interviews were tape recorded and lasted between 20-40 minutes. The data were collected over a three-month period.

Inclusion criteria and sampling

People could participate in the study if they were over 18 years of age, had received a diagnosis of schizophrenia, schizo-affective disorder or bi-polar disorder as outlined within the Diagnostic and Statistical Manual for Mental Disorders (DSM IV-TR) (American Psychiatric Association 2000) and provided consent. Purposive sampling was used as this allowed the selection of participants who represented the population (Haber 2010).

Ethical considerations

Ethical approval to conduct the study was granted by the relevant Research Ethics Committees. Interview participants were also informed of their right to stop the interview at any time without consequence. A list of national mental health organisations and help lines were also provided to each participant in case they wished to speak to anyone further. All participants signed an informed consent form. All study files, including audio recordings, transcripts and field notes were stored in accordance with the Data Protection (Amendment) Act 2003 (Government of Ireland 2003).

Participant profiles

The majority of participants (90%) were Irish. The mean age of participants was 44 years. All of the participants were under 65 years of age and there was an even distribution in the 18-64 year age brackets (Table 1).

*****Table 1 here *******

STUDY RESULTS

The interview data were transcribed verbatim. Transcripts were reviewed and any identifying information removed. The data were coded and categorised (Newell & Burnard 2011). The data were further examined for meaning and similar themes combined. The study findings contributed to the development of a conceptual framework (Figure 1). Each of the emergent themes are presented and discussed in turn. Furthermore, the codes used in each quotation relate to participant number, gender identification and age.

*****Figure 1 here*****

Physical activity as a meaningful activity

The majority of participants identified physical activity as being enjoyable and a fun activity. All participants who took part in the study found benefits in physical and mental health. Within this theme, sub themes emerged, participants reported that endorphins and ‘the feel good factor’ when undertaking physical activity gave them a sense of well being and positive self-image. For many participants physical activity was a meaningful activity beyond diagnosis and provided a way of getting back into a daily routine which appeared to assist their recovery:

You feel part of something, because you are doing stuff, if you are putting spoons into bags that kind of occupational therapy wouldn't help me, if anything that would make me worse. Physical activity would be far better than some occupational therapy or anything like that. I know people say it's great and everything, I completely disagree, then again people have different ideas about these things - Yes physical activity as opposed to busy work. (P1, M40).

Similarly, other participants found physical activity kept them occupied and expressed feelings of positivity about exercising:

I enjoy it, I like doing it – physical activity gets me out. (P3, M60).

All participants discussed present and past experiences of exercise and physical activity. The majority reported positive experiences, identifying exercise as an enjoyable activity. One participant had a negative experience at school and felt it was more of a ‘chore’ and voiced:

Well it depends on who would be teaching you too.... if you were a little bit on the plump side they would say you need it more than the others and this kind of thing, sometimes that can be a put down as well. (P4, F59).

Endorphins, ‘the feel good factor’ and well-being

Endorphins and ‘the feel good factor’ were reported by participants to be an important feature in being physically active as exercising was beneficial for physical and mental well-being.

It does help your well-being it takes you out of living in your mind. (P1, M40).

Physical activity is real important, the endorphins, I used to jog every morning for an hour, you feel so much better after it and you know it was great – it helps mentally and physically.....you are meeting people and you have great fun. (P2, M36).

Similarly, participants voiced that taking part in physical activity was also important as it offered structure and routine to their daily life:

I think the exercise makes you feel stronger, you eat healthier, you see your physical health improving and that helps your mental health improve. (P8, F28).

Physical activity and positive self image

Interestingly, one participant commented on how she used to attend aerobic classes prior to becoming ill and voiced the benefits of physical activity in relation to positive self-esteem and body image:

I was great then doing the aerobics it was so good it made me so energetic..... I had high self esteem then because, I had a good figure and my legs were stronger. (P10, F55).

Some participants reported that physical activity was helping them to move on in life and identified choosing to exercise was their choice and that made them feel empowered. Participating in physical activity was seen as being important in improving physical health, assisting in weight reduction and becoming physically fit. In asking participants what physical activity meant to them, a number of participants associated the benefits of physical activity with physical health and weight loss. One participant had been overweight and inactive and identified the importance of being part of a physical activity programme:

I know it's a good thing. I need to get that weight off cause I don't want to get diabetes.... They said I have got all the risk factors, being 40, smoking fags, and overweight. (P1, M40).

Physical activity as a mental activity

Some participants acknowledged that physical activity assisted in keeping the mind active occupied, having benefits in alleviating symptoms of their illness. The role of physical activity was also reported to add structure and routine to daily life, assisted with motivation, which helped with daily activities such as housework and going to the shops. Participants voiced having more energy and were more motivated as a result of exercising.

Distraction

The majority of participants acknowledged the benefits of physical activity as a distraction from mental health issues. Other participants reflected how physical activity assisted in getting them out of the house and this was a good way to keep their mind occupied from negative thoughts. This appeared to assist with socialising and integrating with other people:

Physical activity keeps your mind active - getting out and having something to do, somewhere to go adds structure and routine to the day. It distracts you. (P7, M53).

Furthermore two participants commented on how physical activity was a useful distraction in dealing with ‘voices.’

Expanding social networks

The majority of participants found physical activity helped with social interaction, as exercising as part of a group and walking with people made participants feel included, which assisted with building new friendships and giving them a feeling of connectivity. Walking, aerobic exercise, gym work and gardening were the most common forms of activities used by participants. All participants identified walking as an enjoyable and social activity. In

addition one participant found walking a useful activity whilst in hospital and also highlighted the importance of structured activity. The importance of feeling socially connected and ‘felt part of something.’ Some people said that going with friends to the gym or meeting friends there made it easier to participate in exercise. Moreover, participants remarked on how this assisted with their daily life thus enhancing their quality of life.

Quality of life and recovery

The majority of participants agreed that physical activity had a role in daily life. Participants reported being ‘part of something’ and being involved in a programme added to ‘a sense of achievement’ and of feeling empowered:

Quality of life, yes I would think physical activity could prove to be a distraction, a distraction is a good thing..... you’re not kind a living your whole life in your head. You do need a little bit of distraction as good quality of life is staying out of hospital. (P1, M40).

Being part of an activity programme improves your quality of life, physically and mentally, it opens up pathways, you feel better about yourself, and you’re sharper mentally. (P2, M36).

Structure and routine

Many participants reported having structured exercise programmes which were supervised at the day centre, this encouraged adherence to exercise programmes, hence enhancing structure and routine as part of their daily life:

I think it might be an important part of treatment as I said it gets you outside your head for a while and that can't be a bad thing It's not going to do you any harm. (P1, M40).

You feel part of something it is part of your life, it's actually living, not existing, its enjoyment. (P4, F59).

Part of treatment

The majority of participants felt that physical activity along with the support of their mental health team had a role as part of their treatment plan. Furthermore, in staying well physically and mentally, participants saw a role for physical activity as part of their recovery. Participants identified that physical activity had a role in daily life, which enhanced their quality of life and perceived this as useful in their own recovery. In addition participants found that regular physical activity such as walking and structured exercise programmes, aerobic classes and gym work such as weights and exercise bikes improved their daily life. The majority of participants found this alleviated symptoms of their illness which improved their quality of life. In addition this assisted participants' in day to day life. Some participants report that exercise aided distraction from their illness:

Physical activity enhances your enjoyment in life you feel part of something and you know that your important. (P7, M53).

Perceived challenges to physical activity

Participants reported the importance of trained gym instructors and nursing staff to support them in participating in physical activities:

Support and encouragement is a huge factor in me being physically active and if I didn't have supportive nursing staff that could be a barrier. (P2, M36).

One participant voiced that not having a familiar and safe environment to exercise was a barrier, as exercising outside caused him anxiety and fear:

I would feel very worried about going out – I just have to force myself out..... coming to the centre helps, as I know it is a familiar place and staff. (P7, M53).

Others voiced the side effects of medication, such as feeling sleepy, stiff muscles, lack of motivation, poor fitness levels as challenges to participating in exercise. Three participants reported being involved in exercise prior to becoming unwell, and they felt their illness was a barrier in participating in activities. Money was identified by two participants as barriers in participating in other social/sporting activities. The majority of participants identified lack of motivation, not being fit and being overweight as barriers to participating in physical activity. Another voiced pre-existing injuries a factor in taking up and maintaining physical activity.

Discussion and conclusion

Existing studies tend to elicit the views of nurses in relation to the physical activity of service users (Happell et al. 2012). However, the current study has captured the unique views and opinions of service users and provides fresh insights into individual experiences. This study demonstrates the important role physical activity plays in the lives of people with SMI and supports the view that people with SMI can make improvements in their physical and mental health by participating in regular exercise (Gorczynski & Faulkner 2011). Furthermore, the

study shows the significance of physical activity in the role of recovery, in finding a sense of identity, returning to a meaningful life, achieving success, and taking control (Crone 2007, Carless 2008, Carless & Douglas 2008b). The key findings of the study demonstrated physical activity to be a purposeful and enriching activity for people living with SMI. Participating in regular physical activity provided benefits for participants in terms of physical and mental health including social inclusion and engagement, which can enhance quality of life and recovery. Findings suggest physical activity does have a role in treatments and plans of care. Perceived challenges were highlighted by participants and included the use of trained instructors and supportive staff to implement exercise programmes.

Strengths and limitations

No studies exist in Ireland that explores physical activity in relation to SMI. The current study highlighted peoples' needs and experiences in relation to the topic and allowed people to express their views and opinions thus augmenting the evidence base in terms of nursing practice. However, some limitations are recognised. The sample size is relatively small and future studies would benefit from the use of mixed methods that obtained data from surveys as well as interviews. There is a clear need for longitudinal and well designed intervention studies (Bradshaw et al. 2010, Vancampfort *et al.* 2012).

Implications for nursing practice

Mental health nurses are well placed to influence and promote the role of physical activity and should incorporate this into care plans (Faulkner & Biddle 2002, Crone 2007, Happell *et al.* 2012). Policies should support the implementation of training and educational initiatives for nurses, trained instructors and the multidisciplinary team (Marzolini 2009, Gorczynski & Faulkner 2011). The significance of further skills training for nurses with regard to the

physical health needs of people with SMI is warranted and should be built into training programmes (Howard & Gamble 2011). Effective partnerships between mental health services and the community are vital in developing physical activity for the person's well-being (Owens *et al.* 2010). People with serious mental illness have higher rates of physical inactivity, poor physical health, obesity and diabetes (De Hert *et al.* 2011). Therefore, it is essential that people should be screened and medical clearance given prior to commencing any physical activity programme (Beebe *et al.* 2005) and this should be included in policy guidelines. In addition, exercise is cost effective, carries no side effects and has the potential to contribute positively in terms of recovery and rehabilitation in SMI (Daley 2002). This study supports the view that physical activity has a role in recovery, in finding a sense of identity, returning to a meaningful life, achieving success, and taking control (Carless 2008, Hodgson *et al.* 2011). Moreover, the incorporation of physical activity programmes as part of treatment in improving physical and mental health is beneficial for people with SMI in enhancing quality of life (Carless & Douglas 2008a). The importance of support in socialisation for people with SMI is highlighted and was a finding of this current study. This was consistent with existing studies (Carless & Douglas 2008c, Sheridan *et al.* 2012). Existing government directives highlight the importance of identifying the physical health needs of people living with SMI such as schizophrenia (NICE 2009a, 2009b). In Ireland, the key policy for mental health *Vision for Change* highlights the importance of change in mental health services in providing a person centred approach and recovery orientated service (Department of Health and Children 2006). Therefore modern mental health services that are recovery orientated, holistic and responsive to the needs and requirements of clients will encourage the inclusion of physical activity as an essential and fundamental component of care.

ACKNOWLEDGEMENTS

The authors would like to thank all of the people who kindly took part in this study.

REFERENCES

Acil A.A., Dogan S., Dogan O. (2008) The effects of physical exercises to mental state and quality of life in patients with schizophrenia. *Journal of Psychiatric and Mental Health Nursing* **15**, 808-815.

American Psychiatric Association (2000) *Diagnostic and statistical manual of mental disorders*. 4th edn. (Text revision DSM- IV-TR). American Psychiatric Association, Washington D.C.

Beebe L. H., Tian L., Morris N., Goodwin A., Swant Allen S., & Kuldau, J. (2005) Effects of exercise on mental and physical parameters of persons with schizophrenia. *Issues in Mental Health Nursing* **26**, 661-676.

Biddle S.J.H. & Mutrie N (2001) *Psychology of Physical Activity Determinants, Well-Being and Interventions*. Routledge, London.

Bradshaw, T., Lovell, K & Campbell, M. (2010) The development and evaluation of a complex health education intervention for adults with a diagnosis of schizophrenia. *Journal of Psychiatric and Mental Health Nursing* **17**, 473-486.

Brown S., Birtwistle J., Roe L. & Thompson C. (1999) The unhealthy lifestyle of people with schizophrenia. *Psychological Medicine* **29**, 697-701.

Callaghan P. (2004) Exercise: a neglected intervention in mental health care? *Journal of Psychiatric and Mental Health Nursing* **11**, 476-483.

Carless D. (2008) Narrative, identity, and recovery from serious mental illness: A life history of a runner. *Qualitative Research in Psychology* **5**, 233-248

Carless D. & Douglas K. (2008a) Narrative, identity and mental health: How men with serious mental illness re-story their lives through sport and exercise. *Psychology of Sport and Exercise* **9**, 576-594.

Carless D. & Douglas K. (2008b) The role of sport and exercise in recovery from serious mental illness: Two case studies. *International Journal of Men's Health* **7**(2), 137-156.

Carless D. & Douglas K. (2008c) Social support for and through exercise and sport in a sample of men with serious mental illness. *Issues in Mental Health Nursing* **29**, 1179-1199.

Crone D. (2007) Walking back to health: A qualitative investigation into service users' experiences of a walking project. *Issues in Mental Health Nursing* **28**, 167-183.

Crone D. & Guy H. (2008) 'I know it is only exercise, but to me it is something that keeps me going': A qualitative approach to understanding mental health service users' experiences of sports therapy. *International Journal of Mental Health Nursing* **17**, 197-207

Daley A. J. (2002) Exercise therapy and mental health in clinical populations: is exercise therapy a worthwhile intervention? *Advances in Psychiatric Treatment* **8**, 262-270.

De Hert M., Correll C.U., Bobes J. Cetkovich-Bakmas, M., Cohen D., Asai I., Detraux J., Gautam S., Moller H.J., Ndeti D.M., Newcomer J.W., Uwakwe R. & Leucht S. (2011) Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. *World psychiatry* **10**, 52-77.

Department of Health and Children (2006) *'Vision for Change' Report of the Expert Group on Mental Health Policy*. Stationery Office, Dublin.

Ellis N., Crone D., Davey R. & Grogan S. (2007) Exercise interventions as an adjunct therapy for psychosis: a critical review. *British Journal of Clinical Psychology* **46**, 95-11.

Faulkner G. & Biddle S. (2002) Mental health nursing and the promotion of physical activity. *Journal of Psychiatric and Mental Health Nursing* **9**, 659-665.

Faulkner G.E.J. (2005) Exercise as an adjunct treatment for schizophrenia. In *Exercise, Health and Mental Health: Emerging relationships* (Faulkner G.E.J., Taylor A.H., eds), Routledge, Taylor & Francis Group, London, pp. 27-47.

Fogarty M. & Happell B. (2005) Exploring the benefits of an exercise programme for people with schizophrenia: A qualitative study. *Issues in Mental Health Nursing* **26**, 341-351.

Fox K.R. (1999) The influence of physical activity on mental well-being. *Public Health Nutrition* 2(3a), 411-418.

Government of Ireland (2003). *Data Protection (Amendment) Act (2003)*. Stationary Office, Dublin.

Gorczynski P. & Faulkner G. (2011) *Exercise therapy for schizophrenia (Review)*. The Cochrane Collaboration, Wiley, Oxford.

Haber J. (2010) Legal and Ethical Issues. In *Nursing Research: Methods and Critical Appraisal for Evidence-Based Practice*. (LoBiondo-Wood G. & Haber J., eds) Mosby Elsevier, St. Louis, Missouri, pp. 246-266.

Happell B., Scott D., Platania-Phung C., Nankivell J. (2012) Nurses' views on physical activity for people with serious mental illness. *Mental Health and Physical Activity* 5, 4-12.

Hodgson M.H., McCulloch H.P. & Fox K.R. (2011) The experiences of severe and enduring mental illness engaged in a physical activity programme integrated into the mental health services. *Mental Health and Physical Activity* 4, 23-29.

Holley J., Crone D., Tyson P. & Lovell G. (2011) The effects of physical activity on psychological well-being for those with schizophrenia: A systematic review. *British Journal of Clinical Psychology* 50, 84-105.

Howard L. & Gamble C. (2011) Supporting mental health nurses to address the physical health needs of people with serious mental illness in acute inpatient care settings. *Journal of Psychiatric and Mental Health Nursing* **18**, 105-112.

Johnstone R., Nichol K., Donaghy M. & Lawrie S. (2009) Barriers to uptake of physical activity in a community-based patients with schizophrenia. *Journal of Mental Health* **18**(6), 523-532.

Marzolini S., Jensen B. & Melville P. (2009) Feasibility and effects of a group-based resistance and aerobic exercise program for individuals with severe schizophrenia: A multidisciplinary approach. *Mental Health and Physical Activity* **2**, 29-36.

Morrissey M. (1997) Exercise and mental health: a qualitative study. *Mental Health Nursing* **17**(3), 6-8.

National Institute of Health & Clinical Excellence (NICE) (2009) *Depression: The treatment and management of depression in adults: This is a partial update of NICE clinical guideline 23*. NICE, London.

National Institute of Health & Clinical Excellence (NICE) (2009) *Schizophrenia: Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care*. (Update), NICE, London.

Newell R. & Burnard P. (2011) *Research for Evidence-Based Practice in Healthcare*. 2nd edn. Wiley-Blackwell, Oxford.

Owens C., Crone D., Kilgour L. & Ansari W. EL. (2010) The place and promotion of well-being in mental health services: a qualitative investigation. *Journal of Psychiatric and Mental Health Nursing* **17**, 1-8.

Sheridan A., O'Callaghan E., Drennan J., Coughlan B., O'Keeffe D., Nee J., Frazer K. & Kemple M. (2012) *Enabling Recovery: The benefits of supporting socialisation. Report of a randomised controlled trial*. University College Dublin, Dublin.

Priest P. (2007) The Healing Balm Effect: using a walking group to feel better. *Journal of Health Psychology* **12**, 36-52.

Vancampfort D., Probst M., Skjaerven H. L., Catalan-Matamoros D., Lundvik-Gyllensten A., Gomez-Conesa A., Ijntema R. & De Hert M, (2012) Systematic review of the benefits of physical therapy within a multidisciplinary care approach for people with schizophrenia, *Physical Therapy* **92**(1), 11-23.