Received Date : 03-Nov-2015

Revised Date : 26-Jan-2016

Accepted Date : 01-Feb-2016

Article type : Letter to the Editor

Corresponding author email id: joseph.firth@postgrad.manchester.ac.uk

Preferences and motivations for exercise in early psychosis

Joseph Firth^{*1}, Simon Rosenbaum², Brendon Stubbs³, Davy Vancampfort^{4,5}, Rebekah Carney¹, Alison R. Yung^{1,6},

Running Title: Exercise for early psychosis

A 2015 special issue of this journal (1) emphasized the importance of physical health interventions in schizophrenia, targeting the prevention of cardiometabolic diseases. Since weight gain and glucose dysregulation occur shortly after the initiation antipsychotics and worsen rapidly over time, first-episode psychosis may be the optimal time for lifestyle interventions to reduce cardiovascular risk (1). Physical exercise is a critical component of such interventions, as it is associated with decreases in all-cause mortality and morbidity (2).

Previous studies in long-term schizophrenia have demonstrated significant improvements in fitness, symptoms and functioning from exercise interventions (2, 3). However, there has been relatively little research in the early stages of psychosis, and the optimal type of exercise for this population is unclear. Nonetheless, the modality of recommended exercise is perhaps less important than the amount of exercise achieved, since 90 minutes per week of moderate-to-vigorous exercise is sufficient to improve physical and mental health (3).

We recently conducted a feasibility study of exercise for community-dwelling outpatients within an 'Early Intervention for Psychosis' service in Manchester, UK. In the UK, Early Intervention services are available to any individuals aged 14-35 for up to five years after experiencing 'first-episode

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/acps.12562](https://doi.org/10.1111/acps.12562)

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psychosis' (defined as full threshold psychotic symptoms for a period of >7 consecutive days). A total of 33 early psychosis patients were approached, of which 28 completed the questionnaire; 22 male, 6 female. All were receiving antipsychotic medication, with a mean illness duration of 1.8 years (s.d.=1.3) and mean age of 25.5 years (s.d.=4.6).

In an attempt to maximize adherence, we offered individualized exercise to participants. To inform intervention development, it was first necessary to assess which types of exercise are preferred by this patient with early psychosis, and why, since this is currently an important knowledge gap in the literature. Upon recruitment to the study, participants completed a questionnaire about their views towards exercise. For each set of questions, participants were instructed to select all the options they felt applied to them. Their answers were used to formulate individualized exercise programs, which aimed to achieve at least 90 minutes of moderate-to-vigorous activity per week. As can be seen in Figure 1, the most popular activity was gym-based resistance training. Both 'Weight Training' and 'Gym Cardio' were substantially more popular than other sporting activities and low-intensity options (such as walking). Furthermore, 100% of participants selected at least one gym training option (i.e. weights or cardio) as a preferred activity.

Fig.1. Preferred activities selected by people with first-episode psychosis

This is to our knowledge the first study to consider exercise preferences in early psychosis. Although lacking an aged-matched control, results suggest these are similar to those observed in the general UK population, as gym-based activities are significantly more popular than all other types of exercise (except swimming) (4). However, the preferences of early psychosis patients appear somewhat different to patients with established schizophrenia, who usually prefer low intensity activities such as walking (5). This disparity may be due to early psychosis patients been younger, fitter and less likely to be inhibited by co-morbid physical health conditions. Indeed, the participants in this study

were subsequently offered supervised gym-training, and did achieve high levels of exercise adherence.

The motivations for exercise were almost equally distributed between the various categories (Figure 2). It is encouraging to note that 'losing weight' did not stand out as the top motivating factor, since this may not be a realistic short-term goal from exercise, especially in the absence of dietary changes (2, 3). Thus, results from this study indicate that gym-based exercise, which incorporates aerobic and resistance training, can match both the preferences and the motivations of young adults with early psychosis. However, research in larger, more diverse samples is still required.

Fig. 2. Motivations towards exercise in first-episode psychosis

References

1. MITCHELL A, DE HERT M. Promotion of physical health in persons with schizophrenia: can we prevent cardiometabolic problems before they begin? *Acta Psychiatr Scand.* 2015;**132**:83-5
2. VANCAMPFORT D, ROSENBAUM S, PROBST M, et al. Promotion of cardiorespiratory fitness in schizophrenia: a clinical overview and meta-analysis. *Acta Psychiatr Scand.* 2015;**132**:131-43.
3. FIRTH J, COTTER J, ELLIOTT R, FRENCH P, YUNG A. A systematic review and meta-analysis of exercise interventions in schizophrenia patients. *Psychol Med.* 2015;**45**:1343-61.
4. JONES H, MILLWARD P, BURAIMO, B. Adult participation in sport: Analysis of the taking part survey. Department for Culture, Media & Sport. 2011. [accessed 9/12/2015]; Available from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/137986/tp-adult-participation-sport-analysis.pdf.

5. USSHER M, STANBURY L, CHEESEMAN V, FAULKNER G. Physical activity preferences and perceived barriers to activity among persons with severe mental illness in the United Kingdom. *Psych Serv.* 2007;**58**:405-8.

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Author/s:

Firth, J;Rosenbaum, S;Stubbs, B;Vancampfort, D;Carney, R;Yung, AR

Title:

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Date:

2016-07-01

Citation:

Firth, J., Rosenbaum, S., Stubbs, B., Vancampfort, D., Carney, R. & Yung, A. R. (2016). Preferences and motivations for exercise in early psychosis. ACTA PSYCHIATRICA SCANDINAVICA, 134 (1), pp.83-84. <https://doi.org/10.1111/acps.12562>.

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