

Service evaluation of Rockbox in a mental health inpatient unit

Nicole Freeman, Medical Student at the University of Sheffield
Dr Simon Taylor, Consultant Psychiatrist at the Hartington Unit (Supervisor)

INTRODUCTION

The World Health Organisation (WHO) recommend that adults aged over 18 years old should do at least 150 minutes of moderate intensity or 75 minutes of vigorous intensity aerobic physical activity (PA) per week. For additional health benefits, it is recommended that people do muscle-strengthening sessions of at least moderate intensity for 2 or more days per week¹. METS (Metabolic equivalents) are the ratio of a person's working metabolic rate to their resting metabolic rate; one MET is equivalent to the caloric consumption of 1 kcal/kg/hour. The WHO estimate that moderate activity is equivalent to 4 METS and vigorous activity equivalent to 8 METS. Throughout the week, adults should achieve at least 600 MET-minutes through moderate and vigorous PA². It is estimated that 28% of adults are insufficiently physically active¹, but metanalysis shows that 54.7% of people with severe mental illness do not meet the WHO recommended amount of moderate PA and significantly less than the general population meet the WHO guidance for vigorous PA³. Many studies researching the correlation between mental illness and PA are in the community, but a pilot study of an inpatient exercise programme showed that the programme improved patients' symptoms of their mental illness⁴. In this project, a mental health inpatient unit ran Rockbox sessions every week over 2 years for both inpatients and staff. Rockbox is a fitness session that incorporates boxercise-style moves with upbeat rock music. This project aims to analyse the baseline levels of PA amongst patients and staff against the WHO guidelines, alongside their attitudes and experiences of the Rockbox sessions.

METHODS

Patients and staff who had taken part in at least one Rockbox session were given feedback forms. In total 16 feedback forms were collected. The feedback forms asked participants to provide their age, gender and whether they were a patient or member of staff. Each participant was asked, over the last 7 days, what activity they had taken part in (lasting over 10 minutes), how long for, and how many times. All participants were asked if they felt they did enough exercise. Each participant was provided a list of reasons for why they had not done more PA in the past, and were asked to tick all reasons that applied to them with space to write any additional reasons. Twelve participants were given a scale on which to rate the session overall from 'very enjoyable' to 'I did not enjoy it at all'. All participants were given space to write comments on why they tried the session, what had been the best thing about the session, and any additional comments.

Each exercise mentioned by a participant was classified as 'moderate' or 'vigorous'. Rockbox sessions were excluded from the analysis. It was decided that walking would be classified as moderate PA, as the WHO Global Physical Activity Questionnaire state that walking is equivalent to 4 METS². Going to the gym was classified as vigorous PA: although it has its limitations, it can be assumed that going to the gym is a hard physical effort and causes a large increase of heart rate and breathing, so is in-keeping with the WHO definition of vigorous PA². Furthermore, going to the gym was categorised as a muscle-strengthening session. The number of MET-minutes per week was calculated by multiplying the MET value of each activity with the duration of the activity in minutes and then adding the total MET-minutes per week together, in line with WHO guidance². Microsoft Excel was used for calculations and for analysis of all data, and to make the figures.

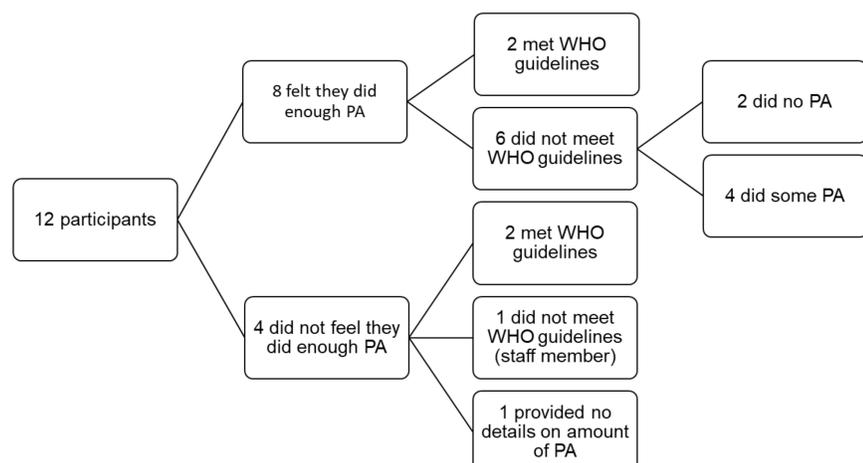
RESULTS

Physical activity per week

Two feedback forms were omitted due to not providing answers and illegibility, so 14 feedback forms were analysed. The age range was 25 to 74 years, with the mean age being 44.7 years old. There were 6 males and 8 females, including 2 female staff members and 14 patients. Of the 12 patients, 41.6% (n=5) exceeded 600 MET-minutes per week: 16.6% (n=2) of patients exceeded 75 minutes of vigorous PA per week, 8.3% (n=1) of patients exceeded 150 minutes of moderate PA per week, and 16.6% (n=2) met 600 MET-minutes per week through a combination of moderate and vigorous PA. The remaining 58.3% (n=7) of patients did not meet 600 MET-minutes per week, with 25% (n=3) of patients doing no PA at all and 25% (n=3) doing some PA per week. Additionally, 25% (n=3) of patients did 2 or more muscle-strengthening sessions in the last 7 days. Both staff members did not meet 600 MET-minutes per week and did zero minutes of PA. The mean number of MET-minutes per week was 550 minutes and median 210 minutes including staff members. Excluding staff members, the mean was 641.7 minutes and the median 360 minutes.

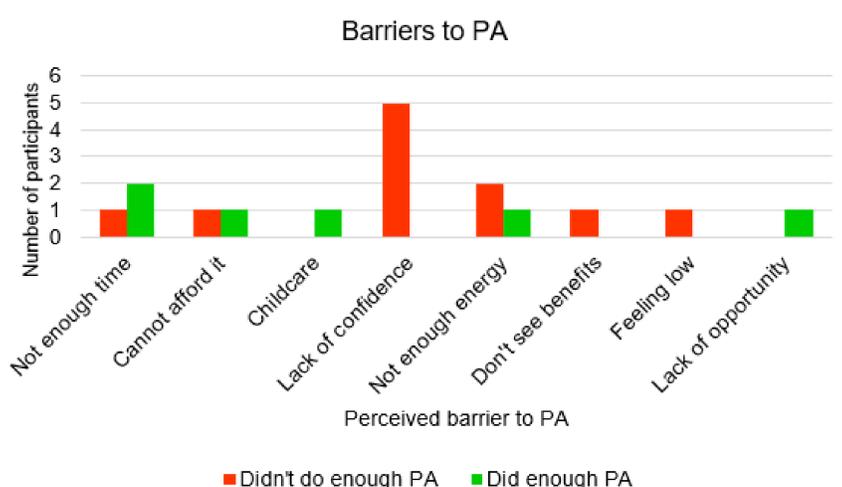
Attitudes towards physical activity

Twelve participants answered whether or not they felt they did enough PA, including 11 patients and 1 staff member. Both patients included in this analysis who did no PA in the last week felt that they had done enough.



Barriers to physical activity

Seven participants didn't state their perceived barriers towards PA. One staff member and 8 patients reported their barriers towards PA, 3 of whom exceeded 600 MET-minutes per week of PA and 6 who did not. The table below shows the perceived barriers in these 2 groups. In those who felt they did enough exercise, lack of confidence was the most common (n=5) barrier towards PA. Not enough time was the most common barrier (n=3) in those who felt they needed to do more PA.



Patient experience of Rockbox and comments

All (n=12) participants who were provided with a rating scale on the feedback form rated the Rockbox session as 'Very enjoyable'. All participants (n=16) provided reasons for deciding to try Rockbox, with common reasons being to improve fitness (n=3), lose weight (n=2) and being told about it by others (n=3), including one patient who was encouraged by a staff member. This patient named motivation when feeling low and lack of energy as barriers to taking more PA, but as a result of the session they felt "like they used to feel" and wanted to attend another session.

When asked what the best aspects of the session were, "fun" was the most commonly stated reason (n=3) out of all (n=16) participants who answered. One staff member and one patient described having patients and staff exercising together as a highlight of the session. A patient who didn't meet WHO guidelines for PA and perceived confidence as a barrier to PA, stated that the highlight of the session was being "allowed to take part within my limitations".

Of the patients who provided additional comments on the session (n=15), all were positive. One patient commented that they wish the sessions had started when they first arrived at the unit and another commented that the session made them feel happier with more energy, and it had allowed them to release their energy and feel calmer after. A different patient, who felt they didn't do enough PA and perceived not having enough time or energy for PA, indicated that the session changed their attitude towards future PA by stating that were interested in attending Rockbox in the future outside of the unit.

CONCLUSIONS

In this cohort of mental health inpatients, 41.6% met the WHO recommendations for PA through walking or going to the gym. This is lower than the WHO estimate that 72% of adults globally do sufficient PA¹, and similar to figures cited in previous studies³. Lack of confidence was the most common barrier towards PA in those who didn't do enough PA, and Rockbox sessions addressed this by allowing people to take part within their limitations. A different set of barriers were faced by those who felt they did enough PA in comparison to those who felt they did not do enough PA. Although, 75% of patients who felt they did enough PA did not meet WHO guidelines. All participants found Rockbox a positive experience, and, although a small sample size, patient comments show that such sessions have the potential to change their views on PA.

REFERENCES:

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