Mental Health and Physical Activity 15 (2018) 7–10

Contents lists available at ScienceDirect

Mental Health and Physical Activity

journal homepage: www.elsevier.com/locate/menpa

In inpatient substance use disorder treatment in Switzerland, exercise programmes are implemented but not evaluated – A missed opportunity for improving treatment

Flora Colledge[a,*], Serge Brand[a,b], Uwe Pühse[a], Edith Holsboer-Trachsler[b], Markus Gerber[a]

[a] Department of Sport, Exercise and Health, University of Basel, Birsstrasse 320b, 4052, Basel, Switzerland
[b] Centre for Affective, Sleep and Stress Disorders, University Psychiatric Clinic, University of Basel, Wilhelm Klein Strasse 27, 4012, Basel, Switzerland

ARTICLE INFO

Keywords:
Sport
Treatment outcomes
Substance use disorders

ABSTRACT

Background: Although there is promising evidence for exercise and sport as an adjunct treatment in substance use disorders, to date there is little information about whether it is integrated into current clinical practice.
Methods: 79 inpatient clinics in Switzerland were invited to take part in a telephone survey regarding exercise and sport programmes.
Results: 46 clinics participated in the survey. 42 (91.3%) offer some type of exercise programme. Participation in at least one session per week was obligatory in 29 (63%) of clinics. None of these clinics evaluate the effects of participation. 4 clinics (8.7%) do not offer an exercise and sport programme; in one of these, the programme was stopped due to lack of patient interest; one was in the process of developing a programme; and two stated that their residents' health was too poor.
Conclusion: Exercise and sport programmes are integrated into the treatment plans of at least half of the identified inpatient substance use disorder treatment clinics in Switzerland; however, while participation in these programmes is often compulsory, their effects are not evaluated. There is an urgent need to develop an evaluation process for the potential effects of exercise participation on substance use-related outcomes.

1. Background

Substance use disorders are diagnosed, according to the DSM-V, by the presence of at least two of a possible eleven symptoms within a 12-month span (American Psychiatric Association, 2013). These include the development of tolerance, repeated attempts to abstain or reduce use, withdrawal, social problems linked to use, and craving for the substance. Worldwide, the number of individuals engaging in problematic drug use, defined either as diagnosis by DSM-V criteria or the regular or high-risk consumption of drugs, was estimated at 29.5 million in 2015 (United Nations Office on Drugs and Crime, 2017).

Treatment for substance use disorders typically involves a combination of pharmacotherapeutic and psychotherapeutic approaches aimed at managing withdrawal, detoxification, and achieving a reduction in use, or abstinence (Kleber et al., 2006). Outpatient and inpatient treatment types are available. However, relapse following treatment is common, with rates of 70–85% following a single treatment attempt (Brandon, Vidrine, & Litvin, 2007). Consequently, there is an urgent need to explore therapy modalities which may improve outcomes in substance use disorder treatment.

Exercise and sports programmes and interventions are attracting increasing interest as adjunct therapies in substance use disorder treatment. This is due in large part to the fact that exercise has been shown to be therapeutic in a wide range of common physiological complaints (Sallis, 2015), some psychiatric disorders (Rosenbaum, Tiedemann, Sherrington, Curtis, & Ward, 2014; Zschucke, Gaudlitz, & Ströhle, 2013), and further is effective in enhancing social integration (Hassmén, Koivula, & Uutela, 2000). Individuals with substance use disorders typically experience problems in at least one of these three domains (Draper & McCance-Katz, 2005; Schuckit, 2006). Thus, if exercise and sport can have a positive influence on any of these domains, it may contribute to a reduction of the physical complaints, psychiatric disorders or symptoms, and social isolation which can accompany and perpetuate substance use disorders. Psychiatric comorbidities, in particular, have frequently been suggested as a target for physical activity interventions in populations with substance use disorders, (Bardo & Compton, 2015; Smith & Lynch, 2011), although research into exercise in patients with dual diagnosis specifically is lacking. It is therefore important that this form of adjunct treatment is thoroughly evaluated in populations with substance use disorders.

* Corresponding author.
E-mail address: flora.colledge@unibas.ch (F. Colledge).

https://doi.org/10.1016/j.mhpa.2018.05.001
Received 20 November 2017; Received in revised form 30 April 2018; Accepted 1 May 2018
Available online 12 May 2018
1755-2966/

To date the small scale and diverse approaches of studies in this field mean that their generalisability is limited; the evidence for exercise in the therapy of substance use disorders per se is promising but weak (Zschucke, Heinz, & Ströhle, 2012). However, three conclusions can be drawn from the current literature. First, it appears that participation in an exercise and sport programme is a feasible form of adjunct treatment in substance use disorder therapy (Hallgren et al., 2017; Wang, Wang, Wang, Li, & Zhou, 2014). Second, though the evidence taken together is indeed weak, the results of individual studies typically suggest promising effects of exercise and sport (Linke & Ussher, 2015). Third, the translation of research to daily clinical practice has not yet been documented; the literature reports on intervention studies, not existing exercise and sport programme in inpatient clinics. It therefore appears that the understanding of the effects of exercise and sport participation for individuals with substance use disorders could be greatly advanced by an investigation into how widespread and effective exercise and sport programmes are in current clinical practice. It is also important to ascertain whether these programmes are evaluated by the clinics which provide them, in order to determine whether provision is based on outcome assessment, or whether other factors dictate the programmes.

It is essential to assess treatment modalities in order to ensure that they contribute towards reducing the burden of disease (Saxena et al., 2007). If exercise and sport are not integrated into substance use disorder therapy, it is likely that an important part of human health is being overlooked in treatment for these disorders. Conversely, if exercise and sport are a part of current clinical practice, then this can and should be evaluated and compared with the experimental literature, in order to improve the understanding of its effectiveness and ensure that money is not invested in ineffective or sub-optimal adjunct treatment modalities.

Evaluations of exercise and sport programmes in daily clinical practice have been carried out in the field of mental health generally (Lederman et al., 2017; Murphy et al., 2012). However, to our knowledge, the most recent investigation into substance use disorders specifically dates to 1995 (Kremer, Malkin, & Benshoff, 1995). Inpatient treatment represents an ideal opportunity for patients to take part in exercise and sports, as the difficulties of time, cost and motivation common to normal life are reduced. Furthermore, inpatient treatment is often undertaken at an early stage of the recovery process, when withdrawal symptoms and craving may represent particularly difficult challenges which require a varied treatment approach. The aim of the present Commentary is therefore to address the issue of whether, and to what extent, structured exercise and sport programmes are a part of substance use disorder treatment in current clinical practice, and whether these programmes are evaluated. General inpatient physical activity and exercise undertaken outside of structured programmes will not be addressed here; at this stage, we also do not seek to compare exercise and activity levels with current public health guidelines.

This Commentary will address 3 questions:

1) To what degree is exercise and sport incorporated in inpatient substance use disorder treatment?
2) What form do exercise and sport programmes, if any, take?
3) Are the exercise and sport programmes evaluated?

2. Methods

In order to obtain information about exercise and sport programmes in inpatient substance use disorder treatment, clinics in Switzerland offering inpatient care were contacted by email and asked to participate in a telephone survey. The email stated that the study team was carrying out a survey of exercise programmes in inpatient treatment, and would like to talk to an employee who could provide information on this subject. The database suchtindex.ch, run by Infodrog, the Swiss Office for the Coordination of Addiction Facilities, was used to identify clinics.

Information was gathered via telephone. Participants were asked whether an exercise and sport programme was in place in their clinic. If they answered yes, they were asked about the types of exercise offered, the weekly frequency and duration, who lead the programme, and whether the programme was evaluated in order to assess its impact and effectiveness. If participants answered no, they were asked why there was no exercise and sport programme in place, if there had been in the past, and if one was planned in the future. Participants were not limited in their responses, and were encouraged to talk in detail. All conversations were recorded and transcribed verbatim.

Findings were analysed using SPSS 25.0 (IBM Corporation, Armonk, NY) in order to provide descriptive statistics.

This investigation is limited to inpatient clinics which treat substance use disorders, as research into exercise and sport as therapy for behavioural addictions (e.g gambling, internet use) is still in its initial stages.

Ethical approval was waived by the Institutional Review Board of the University of Basel, as this study does not involve patients, minors, or vulnerable individuals.

3. Results

185 clinics with some form of inpatient treatment facility (including hospices, hospitals, residential centres and temporary community living facilities) were identified in the search. Based on this list, all centres treating only behavioural addictions (n = 36) were excluded. All organisations offering only supported living and return to employment (n = 64) were also excluded, as these institutions do not offer treatment per se, and therefore by definition cannot offer exercise and sport as an adjunct treatment. Of the remaining 85 clinics, 79 were contacted via email, and if no reply was forthcoming, via telephone, to participate in the survey (for 3, no contact data was available; the other 3 were located in the Italian-speaking part of Switzerland, a language not spoken by the investigators). 33 clinics did not participate. Reasons for non-participation were: non-response to two emails and two follow-up telephone calls (n = 17, 51.5%); statement that an exercise and sport programme was not a part of the treatment offer (n = 16; 48.5%).

46 inpatient or residential substance abuse treatment clinics took part in the survey; however, the individual who took part in the survey was not always the individual who lead the exercise and sport programme. The clinics treat a pool of individuals, male and female, ranging from 14 to 100 years of age. The clinics specialise in withdrawal and rehabilitation.

Of the clinics which participated in the survey, 42 (91.3%) offer some form of exercise and sport programme. Given that 16 clinics explicitly did not participate in the survey because they offer no exercise and sport programme, the percentage of clinics who provided a positive response to the preliminary “Exercise; yes or no” enquiry stands at 67% (42 of 62 clinics). Of the clinics willing to participate in the survey and offering an exercise and sport programme, 39 (92.8%) offer exercise and sport in a group setting, and 12 (28.5%) offer individual instruction; this includes 4 clinics (9.5%) which offer both. These 42 clinics offered between 1 and 11 different types of exercise and sport activities, the most frequently offered number of types being 2 (in 9 clinics). 20 (43.5%) clinics have equipment available for individuals to do exercise and sport independently.

Participation in at least one session per week was compulsory in 29 (63%) of clinics who offered exercise and sport programmes.

Between 1 and 4 individuals (M = 1.52, SD = 0.67) lead the exercise sessions in clinics offering an exercise programme. The following employment descriptions were assigned to exercise session leaders: clinic employee without specific training in exercise and sport programme leadership (n = 15; 32.6%); exercise and sport therapist (n = 10; 21.7%); physiotherapist (n = 9; 19.6%); independent exercise and sport instructor (n = 7; 15.2%); movement therapist (n = 6, 13%);