Physical Activity Group on an Inpatient Behavioral Health Unit

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Recommended Citation
Brown, Patricia, "Physical Activity Group on an Inpatient Behavioral Health Unit" (2019). Doctor of Nursing Practice Projects. 126.
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Executive Summary

Introduction of the Problem

Physical activity is beneficial for the wellness of both the body and mind. Preventable physical diseases are the cause of the majority of deaths in individuals with severe mental illness (SMI) (Vancampfort et al., 2017). Several factors contribute to the lack of physical activity in individuals with SMI. Zechner & Gill (2016), note that motivation is a barrier in individuals with SMI regarding regular participation in physical activity, and that people learn by observing others and will continue the learned behavior based on perceived rewards and benefits.

At a local Midwestern hospital-based inpatient behavioral health department, staff and patients identified a lack of physical activity during hospitalization. In the past, the inpatient behavioral health department offered scheduled time in an exercise room for patients. Due to stricter regulations and standards, all equipment has been removed, and no physical activity is provided as the primary focus in on safety. Introducing the importance of routine physical activity during a mental health hospitalization is vital to the success of sustained physical activity post-discharge and the overall well-being of patients with mental illness.

Literature Review

The National Institute for Health and Care Excellence (NICE) recommends providing a comprehensive range of interventions consistent with the guidelines for the treatment of individuals with SMI (WHO, 2015). The procedures about physical health include mental health providers offering people with psychosis or schizophrenia a combined healthy eating and physical activity program (WHO, 2015). Increasing the quality of life of people with SMI is possible through physical activity by improving one's physical health, along with easing psychiatric and social disability (Kaur, Masaun, & Bhatia, 2013). Fraser, Brown, Whiteford,
Burton (2018), report that physical activity is a realistic and effective treatment for individuals with SMI and possibly a critical aspect in the prevention and management of physical health.

Physical activity is an essential component of the multidisciplinary treatment of individuals with SMI in many European mental health units (Vancampfort et al., 2017). A global systematic review and meta-analysis showed a positive correlation between individuals with SMI in Europe who have the highest physical activity levels and the initiation of physical activity during an inpatient hospitalization (Vancampfort et al., 2017). Research indicates the leading cause for reduced life expectancy among persons with SMI is poor metabolic health, thus emphasizes the importance of behavioral counseling programs providing information and education (Fraser et al., 2018).

A systematic review of studies on the effects of physical activity on the emotional states showed that a group exercise program of three times a week for six weeks on an inpatient mental health unit resulted in perceived decreased depressive symptoms, increased overall physical health, and reduced hospital admissions (Kaur et al., 2013). Providing support and encouragement both on an inpatient basis, along with post-discharge, are crucial factors in the continuation of physical activity by individuals with SMI (Bezyak, Berven, & Chan, 2011). Mental preparation, personal support, and activity planning are three main strategies for implementing a physical activity group (Rastad et al., 2014). Collaborating with other disciplines such as exercise physiologists to facilitate the programs and ensuring evaluation of the new program, assessing the feasibility and acceptability of the program, and disseminating results builds a greater understanding of what works in real-world inpatient settings (Lederman et al., 2017). Physical activity groups on an inpatient behavioral health unit facilitated by exercise physiologists improve the mental health in combination with the physical health of patients.
(Kaur et al., 2013). According to a cross-sectional survey of members of the International Organization of Physical Therapists (Stubbs et al., 2014), physiotherapists believe they should act as the lead in the promotion of exercise and physical activity in patients with SMI, specifically schizophrenia.

**Project Methods**

The primary aim of this project was to educate patients with severe SMI regarding physical activity and how it relates to wellness for the mind and body, along with increasing motivation to continue post-discharge. The goal of the interdisciplinary team involved with this project was to collaborate in the development and implementation of a physical activity group on an acute care inpatient behavioral health unit. The target population for this project included current patients admitted to an acute care inpatient behavioral health unit between the ages of 18-80 years of age. The principal investigator was given permission from the Vice President of Clinical Operations at a local hospital in central Illinois. The Institutional Review Board at Southern Illinois University Edwardsville approved this project with an exempt status prior to project implementation. The project was also approved, with exempt status, from the Institutional Review Board that the hospital site. Hospital employed exercise physiologists conducted the groups every Monday, Wednesday, and Friday during the implementation period.

**Evaluation**

The primary outcome measure of this project was the patients’ perception of value and usefulness of the physical activity group. Patients that participated in the physical activity group completed a survey after participation. The required patient information included the age and sex of the patient. The Intrinsic Motivations Inventory (IMI) seven question tool, an evidence based
seven-point Likert scale, developed to measure motivation, was used to measure the patient's motivation and perception of value in the physical activity group.

The eligible study population was 284 participants; 167 (59%) initially participated but the study population was reduced to 120 (42%) because 47 did not complete the survey. The participants ranged from 19 to 71 years old, with 45% (N=54) being male and 55% (N=66) being female. Further analysis was performed by age groups with 52% (N=62) being between the ages of 19-34, 27% (N=33) being between the ages of 35-54, and 21% (N=25) being 55 years and older. The final analysis showed an overall rating of “Very True” of 65%, with females scoring the values at 69% and males at 61%. A review of age groups in comparison to ratings of “Very True” shows 18 to 34 years old at 65%, 35-54 years old at 59%, and 55 years and older at 90%.

A descriptive statistical analysis (Excel 2016) was performed with the hypothesis of the implementation of a physical activity group on an inpatient behavioral health unit will increase motivation to continue post-discharge, with a= 0.05. All seven questions were evaluated individually with questions one through four and six through seven were statistically significant (p= 0.001-0.049). One of seven questions was not statistically significant (p= 0.608). Overall, the physical activity group proves to be clinically significant to increasing the motivation of persons on an inpatient behavioral health unit to find value in continuing physical activity post-discharge (mean: 6.27).

Limitations of the study include limited offering of the group activity and the inability to follow-up with participants on an outpatient basis to determine if continued participation physical activity was occurring. The physical activity group was offered three days a week, therefore, some patients were admitted and discharge without the opportunity to participate.
Impact on Practice

There had been no physical activity program on the inpatient behavioral health department for persons admitted with SMI. This project focused on the development and implementation of a physical activity group three days a week for patients admitted to the behavioral health unit. The participants in the program showed great interest in attending and participating, which may help to improve motivation for continued physical activity post-discharge. As the physical activity group continues, the expectation is for an increased awareness of the relationship between exercise and health, along with increasing one’s motivation to continue exercising after discharge, thus improving physical and mental health and decreasing hospital readmission. The results show promise for the possibility of further development of physical activity groups throughout different areas of the organization. Additional opportunities for the expansion of physical activity groups may be offered on an outpatient basis within the facility.

Conclusion

Lack of physical activity on inpatient behavioral health units is a common practice. The incorporation of physical activity groups on an inpatient behavioral health department can increase motivation and compliance with continued compliance post-discharge. The inpatient physical activity group, led by exercise physiologists, can continue to be used to improve inpatient motivation for physical activity post-discharge. Increasing motivation to be physically active could positively impact patient outcomes for both physical and mental health.

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