

ROLE OF MUSIC AND DANCE IN MANAGING OVERWEIGHT AND OBESITY AMONG PERSONS WITH INTELLECTUAL DISABILITY

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Abstract

Music and dance are one of the important art forms. This combined form of arts used to enjoy by every individual. Obesity and overweight are growing health concerns among children worldwide, including children with intellectual disability (ID). Intellectual disability refers to significant limitations in intellectual functioning and adaptive behavior, affecting social, conceptual and practical skills. Children with intellectual disability are often more vulnerable to overweight and obesity due to reduced physical activity, poor dietary habits, medication side effects, limited recreational opportunities and difficulties in understanding healthy lifestyle practices. Managing obesity in children with intellectual disability requires approaches that are enjoyable, motivating, inclusive and adaptable to their abilities. Music and dance have emerged as effective therapeutic and recreational tools that can support physical fitness, emotional well-being and social participation. This combined form of art effectively uses for various purposes such as education, training and therapy. These activities not only increase physical movement but also create a positive environment that encourages children to remain active regularly. Music and dance are creative physical activity that combines exercise with expression and entertainment. It is especially effective for persons with intellectual disability. It can be modified and adapted according to needs and abilities of every individual.

Key words: Music, Dance, Obesity, Special Needs & Intellectual Disability.

Introduction

Overweight and obesity is considered as chronic complex disease. It is defined by excessive fat deposition that can impair individuals' health. It leads to various type of diseases such as diabetes and heart disease. It also increases health risk and affects quality of living of an individual.

The diagnosis of overweight and obesity can be found out by measuring weight and height and by calculating Body Mass Index (BMI): $\text{weight}(\text{kg})/\text{height}^2(\text{m}^2)$. As per World Health Organization (WHO) criteria for overweight and obesity is as under:

SN	Standard Weight	BMI
1.	Underweight	Below 18.5
2.	Healthy Weight	18.5-24.9
3.	Over Weight	25.0-29.9
4.	Obese	30 and above

(BMI) vary by age such as infants, children & adolescent and gender.

There are various factors that lead to overweight and obesity. Among all these factors hereditary, psychological, environmental factors, diet, physical activities and preference of exercises are very important. In addition to these behavioural, hormonal, unhealthy diet and metabolic causes also lead to overweight and obesity. Among all these above factors some of the factors that exhibited by intellectually disabled Children because of their limited cognitive capacity.

According to American Association on Intellectual and Developmental Disability (AAIDD) 2021, 'Intellectual disability is a condition characterized by significant limitation both in intellectual functioning and in adaptive behavior as expressed in conceptual, social and practical adaptive skills. This disability originates during the developmental period, which is defined operationally as before the individual attains age 22.' Intellectual disabled Children have very limited cognitive capacity. Thus they are not aware of various health conditions. Hence they did not take care of their health which leads to overweight and obesity among them.

Need and significance of the study

Obesity is a chronic complex disease defined by excessive fat deposition that can impair individuals' health. There are number of causes of overweight and obesity such as heredity, hormonal, environmental factors, psychological, combined with diet,

physical activity, exercises choices, behavioural, unhealthy diet and metabolic causes lead to overweight and obesity. Since persons with Intellectual disability have limited cognitive capacity, thus they are unable to make right decision on the above factors. It is also true that music and dance provide a pleasant condition and atmosphere to every individual irrespective of their ability and disability. Present study is helpful for the parents, teachers and other professional to study and analyse the medical condition of intellectually disabled children. It is also helpful for them to plan and provide appropriate intervention through music and dance to manage overweight and obesity among persons with Intellectual Disability.

Objectives

- To study the probable cause of overweight and obesity among persons with intellectual disability.
- To explore the role of music and dance in managing overweight and obesity among persons with intellectual disability.
- To explore the strategies for effective implementation of music and dance in managing overweight and obesity among persons with intellectual disability.

Understanding over weight and obesity among persons with Intellectual Disability

Persons with intellectual disability frequently face challenges that contribute to excessive weight gain. This excessive weight gain may be due to various factors. Some of the important factors as under:

- Most of the time Persons with intellectual disability have sedentary lifestyle.
- Persons with intellectual disability have limited motor coordination.
- Persons with intellectual disability very low participation in sports and outdoor activities
- Most of the time persons with intellectual disability have emotional, eating and behavioural issues.
- Most of the time persons with intellectual disability are dependent on parents and caregivers for daily routines.
- Sometimes they have side effects of medications.
- There are lack of awareness regarding healthy habits among persons with intellectual disability.
- They did not take interest in physical activities.
- Thy did not understand the importance of health conditions.

Since overweight and obesity among persons with intellectual disability may lead to additional complications including diabetes, cardiovascular disease, low self-esteem, poor mobility, fatigue and social isolation. Therefore, means of interventions and interventional strategies need to be according to their needs, interest, structured and engaging.

Importance of physical activity for persons with intellectual disability

Physical activities are one of the most important activities among all the activities to manage overweight & obesity in order to live a healthy life. Regular physical activity helps in the following ways:

- Physical activities burning excess calories of individual.
- Physical activities improve muscle strength and endurance.
- Physical activities enhance cardiovascular fitness.
- Physical activities increasing flexibility and coordination in individual.
- Physical activities reduce stress and anxiety of individual.
- Physical activities promote healthy sleep patterns.

Since, conventional exercise programs and physical activities seems for persons with intellectual disability. They neither take interest nor motivated to involved in these activities. Thus, music and dance provide an alternative form of exercise that combines physical movement with enjoyment.

Role of music and dance in managing overweight and obesity

Music and dance is a creative physical activity that combines exercise with expression and entertainment. It is especially effective for persons with intellectual disability. It can be modified and adapted according to needs and abilities of every individual. It creates an encouraging and stimulating atmosphere that increases participation in physical activities of the individual including persons with intellectual disability. Music and dance influences in the following ways.

Motivation and Engagement

Rhythmic sound attract attention and motivates every individual including persons with intellectual disability to move their bodies naturally. They often enjoy clapping, jumping and walking on the music tunes without realizing that they are exercising.

Improvement in Motor Skills

Music-based movement activities improve balance, coordination, gait, body awareness, timing and rhythm among individual including persons with intellectual disability. It also improved motor skills of persons with intellectual disability and helps to become more active in daily life.

Emotional Benefits

In general music and dance reduces anxiety, frustration and behavioural problems. It also enhances mood and emotional expression of individual, which may reduce emotional eating and sedentary behavior.

Social Interaction

Group music and dance activities encourage communication, cooperation and peer interaction among people. This social participation of individual increases confidence and reduces feelings of isolation.

Structured Physical Activity

Music and dance sessions mostly include aerobic movements, stretching exercises, action songs, rhythmic walking, musical games and so on. All these activities increase calorie expenditure in an enjoyable manner.

This reveals that music and dance is a creative physical activity that combines exercise with expression and entertainment. It is especially effective for persons with intellectual disability. It can be modified and adapted according to needs and abilities of every individual. Music and dance involve continuous body movement that helps to burn calories, reduce body fat, improve metabolism and enhance cardiovascular health. It also development of physical fitness, improves flexibility, muscle strength, endurance, posture and coordination. These improvements support weight management and overall health of individual.

Strategies for effective implementation of music and dance

There are various strategies for effective implementation of music and dance in managing overweight and obesity among persons with intellectual disability. Some of the important strategies adopted for effective implementation of music and dance to achieve the best results are mentioned below.

Individualized Programs

Music and dance activities should match the age, interest, physical ability, and level of persons with intellectual disability.

Simple and Repetitive Movements

Easy steps and repeated patterns of music and dance activities should be used that helps the persons with intellectual disability to learn comfortably.

Positive Reinforcement

Reinforcement is very important for involvement and learning any task. Praise, rewards and encouragement increase participation, involvement and confidence of persons with intellectual disability.

Family Involvement

Parents and caregivers need to encourage music and dance activities at home along with persons with intellectual disability. They need to create and utilise every suitable situation for this.

Safe and Supportive Environment

Each and every session of music and dance activity need to be supervised by trained teachers, therapists, special educator or instructors.

Regular Participation

In order to have effective management of overweight & obesity and physical improvement among persons with intellectual disability consistent practice is necessary.

Challenges and Limitations

Though music and dance one of the most effective way of managing overweight and obesity among persons with intellectual disability. Still people faces some challenges and limitations in order to implement the same. Some of the important challenges and limitations are mentioned below.

- There is lack of trained professionals to use this for persons with intellectual disability.
- There is limited access to inclusive recreational programs.
- Most of the time persons with intellectual disability shows behavioural problems.
- There are financial constraints.
- Inadequate awareness among parents, educators, teachers and trainers.
- These challenges can be addressed through awareness programs, teacher training and inclusive health policies.

Conclusion

Music and dance play a significant role in managing overweight and obesity among children with intellectual disability. They provide enjoyable, inclusive and motivating forms of physical activity that improve physical fitness, emotional well-being, social interaction and self-esteem of individual. Unlike traditional exercise programs, music & dance encourage active participation through fun and creativity. It is essential to integrating music and dance into educational, therapeutic and home environments. Caregivers, teachers, parents and professionals can help children with intellectual disability to adopt healthier lifestyles and reduce overweight and obesity that also reduce health risks among persons with intellectual disability. Therefore, music and dance should be recognized as valuable tools in promoting holistic health and quality of life for persons with intellectual disability.

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