

## EXERCISE COUNSELING FOR INTELLECTUAL DISABLED CARE GIVERS IN IBADAN: HOW BENEFICIAL?

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### Abstract

*In recent times, exercise for intellectual disabled individuals (IDIs) receives more emphasis but with few studies focusing on the integral care involved in providing counselling to people on the comfort of the caregivers caring for the IDIs. This review systematically identified the benefits of exercise counselling for caregivers, which measured outcomes for effective implementation in essentially supporting the IDIs. This study suggested benefits of exercise counselling for IDIs caregivers. Often examined secondarily, caregivers are overlooked for participation in exercising alongside the IDIs. This paper exposed that caregivers may benefit from exercise intervention in which they either undergo counselling together with their care recipients or receive a separate exercise counselling intervention or respite. Few of the factors identified however, include the inability to adequately enjoy good health thereby resulting into occurrences of cardiovascular diseases, stress, depression and eventually paralysis; and more so the lack of paying attention to other aspects of their own way of life. There is therefore need for all caregivers to be involved in exercise counselling to promote their well-being and quality life.*

**Keywords:** Caregivers, Exercise counselling, Quality life, Intellectual Disabled individuals, Ibadan.

### Introduction

In the act of positively influencing the way of life of the intellectual disabled individuals (IDIs), several researches on beneficial effects of exercise has been conducted for the IDIs whereas the caregivers have been abandoned (Canonici *et al.*, 2012). Exercise counselling involves practices in helping the IDIs with their emotional and physical disabilities, evaluates their strength and limitations. Apparently, it guides the IDIs to live independently. Despite the benefits in health that can be reached via implementing a more active way of life, caregivers are still underactive, faced with this defy of inactivity. There is a necessity increase for exercise counselling intervention for the IDIs caregiver population. The incorporation of exercise support includes being able to reach a wide coverage of cases over time, the delivery of message and content and the consistency and continuity of such delivery, and the level of cooperation of IDIs to interestingly follow the advice of caregivers (Anton *et al.*, 2013). Notwithstanding these, however, many bottlenecks to exercise counselling to these individuals have been documented, including development of cardiovascular disease, mismanagement of time, reimbursement, and change in behaviour (Davies *et al.*, 2011). Though, such problems have continued to hinder health promotion not only among the caregivers but also of the IDIs, including exercise. While a high amount of studies exists on counselling by physicians for health behaviors, like stopping smoking, few studies have been

conducted on the promotion of exercise of caregivers' practices. The studies undertaken have had the advantage of a growing body of knowledge that underscores the use of empirical information on behavioural strategies in aiding exercise change. Some of these behavioral strategies were tried out in studies in which primary health care physicians were trained in giving advice and counselling on exercise, thereby producing positive results in a short period of time (Barnes *et al.*, 2015).

Given the limited evidence for exercise counselling, especially towards the effects on caregivers, this systematic review contributes to and expands the body of literature by identifying exercise counselling for caregivers. Specifically, this review examined whether caregivers realize greater physical and psychosocial health and well-being benefits when: (a) the caregiver undergo the use of exercise counselling, (b) the caregivers are counselled in order to care and watch over their well-being and that of the Intellectual disabled individuals. Based upon the studies that met the inclusion criteria, literature was examined to better understand whether caregivers derived greater benefit from exercise counseling, or not at all.

### **Intellectual Disability**

Quality living is the desire of all and sundry. Parents desire quality life for their children and are willing to do more to see that their off spring exude good living standards including parents with single or multiple disabilities. As Children experience physical growth and development, they are expected to also grow and develop mentally, socially, psychologically and emotionally. Unfortunately, intellectually disabled individuals are more susceptible to falling deficit of these expectations. According to Carmeli, Imam, Bachar and Merrick(2012), AAIDD (2010), persons with Intellectual Disability are characterized by certain limitations in communication, social skills, self-care, health and safety. These setbacks can be attributed to the inability of the intellectually disabled to develop sufficient intellectual capacity to thrive in the community and their inability to exist independently, without supervision from their care givers (Angba, 2016). Persons with Intellectual Disability suffer more health conditions, relative to normal people ([Krahn, Hammond, & Turner, 2006](#); [Angba, 2015](#)). Notwithstanding this knowledge of causes of ID is poor while the etiological diagnosis attempted among developed countries established not up to half of the cases tested. The basic concepts on intellectual disability are hereby treated as functions of prognosis, diagnosis and treatment ([bhojuvirtualuniversity.com, 2012](#)). Intellectual disability general learning and mental retardation could be defined as comprehensive neuro development disorder manifesting as impaired intellectual and adoptive or behavioural functioning (University of South Pacific, 2016). This condition is worse than learning difficulty which can be ameliorated with relative ease (Ogunleye, 2019a; Ogunleye, 2019c). The increasing rate of obesity and cardio respiratory disorders among children and adults across the globe has been the subject of recent research. Studies have found that obesity, motor and cardio respiratory difficulties affect children who have intellectual disability in their early development period (Veronique et al, 2018), and the problem of inactivity in such population being linked to social and adaptive behavioural deficits. The deficits here have capacity for reducing children ability to participate in exercise (Veronique et al, 2018). Divers definitions of "intellectual disability" been debated modified over the years. Intellectual disability thereafter, affects and is affected by individuals in different areas of study ([iiste.org, 2014](#))

According to the tenth revision of the World Health Organization (WHO), Intellectual disability (ID) is a disorder characterized by incomplete or terminated mental development, and by the deterioration of concrete functions at each stage of development that should otherwise boost overall level of intelligence, including cognitive, language, motor and socialization functions. In this condition, ability to adapt to the environment becomes difficult (bhojuvirtualuniversity.com, 2012).

If is a basic requirement for the intellectual development levels of ID persons to be determined using all available information such as clinical signs, the adaptive behaviour in the cultural medium of the persons in addition to psychometric findings. Also, the American Association on Intellectual and Developmental Disabilities (AAIDD) states that apart from the sub-average intellectual functioning, certain limitations are associated with a number of areas of adaptive skills as could be observed. In a nutshell, intellectual disability could be observed as malfunctioning of individual intellect and adaptive conduct. However, adaptive conduct may be conceptual, social and practical kinds of adaptive skills. According to the AAIDD, five dimensions are considered in the study of ID to include dimensions of participation, interaction and social networks. This is in agreement with the International Association for the Scientific Study of Intellectual Disability (IASSID), and aligns with the more recent World Health Organization's International Classification of Functioning, Disability and Health (ICF) (bhojuvirtualuniversity.com, 2012). Persons living with intellectual disabilities suffer sub-average intellectual functioning and other problems in certain adaptive skills such as conceptual, social and practical (American Association on Intellectual and Developmental Disabilities – AAIDD, 2010). The Lower intellectual functioning enumerated earlier, signals the requirement for special treatment to promote the well-being of the intellectual disabled (dcidj.org, 2011).

### **Intellectual Disability Care-Givers**

Caregivers assist in the completion of measurement scales that have to do with functional ability, dependence, neuropsychiatric symptoms, quality of life and mood. (onlinelibrary.wiley.com, 2014) caregivers' impressions are usually relied upon but with reference to a clinician's ratings. Caregivers are set of individuals who help to broaden functional ability, dependence, neuropsychiatric symptoms, quality of life and mood scales (onlinelibrary.wiley.com, 2014) of disabled individuals (Wang, et al., 2015). The role of caregivers is critical towards child development and positive parenting helps to reduce behavioural problems in childhood and adolescence periods. Improved emotional and social, competence is also assured (WHO, 2015). The need for empowering, caregivers has become critical in the intervention for children with developmental disorders. Children and adult with developmental disorders can pose serious challenges while trying to provide care for them as they experience feelings of inadequacy and poor self-confidence (WHO, 2015). Le (2011) averred that any caregiving worth its salt comes from the heart and can promote physical, emotional, mental, spiritual and social well-being of IDIs. Caregivers have diverse responsibilities. While some caregivers render a 24-hour care, others virtually live with the IDIs, and some others care from a distance. (American Society of Clinical Oncology, 2015). This led the National alliance for Caregiving (NAC, 2004) to categorize caregivers into formal and informal in typology. The formal caregivers are individuals and professionals trained for the purpose and these include health care providers, who care for the IDs on salaries (dcidj.org, 2011).

In countries such as the United States of America, United Kingdom, Canada, France, Germany, and others, people with disabilities are cared for by professional caregivers, while family members of persons with intellectual disabilities assist (dcidj.org, 2011). Relating the quality of care afforded children with intellectual disability in developed countries with those in less-developed countries in Africa, the quality of care provided by both relatives and professional caregivers put together is poor (dcidj.org, 2011). The roles of parents in children upbringing, care, quality education and overall success in life are well documented in Ogunleye (2011). In Ghana, the parents and mothers play a magnificent role in the education of normal children and persons living with intellectual disability in the country (Ghana Education Service, 2005). Moreover, children having ID are potential problems to themselves, their caregivers and the society at large, if their conditions are not effectively managed thereby constituting nuisance to the public at large (Angba, 2016; Marieke, Heleen & Thessa, 2019). Desforges (2003) revealed that the notch of the involvement of parent depends on social status of families, educational levels, single parenting and occasionally, ethnicity. The schools teachers can also be categorized as caregivers, as prepared by the University of New York (2015). Generally, there is a high expectancy of teachers to show love, empathy and respect while also motivating them towards right behaviours and as well correcting wrong actions. For every child manipulative skill which helps to function effectively in the society and to meaningfully contribute to national development is sacrosanct (Ogunleye, 2019b) and this does not leave out the intellectually disabled individuals. In the special education parlance professionals serve as caregivers only when they love and esteem pupils, assist them to ample academic achievements and vocational work build their self-esteem and by treat every student with dignity thus enabling pupils to obtain morality (State University of New York, 2015). The World Health Organization (2012) has linked availability of necessary support systems for caregivers to effective performance of their roles and vice versa (dcidj.org, 2011). One can then recommend provision of information, financial support, encouragement of respite care and organization of training programmes as basic necessities towards overcoming challenges associated with the care giving Job.

### **Benefits of Exercise for Intellectual Disability Individuals**

Children having ID appear to be feebler and are liable to premature fatigue than normal children. Their metabolic, mechanical and cardio-respiratory requirements of mobility are higher, resulting into early fatigue and decreased performance in exercise (Angba, 2016). There is therefore, indications that engaging in exercise is beneficial (Angba, 2017). One of the benefits of systematic exercise is that it strengthens the heart and, improves lungs fitness. The cardiovascular system is also able to deliver more oxygen to the body as the heartbeats and the pulmonary system is also gingered to increase the optimal amount of oxygen that the lungs can accommodate. These helpful effects of exercise decrease the possibility of heart attack, stroke and diseases of the coronary artery. Further, people who exercise regularly are likely to have less diseases such as colon cancer and some types of diabetes. Also, exercise strengthens the muscles and allows people to do the tasks they might not be able to do ordinarily. Every physical task requires muscle strength and some degree of range of motion in joints. Indeed, regular exercise improves both qualities. Similarly, Brett et al (2018) posited that elevating the level of physical activity of a people is capable of enhancing both mental and physical health of the people and fosters social cohesion. If physical activity brings health benefits to the normal people and the general population, it follows that it can be useful for

people with ID. Additionally, exercise can be a way out, not only for normal people but also for people with ID (Angba, 2017).

### **Physical Benefits**

Physical benefits of exercise could lead to a decrease in the risk of chronic diseases, mental health problems and premature death. Authors such as Warburton, Nicol, and Bredin (2006), reported improvements in vascular functioning among adults who regularly engage in aerobic activity. Exercise was reported as responsible for lowering the risk of blood clots and regulation of blood pressure. Aerobic exercises helped in decreasing low-density lipoproteins (LDLs, called “bad cholesterol”) and helped to increase high-density ones (HDLs, called “good cholesterol”). Regular exercises were also shown to reduce chronic inflammation while improving musculoskeletal and cardiac health (Warburton et al., 2006). Warburton *et al.*, 2006 further found exercises contributing to achieving stable hormones and insulin levels by endangering homeostasis to maintain blood sugar control, thus reducing the likelihood of one developing diabetes or obesity (Sharma, Madaan and Petty, 2006; Warburton et al, 2006). Although people living ID suffer higher rates of health problems such as obesity, hypertension, higher cholesterol, heart rates of health problems including obesity, hypertension, higher cholesterol, heart disease, diabetes, respiratory infections and osteoporosis as against their age-matched peers, other categories of IDs include the more serious Down syndrome. Meanwhile, Andriolo (2007) cited by Angba (2011) describe Down syndrome is more ubiquitous and it is the easiest chromosomal condition of intellectually disabled individuals. Hence, exercise is helpful (Angba, 2018).

### **Mental and Psychological Benefits**

There are many advantageous deliverables inherent in exercise as it affects one’s mental health. Thus, IDs should benefit greatly. Exercise help to improve intellectual capacity and academic performance (Ogunleye & Ojo, 2019). It also boosts self-esteem and cognitive functioning while ameliorating instances of anxiety, depression and negative mood (Weiss et al., 2003). Current suggestion posits that, at least among the general population, exercise decreases the possibility dementia or Alzheimer’s disease, and it can reduce the onset of any cognitive impairment though, there are only a few studies bothering on people with ID (Warburton et al., 2006). For those predisposed to psychiatric illnesses, including ID, exercise seems to be potent means of improving their mental wellness and reducing the risks of more serious mental illnesses.

### **Physiological Benefits of Exercise**

It is impossible to overstate the physiological benefits of exercise of the IDs. Exercises impact the entire human body from the bones to the muscles and to the organs. Steady exercise improves the muscle and bone strengthens which aids relief of common aches and pains, especially lower back pain, arthritis and fights osteoporosis and muscle loss (Angba, 2014). Exercises improve balance and flexibility. Ease off activities and support physical independence as people grow in age (Ajayi, Abayomi and Ojo, 2013). It equally boosts sexual stamina and relieves pains from menstruation cramp. In addition to balanced diet, regular exercises achieve weight control (Angba, 2012). Exercise at whatever intensity burn calories and this is essential for maintaining healthy weight and body mass index. Exercise is also supportive of the IDs’ cardiovascular system increases cholesterol levels, promote oxygen and blood flow and lowers blood sugar all at the same time. Levels of stamina and energy

then improve and the risks of a number of serious illnesses are reduced. (Warburton et al., 2006). Exercise is also useful for the mind, having been found to prevent and treat depression and anxiety which are evident in IDIs. During exercise, hormones such as endorphins, serotonin and adrenaline which have the capacity for distracting individuals from negative thoughts are released, thus fighting stress and improving mood.

### **Social Benefits**

There is a great level of confidence which is important for a good social life as it relates to the social benefits of exercise. While they grow stronger and faster, there is increase in the self-confidence of the IDIs (Special Olympics, 2001)). Another benefit of exercise is to help improve concentrating skills, and this helps to provide a release valve for stress, pressure and encourage higher levels of endorphins. Concentration on important work and social tasks, leads to long term happiness. One of the social benefits is to create a positive self-image and high self-esteem. By maintaining a healthy weight, there is a fully and frequently positive engagement in social activities. One of the most paramount social benefits of exercise is an improved social life especially when there is participation in sports or exercise with a group, there is a group, there is a greater development of empathy and social skills. This prompts relationship with new friends and eventually leads to new social outlets and gatherings thereby promoting the human-relationship with other people (WHO, 2011).

### **Types of Counselling**

Counselling is both an art as it is science. It is a short term, interpersonal, theory-based, help in any profession. Its aim is a resolution of developmental and situational difficulties. Counselling brings changes in life: thoughts, emotions and behaviours. The American Counselling Association (ACA) and Division 17 (Counselling Psychology) of the American Psychological Association (APA) both defined counselling in deference to a number of common points. These include the issues that Practitioners should complete a prescribed programme of study leading to the master's or a doctorate degree. Counsellors as members of organizations set professional and ethical standards and promote state licensing and certification (Biggs & Hinton-Bayre, 2008). The certification, licensing and the process of adherence to ethical codes assure the public that the counsellor observes minimal educational and professional standards. The Counsellor should possess personal qualities of maturity, empathy, and warmth. On the whole, counselling is active and sharply deviates from simply listening to problems but deals with specific personal, social, vocational, empowerment and educational issues. Counsellors attend to issues coinciding with their expertise (Brown, et al., 2011). These areas may involve intra-and interpersonal issues relating to adjustment to school psychological health, aging, marriage/family, employment and rehabilitation. Clients may have adjustment development or situational concerns and their problems may require short-term intervention. In a structured setting, counselling is theory-based. A number of theories are utilized by counsellors who work in structured environments such as office settings with various individuals, groups and families. Counselling is a process in which one learns how to make decisions and formulate new ways of behaving, feeling, and thinking and counsellors focus on the needs of their clients. In the instance, clients explore their present levels of operation and the changes necessary for achieving personal objectives. Counselling therefore, involves choice and change which evolve through different stages such as exploration, goal setting and action (Guenther, 2009). It also encompasses various subspecialties like school counselling, marriage and family counselling, psychological health counselling, essentials of

counselling, gerontological counseling, rehabilitation counseling, addiction counselling and career counselling. These have respective education and experimental requirements for practitioners counselling can be more precisely defined as either short-term, interpersonal, or theory-based processes of helping persons who are basically psychologically healthy resolve developmental and situational problems (Greenwood, 2002). Counselling activities are guided by ethical and legal standards and go through distinct stages from initiation to termination (Guenther, 2009).

The broad aims of counselling which depend on the situation, the environment and on training include:

1. Helping clients and patients to gain insights into the origins and development of emotional difficulties, leading to an increased capacity to take rational control over feelings and actions;
2. Altering neurotic behaviour;
3. To assist clients and patients to move in the direction of fulfilling their potential or achieve an integration of conflicting elements within themselves; and
4. To provide clients and patients with the skills, awareness and knowledge, which will enable them to confront social inadequacy.

There is a number of counselling involved in the role of promoting the standard living of the IDIs. The common types of counselling are; Marriage and Family Counselling, Educational Counselling, Mental Health Counselling, Substance Abuse Counselling and Rehabilitation/Exercise Counselling.

### **Importance of Counselling for ID Care givers**

Importance of counselling are Facilitation of behavioral change; enhancement of coping skill; promotion of decision making; improvement of relationships; and facilitation of potentials. It aims at resolving developmental and situational difficulties (Beauchamp *et al.*, 2005). Individuals with intellectual disabilities in developed countries attain increased life expectancy (e.g Stuart, 2012) because intellectual disability support organizations use multi-modal expressions such as storytelling, dance, music, drama and art as support mechanisms. These approaches, however, are often not planned or structured in a proper counselling intervention for meaningful and enduring change. Indeed, counselling is seen as a set of enjoyable activities that yield secondary benefits in facilitating communication and interaction among people with intellectual disability (Stuart, 2012). The use of exercise counselling options is an appropriate strategy within a therapeutic framework for provision of counselling support (Stuart, 2012). Many caregiver interventions reported improvement in caregiver outcomes such as health and well-being but only a few assessed economic impacts of such interventions such as health care savings which attend to reduction in formal health care utilization by the IDIs. Again, most intervention studies fail to quantify cost of delivery of intervention e.g costs of training the interventionists, time, travel and monitoring costs among others (Bertrand, 2006). Beauchamp, et al., (2005) reported that caregivers who received the exercise intervention presented fewer depressive symptoms and lower distress levels compared to those in the usual care treatment. An analysis of the widespread use of the programme suggested substantial government savings in expenditure through the delay in nursing home placement (Long, et al., 2013). Studies have reported the impact of integrating

caregivers into discharge planning. Against usual care such integration and follow-up support resulted in magnificent reduction in readmissions at 90 and 180 days with an overall lowering of care post-discharge (e.g. Huang and Liang, 2005; Legrain, et al., 2011). These findings take as a whole suggest relatively modest investment in the integration and family caregivers support which can generate huge health care cost savings. In another vein, the long-term impact of exercise on the caregiver and the potential savings that might be accrued by preventing adverse downstream effects have not been seriously explored. Other studies that evaluated exercises as IDIs' caregiver interventions proved that these interventions can be healthy and result in reduced cost and time to the caregivers (Gitlin, et al., 2010a; Nichols, et al., 2016).

### **Exercise Counselling and ID Caregivers: The Relevance**

Persons with intellectual disability have earlier mortality and higher prevalence of serious health conditions than the general population. This group has high levels of obesity (Rimmer & Yamaki, 2006), cardiovascular disease (Draheim, 2006), osteoporosis, and type II diabetes (Draheim, McCubbin, & Williams, 2002), all of which have been traced to sedentary lifestyle. Exercise Counselling is offered at various levels; to an individual, to a family, to a group, or to an entire community. According to studies, over two-thirds of people with mild to moderate levels of an intellectual disability do not participate in adequate levels of physical activity for health improvement (Temple, et al., 2006); (Warburton, et al., 2006). Few studies, however, examined the benefits of exercise for people with intellectual disability and suggested that the benefits are comparable. Regular participation in exercise intervention programmes generate improvements in cardiovascular fitness and muscular strength in line with what obtains among caregivers (Rimmer, Heller, Wang, & Valerio, 2004), psychosocial well-being, and facilitate a decrease in bodyweight (Heller, et al., 2004).

Apparently, with these positive profile influenced by exercise, caregivers should not in any way be left out of this advantageous intervention as identified among the IDIs. Communication is the process of sharing information between two or more people. The information share may include ideas, emotions, knowledge or skills. In counselling, communication is key as it may take the form of explaining a point, expressing a feeling, or asking a question. In counselling, two-way communication is recommended where caregivers share information their counsellors. This however, is paramount in exercise counselling for the IDIs' caregivers. The purpose of this communication are to: Get information from the caregivers; Give information to the caregivers; Help the caregivers learn and apply coping skills to deal with problems; Persuade the caregivers to adopt positive ways of doing things; Help the caregivers make effective decisions; Help the caregivers express their emotions, feelings and thoughts.

### **Conclusion**

This paper concludes that many caregiver interventions must be developed for alleviating the negative effects of care giving. Experiments well-designed and conducted in different settings, have demonstrated that caregiver education and skills training, environmental modifications of care recipients' homes, care coordination and management, counselling, self-care and relaxation training, respite programs and other approaches especially on counselling can help to improve the quality of life for both caregivers and care recipients. Such intervention also increases caregivers' abilities and confidence and delay care recipients' institutionalization.

Future research needs to investigate effectiveness of exercise counselling to determine if further modifications or cultural adaptations are needed. Work is also needed in order to identify optimal strategies to disseminate and sustain effective models in diverse communities (Napoles et al., 2013). Since enormous care giving research focused on improving outcomes for family caregivers and often on a single caregiver rather than on situations especially when it comes to the situations of the IDIs in which several caregivers are involved, new dimension of studies are advocated. Although the results from these studies may apply to a variety context of caregiving, additional research on caregivers improved attendance to the IDIs needs is needed. More so, there is therefore need for all:

1. Caregivers to be involved in exercise counselling in order to promote their well-being and quality life.
2. Caregivers to adequately and promptly participate in exercise counseling that will also make them active in other aspects of their lifestyles.

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