



Physical Exercise or Activity and Healthy Ageing

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Abstract. This paper looked into the issue of physical activity as aiding healthy ageing. Ageing is an imperative word for everybody that implies that no one can run away from ageing, thus, everybody should be prepared for it as soon as possible by minimizing sedentary living for an active one to make one's old age interesting and independent. Most of the diseases of the ageing population could be averted or minimized with regular physical activity or exercise (Physical activity is used synonymously with exercise in this paper). Ageing can be related to life changing situations like retirement and change of environment which can breed loneliness and lonesomeness thus, the need for providing enabling environment for adults to engage in physical activity/exercise to help them mix properly, share their ideas and mitigate loneliness. The paper expressed the fact that healthy aging brings joy to older adults who are the repertoire of knowledge and wisdom in every society. The authors reviewed training for physical activity/exercise and necessary precautions towards exercise by the elderly. The paper recommended among others that every individual should be involved in daily physical activity in order to stay healthy, the government at all levels in Nigeria and all over the world must make policies that would aid healthy ageing and individuals must learn to practice healthy behavior by way of eating balanced diet.

Keywords: physical activity/exercise, ageing, healthy ageing, diseases, older adults, training.

1. Introduction

Ageing is something no one can run away from. Realizing this fact, each person must be prepared to make his/ her old age an interesting period full of lively activities. This calls for adequate preparation

towards ageing. In preparation for healthy ageing, each person must be educated to minimize sedentary life as much as possible in order to make physical activities a part of one's life before reaching the older age as there are so many conditions associated with ageing but which could be minimized with physical activity right from one's middle age and not necessarily when old age arrives.

World health organization (2014) lists common health conditions that an ageing person can experience such as back and neck pain, osteoarthritis, chronic obstructive pulmonary disease, diabetes, depression and dementia among others. These conditions can be minimized or averted if there is a conditioning to daily physical activity on a moderate level.

WHO (2021), delivering 2021-2030 as a decade of healthy ageing states that the decade is to reduce health inequities and improve the lives of older people, their families and communities through collective action. Four pillars had been set aside to achieve healthy ageing among the elderly. These are, changing how one thinks, feels and acts towards age and ageism, developing communities in ways that foster the abilities of the older people, delivery of person centred integrated care and primary health services responsive to older people. All these key pillars are to be holistically treated to bring about healthy ageing among the older population. Thinking that old age will come and taking prompt action in preparation for it is key. This calls for the government and communities in providing a favourable environment free of violence for older people and put in place quality health care services for easy access for the elderly. These will encourage older adults to engage in exercise/ physical activities that will make them fit for all time. There is also the

need for providing a supportive and encouraging social environment which will enhance the older adults to mingle thus preventing them from loneliness and lonesomeness. A supportive social environment will help adults to share their experiences and stories and possibly engage in walking and playing local games with people around them thereby fostering their happiness.

Older people are seen as incapacitated and dependent. Societies and their families sometimes see them as a burden to them which should not be if society really wants them to enjoy their lives. Therefore, older people should be kept company, and places of interest should be put in place for them for their leisure and environments should be conducive for them to engage in simple physical activity which will culminate in healthy ageing.

2. Ageing

WHO(2021) explains that ageing is a resultant effect of the accumulation of a wide variety of molecular and cellular damage over time which leads to gradual decrease in physical and mental capacity hence the elderly could not think as they used to do in their active years nor physically active as they used to be. This inactivity leads to a series of piled up diseases which eventually leads to death.

WHO also explains that ageing can be associated with life-changing situations such as retirement, relocation to new places, death of friends and partners and lack of family fellowship. These calls for providing avenues for better social interaction with these elderly in order to mitigate the effect of these changes in them to make them age well.

Ageing , therefore is the process of becoming older which is likely to bring about inactivity. Ageing is accompanied by gradual changes in most body systems (National Institute of Ageing, 2022) which involves physical, psychological and social changes. Ageing has also being viewed as the time related deterioration of the physiological functions necessary for survival and fertility. However, WHO (2021) states that the characteristics of ageing should not be misconceived as diseases of ageing such as cancer and heart disease

Ageing is thus the time when the older people experience the incoming of several health issues, diseases and problems and this is usually referred to as geriatric syndrome which may be related to health issues like urinary inconstence, falls, mental concussions which can be accompanied by hallucinations which bring unnecessary fear to the elderly. When experiencing the geriatric syndrome,

their thoughts become incoherent, expressions become unstable and they suffer alienation of minds. Some older people age well without experiencing much of these syndromes. Some older people suffer at old age not due to genetic factors but due to their physical and social environments. Older people living in environments that are not encouraging and supportive are likely to experience wild and 'bitter' ageing.

Realizing that older people are the think tank and repertoire of knowledge in societies, they must be encouraged and helped to age well in order for the younger generation to tap from their wealth of knowledge and experience. Therefore, society at large must not allow old age to be controlled by declines in mental and physical capacities so that societies will not be negatively impacted. The policymakers in every society of the world,(Nigeria inclusive),and family members must ensure the provision of a supportive environment for the elderly economically, socially, physically and psychologically. Making preparation for wholesome ageing will lift the burden of ageing of the older adults off the necks of their families.

2.1 Healthy Ageing

Planning for healthy ageing is germane for each person and especially for the older adults; the result of which is happiness, not only for the aged but for people near them, hence, they would not be perceived as burdens to the society and the relatives. Many aged people walk the streets of cities, begging because there was no preparation for the time of old age and Nigeria policymakers had not earlier made provisions for old age for people while the poor relatives could not afford to support their living. Teaching the elderly to be independent through healthy living, will go a long way to avert these old age health and social problems.

Daskapoulou and Prima (2017), in their study titled "Physical activity and healthy ageing: A systematic review and meta-analysis of longitudinal cohort studies" submit that exercise/ physical activities are important components of healthy ageing.

Healthy ageing will mitigate falls, pains, cognitive impairment and other vices associated with unhealthy ageing. The authors proposed that a well-balanced exercise programme that includes daily aerobic ,strength balance and flexibility should be interjected into daily physical activity.

Eckstrom, Neukan, Katzin and Wright (2022) in their submission in their study on "Physical activity and healthy ageing" state that healthy ageing involves maintaining independence, purpose, vitality and quality of life into old age despite unexpected old age medical challenges, accidents and other unhelpful social determinants of health. They expressed further that because ageing is a complex process involving variables such as genetics, lifestyle factors and chronic diseases; these interact to determine the varying ways individual ages. Helping adults to age well thus need counselling in order for them to meet the needed minutes of regular physical activity. Counselling the adults will help them improve on their daily/ weekly physical activity as this will eventually improve their health, functional capacity, quality of life and independence. Participation in regular physical activity will help reduce a lot of functional declines associated with ageing. Tokana (2009) states that participating in physical activities and on regular basis is an effective way to reduce or prevent health problems associated with old age.

Augustino, Wu, Koukounari, Haro, Tyravolas, Panajiotakos, Prince and Prina (2020) in their study titled " The impact of physical activity on healthy ageing trajectories: evidence from eight cohort studies", found that:

- a) physical activity is strongly associated with healthier ageing trajectories
- b) it leads to better cognitive function trajectories
- c) leads to improved frailty trajectories and
- d) that physically active older adults had almost 40% increased odds of experiencing healthy ageing compared to their non-physically active counterparts.

The findings suggest that there is potential for physical activity to increase baseline health and functioning thereby reducing the rate at which older adults decline. To make the older adults evade hospitalization and being inactive, older adults should be encouraged to be involved in moderate physical activity. The authors state the public health implication from the empirical evidence in the study that, physical activity has a positive impact on supporting healthy ageing thereby, reducing health age functioning declines in old age.

3. Training for physical activity

Everyone needs good health but achieving this is a matter of personal decision and to make this important decision will enable one to stay healthy for life. Physical activity is good for one's both mental and physical health, helping the individual to be able to do what he or she wants without necessarily being dependent on others. The National Institute of

Ageing (2022) alluding to physical Activity Guidelines for Americans states that it is good that a person is involved in doing at least 150 minutes of moderate intensity aerobic exercise like brisk walking or fast dancing; that being active at least three days a week is good. Among the recommendations of the guidelines is that engaging in muscle strengthening activities like weight lifting or doing sit up for at least two days a week is equally good.

However, the older aged people cannot start doing these overnight, hence before reaching the older age, professionals in physical exercise should have been educating and training middle-aged people to engage in these activities in order to be fit for old age practices to keep them healthy and independent as they grow older. This implies that older adults should be trained for physical activity/exercise, the success of which would be measured by their rate of adaptability and responsiveness to both endurance and strength training.

Training for older adults like others is of various types such as:

- **Endurance Training:** this involves walking, jogging, biking, swimming, aerobic dance and golfing among others. Endurance training improves cardiovascular function keep arteries flexible for free blood flow and it lowers the resting heart rate. It also helps to lower blood pressure, lowers blood sugar levels and reduces body fat. Endurance exercise improves the mood so that older adults look happy, induces sleep thereby reducing anxiety and depression more so when they engage in these activities with peers. The study of Augustino et al (2020) reveals that the above can be achieved with regular activities of about 3-4 hours every week.
- **Resistance Exercise:** This involves using light weights. It enhances muscle mass, strength and preserves bone calcium.
- **Flexibility Training:** This has to do with stretching exercises with which one can warm-up or cool down before or after endurance exercise.
- **Exercises for Balance:** The helps to maintain balance in order to prevent falls and injuries in adults(National Institute of Ageing)

According to Harvard Alumni Study in 1978, it was found that men who exercise regularly are 39% less likely to suffer heart attacks than those who are involved in sedentary lifestyles (health.Harvard.edu,

2022). The research also reveals that many of the changes attributed to ageing are caused mostly by diseases (Harvard.edu). There is, therefore, a great need for proper exercise in order to live a life of vitality.

The study also found that resuming exercise training in the five- 50 year old men who were placed on bed rest for three weeks, had gained weight of between 14-28% with their cardiac functioning suffering with a rise in resting heart rate, rise in blood pressure and a fall in maximum pumping capacity. After being exposed to exercise, at the end of six months, the men had an average of 10pound weight loss (of the excess weight gained), their resting heart rates, blood pressure and their hearts' maximum pumping abilities were back to their baseline level. This implies that participating in physical activity/ exercise leads to improved health thus mitigating declining health in people generally.

4. Precautions

Harvard Health (2014) states that precautions should be put in place when older adults engage in daily physical activity. Some of these precautions are listed below. That older adults should

- a) get medical checkup before embarking on moderate or vigorous exercise
- b) drink plenty of water before, during and after exercise
- c) warm-up before exercise and cool down after

Others are that older adults should use good shoes, engage in varieties of activities and when they feel sick, they should not engage in any exercise.

Apart from physical exercise/ activity ageing adults should pay rapt attention to their diet because a wholesome diet plays a great role in slowing down the ageing process.

Hard health recommends that adults should desist from consuming saturated fats and food items filled with fatty acids and cholesterol. They should endeavor to consume more fish and nuts in which mono saturated fats are found. Both adults and youth should eat lots of fruits and vegetables, cut down on salt and processed foods. Adults should complement their meals with simple multivitamins on a daily basis.

Ageing is a matter of mind. As you think you are, so you will age. Older adults should be educated to have a positive thought about ageing by keeping their minds active and building strong social networks in other to enjoy accompaniment.

5. Benefits of Physical Activity/ Exercise

The benefits of engaging in physical activity/ exercise cannot be underestimated as being engulfed in exercise prevent age-related diseases.

Mazzeo and Tanako (2001) highlight some of the benefits of physical activity such as reduction in the risk of coronary heart disease, diabetes mellitus and insulin resistance diabetes, hypertension and obesity, improvement in bone density, muscle mass and energy metabolism. The benefits also include cardiovascular fitness and functional capacity that will help the elderly to maintain their body posture in accordance with their age, maintain independence as regards to daily living.

The study of Warburton, Nicol and Bradin (2006) on " Health benefits of physical activity: The evidence" submit

That there seems to be a linear relationship between physical activity and improved health status:

that with further increase in physical activity, there will be a better improvement in health status; and that an increase in physical activity which leads to physical fitness will reduce the risk of premature death.

Erikson, Liestol, Bjornholt (2001) in their study "Changes in physical fitness and changes in mortality" reveal that physical activity is associated with improved psychological wellbeing, through reduced stress, anxiety and depression. They explained that psychological wellbeing is germane to the management and prevention of cardiovascular disease and other diseases such as osteoporosis, cancer, depression and hypertension.

In the study of Janssen and LeBlanc (2010),it was established that physical activity is of immense benefit to both the young and old but that physical activity should be of moderate intensity and that aerobic based activities that stress cardiovascular and respiratory systems have the greatest benefits other than for bone health.

6. Summary

In order to address the adverse health conditions that are associated with economy, social and health care, good health policy targeting both young and old must be solidly put in place, funded and monitored for proper implementation by government at various levels. Individuals should develop interest in physical activities as they are being educated with its importance by professionals. The implication of this paper includes among others that individuals should

uphold good health ideas to age well and be functional to be able to do the needful everyday without having to wait for others to help them out because depending on others for all could be frustrating and thus lead to premature death especially when needed help seems not to be available by those who are expected to give such help. Inactivity breeds sickness and brings a lot not medical expenses with it, thus, physical activity should be embarked upon to lessen hospital bills while promoting good health and healthy ageing.

7. Recommendations

Based on the above, the following are recommended:

- The older adults must be educated and counseled on the importance of engaging in physical activity.
- The government at the Federal, State and Local levels should promulgate good health policies that will be of great benefit to older adults while also making access to health care facilities easy and less costly for the older generation.
- Older adults should be encouraged to engage in healthy behaviour especially through eating balanced diet, refraining from things such as tobacco and alcohol that can harm their health.
- Educating and encouraging older adults on healthy behaviour will reduce the risk of non-communicable diseases thereby, increasing their physical and mental capacities thus, removing early care dependency.
- Supportive social environment should be made available for the older adults to enable them network with friends and family members in order to limit the effect of loneliness.
- Also supportive, violent and injury free physical environments should be provided for older adults in order to encourage them to participate in physical activity. Children of older adults should give them necessary social support by not neglecting to visit them.
- Various programmes should be put in place to educate the older adults of the functional benefits associated with regular physical activity/exercise.
- Professionals in Sports and Exercises should design interventions that will increase involvement of older adults in regular physical activity as well as encourage and

improve adherence and compliance to such programmes.

- Above all, health programmes should target people of all ages in order to be fully prepared for healthy ageing.

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