

**EFFECT OF PHYSICAL EXERCISE ON QUALITY OF LIFE OF STROKE SURVIVORS
IN OSOGBO OSUN STATE NIGERIA**

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BMR, M.Sc. (Ife) PGDE (NOUN)
14/68OM003**

APRIL, 2021

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**SUPERVISOR
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APRIL, 2021

DECLARATION

I, OJO, Israel Arogundade (1468OM003) declare that this thesis titled “Effect of Physical Exercise on Quality of Life of Stroke Survivors in Osogbo Osun-State Nigeria”, has been written by me. The information derived from the literature has been fully acknowledged in text and the list of references provided. No part of this research was previously presented for another degree of any university.

.....
OJO, Israel Arogundade

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Date

CERTIFICATION

This is to certify that this Thesis on Effect of Physical Exercise on Quality of Life of Stroke Survivors in Osogbo, Osun State, Nigeria was carried out by OJO Israel Arogundade (14/68OM003) and had been read and approved as meeting part of the requirements for the Award of Doctor of Philosophy (Ph.D.) Degree in Human Kinetics (Exercise and Sports Science).

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Internal/External Examiner from Related Department

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External Examiner

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DEDICATION

I dedicate this work to my late parent Mr and Mrs Kolapo Rachael Ojo-Alatise.

ACKNOWLEDGEMENTS

My foremost gratitude goes to God Almighty for giving me grace, guidance, wisdom and good health to undergo this study. Also, my appreciation and heartfelt gratitude goes to my erudite Supervisor, Prof. Olufunmilola L. Dominic for her expert advice, direction and mentorship that enabled me complete this work.

A special word of appreciation goes to the current Head of Department of Human Kinetics Education, Prof. O. O. Obiyemi and the past HOD, Prof A. A. Adesoye for their contributions to make the work better. The quality of this work would not have been possible without the contributions of the Internal/External Examiner, Dr K. A. Oluseye and also the Postgraduate Coordinator, Dr. T. O. Ibraheem.

My thanks go to Dr. S.T. Bakinde, Dr. Memunat T. Ajadi, Dr. B. Adebayo, Dr. M. G. Aina, Mr. Adeoye and Mrs. Dauda and other Lecturers in the department for their support during my course of study. I want to appreciate my colleagues in my working place, LAUTECH Teaching Hospital, Osogbo, Osun-State starting with my Head of Department, Mrs. M. I. Olaoye, for the permission to start this program. I also appreciate Mr. O. A. Adeyemi, Mr A.A. Ojeyinka, Mr. K. Lasis, Mrs. O. Oladimeji, Mr. A. Ademoyegun, Mrs T. Elugbaju, Mrs I. Aghedo, Mrs A. Adeoye, Mr Y. Naheem, Mr. Awogboro, Mr W. Rasak, Mr. S. Nathaniel (my research assistants); Mrs Adelowokan, Mr. Y. Adewuyi and others for their support towards the completion of this study.

I am grateful to all the 21 stroke survivors that participated in this study and Mr Alatise Tosin (my son), Mr Abah Abel (statistician) and Mr I. Y. Seidina, Mr Sheu Ya' Mursur that helped in the graphic, printing and analysis of the study, God bless you all. Many thanks to Deaconess Toyin Fanu, for her financial support when it was difficult to pay my school fees. Thanks to Prof. Seyi Adeyeba, Prof and Mrs. Labo Popoola, Prof. R.A. Adedoyin, Dr. A. T. Onigbinde, Hon(Dr) and Prof. (Mrs.) Oladimeji also Prof O.A. Onifade for their words of advice and moral support during this program, my colleagues and staff of the Redeemer's University, Ede. Prof. Sokunbi, Head, Department of physiotherapy, Dr. Adeyemi, Mr. Joshua Afolabi and others for their support during this study.

Finally, I appreciate my Pastors, Pastor Olumuyiwa Emmanuel & Dapo, Pastor Michael Olusoga for their prayers, my fellow students Mr. J. Abolarin, Mrs. Esther Whoba, Mrs. Hannah Musa, Mr. Ayo Olaoye and others; my siblings Mrs Popoola Jumoke, Chief Tope, Mr. Dosu and Mr. Dotun

Ojo-Alatise. Lastly, to my beloved wife Mrs T. Ojo-Alatise and our children, Oluwatosin, Anuoluwayimika, Divine favour and Olayinka Alatise for their understanding and moral support, perseverance and prayers throughout the course of study. Thank you all.

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ABSTRACT

Exercise is meant to minimize sedentary living, improve health and enhance physical fitness, performance and quality of life of individuals recovering from chronic conditions such as stroke. Most stroke survivors assume sedentary life style due to functional limitations which could be the reason behind their low quality of life. This study examined the effects of physical exercise on quality of life of stroke survivors in Osogbo, Osun-State. The objectives of the study were to investigate the effect of exercise on: (i) quality of life (QoL); (ii) well-being; (iii) functional capacity; (iv) cardio-respiratory endurance ($VO_2\text{max}$); and (v) cardiovascular parameters (Systolic Blood Pressure (SBP), Diastolic Blood Pressure (DBP), Heart Rate (HR) of stroke survivors in Osogbo, Osun-state.

This study employed pre-test, post-test experimental research design with a target population comprising all 25 registered male and female outpatients who were either right or left hemiplegic stroke survivors in the two tertiary hospitals at Osogbo, Osun-state. Purposive sampling technique was adopted to select all the 25 out-patients. However, during the intervention, four of the participants were excluded due to their inability to fulfill all the inclusion criteria. Finally, 21 participants formed the sample for this study. World Health Organization Quality of Life Questionnaire (WHOQoL) (2004) was adapted while reliability co-efficient of $r = 0.90$ was obtained using test retest method. A pilot study was carried out to ascertain the usability of the exercise programme and calibration of the instruments. The research questions were answered with descriptive statistics of frequency, percentage, mean and standard deviation while Analysis of Variance was used to test the hypotheses at 0.05 alpha level.

The Findings of the study were that:

- (i) aerobic, flexibility and strengthening exercise have positive effect on Quality of life of stroke survivors (47.0%) ($p=0.00$).
- (ii) aerobic, flexibility and strengthening exercise have significant effect on well-being of stroke survivors [$F(2,19)=37.77$, $p=0.00$].
- (iii) aerobic, flexibility and strengthening exercise significantly improved stroke survivors' functional capacity [$F(2,19)=69.37$, $p=0.00$].
- (iv) aerobic, flexibility and strengthening exercise significantly improved cardio respiratory endurance of stroke survivors [$F(2,19)=5.29$, $p=0.008$]; and
- (v) there was a significant reduction in cardiovascular parameters (SBP [$F(2,19) =4.209$, $p=0.031$]; DBP [$F(2,19)=6.65$, $p=0.018$]); and HR [$F(2,19)=5.29$, $p=0.015$] of stroke survivors.

The study concluded that; physical exercise improves the quality of life, efficiency of cardiorespiratory fitness and functional capacity of stroke survivors. The implication of this

study is that improvements in quality of life of stroke survivors are possible with regular physical exercises. It was therefore recommended that; aerobic physical activity programme should be designed for outpatient stroke survivors with stable cardiovascular parameters after their discharge from the hospital using the exercise protocols.

Word Count: 429.