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## COMBINED AEROBIC AND RESISTANCE EXERCISE TRAINING CARDIO-PULMONARY FUNCTIONS AND BODY COMPOSITION OF INDIVIDUALS WITH BI-VENTRICULAR HEART FAILURE

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The study aimed to investigate the effects of combined aerobic and resistance exercise training (ET) on selected cardio-respiratory and body composition variables of Nigerians with chronic bi-ventricular heart failure (BVF). Sixty six subjects with chronic BVF in Class II and III of New York Heart Association (mean age  $54.0 \pm 1.6$  years) recruited from a Nigerian tertiary Hospital participated in the study. They were randomized into exercise (EG) and control groups (CG). Exercise group performed 12- week of aerobic and resistance training for 60 minutes three sessions per week. Selected cardio-respiratory and body composition variables were measured pre and post intervention in both groups. Data was analyzed using SPSS-21 package. Level of significance was set at 0.05. There was no significant difference in the measured variables between the groups at baseline ( $p > 0.05$ ). Significant improvement was seen in EG in all the measured Cardiopulmonary parameters variables except the diastolic blood pressure ( $p = 0.174$ ) while significant increase was observed in rate pressure product and mean arterial pressure in CG. No significant improvement was observed in the control group ( $p > 0.05$ ). In the exercise group, significant increase was observed in the % body muscle ( $p = 0.001$ ), significant reduction in % body fat ( $p = 0.005$ ), fat mass ( $p = 0.033$ ), body mass index ( $p = 0.046$ ) and resting metabolism (0.003) while no significant difference was observed in the CG. Combined aerobic and resistance exercise training improved cardio-respiratory and body composition variables in patients with chronic bi-ventricular heart failure.

### Biography

Dr. Olufunke Adewumi Ajiboye, is the Director / Head, Physiotherapy in Lagos University Teaching Hospital, Lagos Nigeria. She has published more than 17 papers in peer reviewed Journals of International Standard and has presented her research outcomes in more than 18 Conferences both at National and International level. Part of her research outcome won the best Poster presentation Award from Africa Region in Singapore at WCPT in May 2015. Many of her research outcomes had won Awards at national and international level. She won Fellowship Award from Nigeria Society of Physiotherapy in 2014 and Award of Excellence from Nigeria Society of Physiotherapy in 2015. She was recently elected as a Council member of the National Postgraduate Physiotherapy College of Nigeria. She is a fellow of and member of Nigeria Society of Physiotherapy Reform Committee and also a member of Governing Board of University of Abuja Teaching Hospital, FCT, Abuja Nigeria.

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