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Comparison of VO₂ max among Aerobic, Bharathanatyam and Kandyan dancers

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Dance is a Rhythmic activity that stresses the body in submaximal intensity which increases VO₂ max through increased cardiac output. The objective of this study was to compare VO₂ max among aerobic, Bharathanatyam and Kandyan dancers. To achieve the objective ninety (No 90) women dancers were selected from India and Sri Lanka, and their age were 17 (± 1.3) years. They were classified into Aerobic dancers [(AD)(n=30, from India, practicing aerobic dance 60 (±15) min / day/ 3 days / week over the period of minimum 3 years)], Bharathanatyam Dancers [(BD) (No 30)], from Sri Lanka, practicing Bharatha natyam 60 (±15) min / day for 3 days / week over the period of minimum 3 years)] and Kandyan Dancers [(KD)(No 30)], from Sri Lanka, practicing Kandyan dance 60 (±15) min / day/ 3 days / week over the period of minimum 3 years)]. VO₂ max was assessed for all the selected subjects by Queen's step test, the collected data were statistically treated by using one way ANOVA, 0.05 level of confidence was fixed to test the significance. When the obtained 'F' ratio was significant, Scheffe's post hoc test was used to find out the paired mean difference. Within the limitations set for this study, it was concluded, that the entire three dance groups were significantly differ on VO₂ max. However aerobic dancers have better VO₂ max than the Bharatha natyam and Kandyan dancers. Hence it was recommended that People need to increase O₂ utility of the muscles can undergo aerobic type (Submaximal) of activity. Further Scientific research needed to assess the physiological demands of various dance and dancers.

Keywords: Aerobic Dance, Bharatha natyam Dance, Kandyan Dance, VO₂ max