

# In vivo randomised clinical trial of tactile surface aqua aerobic exercise for type 2 diabetes mellitus

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## Abstract

**Statement of the problem:** Type 2 Diabetes mellitus is a chronic hyperglycemia condition due to the improper insulin action either completely or partially though the insulin production is normal. This condition is on rapid incidence and prevalence rate as age increase. Different researchers and clinicians are on evidence based practice and trials to find a permanent solution of the condition. Recent studies have proven proper diet; life style modification, exercises and some medication can give effective control on the effects of type 2 diabetes mellitus condition. The purpose of the study was to evaluate the effect of tactile surface aqua aerobic exercise on type 2 diabetes mellitus in young adults. **Methodology and theoretical orientation:** the study was commencing after the approval of institutional ethical clearance. Group A (15 subjects) for tactile surface aqua aerobic exercise and group B (15 subjects) for conventional on ground exercise were randomly allocated by probability sampling design. **Finding:** Statistical analysis was tested with t test at 95% level of significance ( $p < 0.05$ ). Both the group showed significant difference and Significant difference was observed between Pre and post of group B since T value giving its p-value 0.000 is less than 0.05, which indicated that group A is more significant than group B. **Conclusion and significance:** Group A showed better control of type 2 diabetes mellitus in subjects doing tactile surface aqua aerobic exercise then just conventional types of exercises to control diabetes mellitus. **Recommendation:** physical therapy exercise in aqua environment with tactile surface that stimulate tactile system can be adopted for better control of type 2 diabetes mellitus condition.

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## Biography

Dr. Satyam Bhodaji born on 4th may 1993 in Goa, India holds the degree of bachelors and masters in Physiotherapy and Community physiotherapy & Rehabilitation (CBR), Orthopedic Manual and Myofascial Therapist (COMT). Head of research department at Dr. Ketan Bhatiker's Sports Physiotherapy and Aqua Rehabilitation center (Dr. K.B SPARC), Ponda Goa 2018 and Assistant professor, Head of Department of community Physiotherapy at Mahatma Gandhi Mission School of Physiotherapy, Aurangabad 2019 till date. He is in editorial

board members in 5 scientific journals and in organizing committees of international conferences. Dr. Satyam has written more than 30 original articles in various national/ international journals, participated and presented 5 plus conferences', 3 plus copyrights and is active participant of various community health and awareness camps and activities, also has Assist world record for attending most number of topics in live international webinar in physiotherapy and more achievements in process.