

Project Title : New Directions For Research in Diabetes in India : The harbinger for future Diabetes - An Adolescent and preconception health perspective (DERVAN Cohort) Stage1

| Project Information | Project Output | | |
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| Funded by Rajiv Gandhi Science and Technology, Mumbai | Start Date 4 th February 2019 | Publications 6 | Equipment sanctioned Yes |
| Project Cost 4.35 Crore | Project status Ongoing | Enrolled Subject 1100 | Manpower 14 |

Principal Investigator: Dr Suvarna N Patil,

Designation: Associate Professor, General Medicine.

Co- Principal Investigator: Dr.Netaji Patil, Dr. Vijay Dombale, Dr. Arvind Yadav, Dr. Anup Nilawar, Dr.Unmesh Santpur, Charudatta Joglekar, Ulka Banavali, Rohit Bhat

Email ID: info@bklwrmc.com

Project Summary

Introduction Precise impact of nutritional insufficiencies in adolescence as a risk factor for non-communicable diseases (NCD) in later life as adults remains largely unknown. We are conducting research into the effects of nutrition on adolescent girls of Ratnagiri district by a prospective cohort study (aDolescent and prEconception health peRspective of Adult Non-communicable diseases cohort).

Our study focuses on the physical health, nutritional parameters and cognitive profiles of adolescent girls, during the prenatal and postnatal period and we aim to follow this cohort and their offspring for 20 years. Methods and analysis Cohort recruitment began in June 2019. Our aim is to recruit more than 1500 adolescent girls, age 16–18 years, over a period of 3 years. The recruit's cognition, diet and physical activity will be recorded. The following investigations will be performed: body composition by anthropometry and bio-impedance,

and blood pressure, fasting blood sample to measure glucose, lipids, micronutrients and hormones, abdominal ultrasonography to measure liver, pancreas and kidneys. A bio-repository has been created for long-term storage of blood, urine and saliva samples for future analysis. By this longitudinal study, we aim to identify the effects of malnutrition on the behavioral and biological measures in adolescent subjects and evaluate if these are associated with the onset of NCDs in adulthood