Clinical research in diabetes

Background & Aim: The rapidly world-wide growing frequency of diabetes, and the failure to achieve satisfactory glycemic control and prevention of secondary complications indicate an urgent need for a different approach toward diabetes management. Here we present initial data obtained from a novel diabetes strategy aiming to propagate and widen the range of successful individual management versus the enlarged family and community. Such strategy believes that urbanic loneliness has a major role in induction of diabetes, and education with programmed changes in community life style might support efforts to prevent diabetes development.

Subjects & Methods: First and second degree adult family relatives of diabetic, and obese, non-diabetic children were studied. Their mean age was 58±12yrs, and about 40% had either diabetes or dysglycemia (IFG, IGT, IFG/IGT). The majority of the adult subjects were of Arab ethnicity. In addition to diabetes, adult family members were diagnosed with overweight and dyslipidemia. About 50% had a history of multiplex family diabetes, and many had a history of early CVD morbidity and mortality. Recruitment of the adult group was obtained through their motivation to improve their diabetic child condition by increased family involvement, and by general education focusing on the role of overweight, the role of insulin resistance, hyperglycemia and dyslipidemia in acceleration of aging processes. In >50% adults a change or initiation of diabetic pharmacotherapy was initiated following the encounter.

Results & Conclusions: A significant improvement of familial life style was obtained in the majority of the adult subjects when the focus of education was switched from blood glucose level to accelerated aging process. Improvement was reflected by decreasing weight, fasting insulin level, fasting blood glucose level, lipid profile and HbA1c level even in the normal range. Moreover, the success of the adult family members to improve their condition empowered them to lead, spread knowledge and enlarge the circle community subjects interested in achieving similar changes. Thus doubling and tripling the success rate to prevent development of diabetes, metabolic syndrome and their complications can be achieved by changing the treatment aim and allowing active involvement of family members in diabetes education.

Biography

Dr. Vardi serves as the director of the Central Unit of Pediatric Endocrinology & Diabetes in Haifa, Israel. She is also the director of the laboratory for Diabetes & Obesity research in Felsenstein research center of the Sackler Faculty of Medicine in Tel Aviv University. Dr. Vardi is a board certified pediatrician, general endocrinologist and pediatric endocrinologist. She graduated from the Faculty of Medicine in the Technion, institute of technology in Haifa, Israel. She did her fellowship in Diabetes Research, at the Joslin Diabetes Center, Harvard Medical School. Her work involves both clinical and basic research with main focus on characterization and prevention of diabetes, metabolic syndrome and their complications.

pvardi@post.tau.ac.il