

The Diabetes Auto Manager (DAM): A Child-Specific Diabetes Tool



Ahmad Abul Ainine

Consultant in Pediatrics, Diabetes & Endocrine, UK

Biography

Ahmad Abul Ainine is keen on delivering high quality Diabetes, Endocrine & Obesity care for children in the Digital Era. Using various Automated Digital Programs, he aims at: (i) Promoting better understanding of childhood diabetes, its treatment, teaching and professional training, (ii) Predictive (+corrective) diabetes management by professionals & technically-enabled children's carers. (iii) Child & Family Nutrition & Activity. Designer for Weight Control. (iv) Designers of Pharmacotherapy for treating a critically-ill child with minimal blood testing of drug levels, to optimise benefits and minimise errors, risks & side effects

Presuming that diabetes care is best provided via an insulin pump, how to manage the majority who cannot afford a pump financially or technically? Despite that paediatric diabetologists are using the 500 & 100 adult diabetes rules, there are safety concerns in children esp. toddlers. So, there is a need to develop child-specific intensive insulin therapy.

Methods: Biological variables like age, size, lifestyle, food, insulin, exercise, glycaemia & weather...etc. will be identified. Pharmacokinetic principles would be applied to them. Their mathematical correlations equations will be derived for various ages.

Results: Most bio-variables regression equations were used in one software programme. At diagnosis, a provisional plan utilises little information (info plus estimates of missing info). With each contact, the child's care plan is tailored to the growing parameters. The DAM plan is visually enhanced green, amber & red care levels is sent to the carer's Smart-Device to follow.

Conclusion: The Diabetes Auto Manager used over a dozen bio-variables to instantly tailor care plans for all children even with pumps. Mathi-Medics can unravel the multifactorial diabetes control that may pave the way for the insulin pump that predicts more and wirelessly transmits less.

Publications

Intravenous Salbutamol and the British Guidelines

Keep Sugars on Sheets ... To Allow for Play & Sweets ... The Diabetes Auto Manager (DAM) The First Child-Specific Tool

Hypoechoic thyroid nodules on ultrasound 4 years after prenatal exposure to radioiodine: Resolution with thyroxine therapy

Toddlers' diabetes: The lost insulin drop and SemiPens vs. DeciPen



DAM

2nd World Congress on Diabetes and Endocrinology | Edinburgh, Scotland | July 31-August 01, 2020

Citation: Ahmad Abul Ainine, *The Diabetes Auto Manager (DAM): A Child-Specific Diabetes Tool*, WDEC 2020, 2nd World Congress on Diabetes and Endocrinology, Edinburgh, Scotland, July 31 – August 01, 2020, 15.