The Lived Experience of Wearable Diabetes Technology for Adolescents with Type 1 Diabetes and Caregivers

Research project informed by an Advisory Phase with adolescents and caregivers:

‘So we can’t wait until all of us are adults, we haven’t got time for that’ (Research Advisor, age 11)

‘It’s really important for teenagers or children to have their voices heard about what they think and about how their experience with diabetes has been’ (Research Advisor, age 12)

Wearable Diabetes Technology (WDT)

WDT such as insulin pumps and continuous glucose monitors augment treatment, improve outcomes and reduce the burden of diabetes (Allen and Gupta, 2019). WDT has predominantly been examined in areas such as clinical health and technological design.

A service marketing and public management perspective could provide insights into how value emerges from the customer’s situated realities.

Value in experience

Value is a top marketing priority and key metric for success (Vargo and Lusch, 2004; Grönroos, 2008; Osborne, 2017).

Exploring value in experience involves looking at the experience lived within the customers' world in relation to time, space, people and their body.

Methods

Data collection was informed by the Advisory Phase of this project. Twenty adolescents and ten caregivers will be invited to choose between:

- online semi-structure interviews
- written diaries.

Type 1 Diabetes

Autoimmune chronic disease that occurs when the body stops producing insulin, an essential hormone that controls the glucose in the blood.

Around 400 000 people in the UK have Type 1 Diabetes; 29 000 are children and adolescents.

Daily insulin administration and blood glucose monitoring are necessary to maintain health and avoid diabetes complications.

UK is situated within the top five countries affected and the incidence of Type 1 Diabetes is increasing by 4% each year (JDRF, 2021).

Only 10% of children and adolescents maintain optimal glucose control. Adolescents find the process more challenging and distressing (NPDA, 2020).

Inadequate diabetes management leads to complications such as eye and kidney damage, with an increased risk for cardiovascular disease, stroke and mortality.

Project Aims

This project aims to explore:

1. The phenomenon of wearable diabetes technology lived within the social, embodied, spatial and temporal realities of adolescents.
2. Value emerging from this experience and how it leaves adolescents ‘better off’ or ‘worse off’ (Grönroos, 2008).
3. The role of wearable diabetes technology for adolescents and caregivers.

Implications

- Inform strategic planning with implications for theory, policy and practice.
- Advise healthcare providers on how to offer optimised service that aligns with the goals and needs of adolescents and caregivers.

References:


JDRF, the type 1 diabetes charity. 2021. Facts and figures about type 1 diabetes - JDRF, the type 1 diabetes charity. [online] Available at: <https://jdrf.org.uk/information-support/about-type-1-diabetes/facts-and-figures/>

