

**Empathetic design research and development in practice;
co-development of an innovative head and neck support
for people with Motor Neurone Disease**

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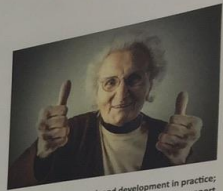
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Empathetic design: research and development in practice: co-development of an innovative head and neck support for people with Motor Neurone Disease

People with Motor Neurone Disease (MND) experience muscle weakness. The human head can weigh 1kg so when this happens in the muscles around the neck it can become very difficult to hold the head in an upright position to the head falling forward.

The shoulder can lead to extreme pain, restricted movement, problems with eating, drinking, swallowing, breathing and respiratory adversely affect face to face communication. A neck collar would help alleviate these important quality of life (QoL) issues. Current neck collar products can be impractical for people with MND and are regularly rejected by users as often they are designed to immobilise the head and neck and can be socially embarrassing.

A fundamental re-evaluation of the way these physical products are configured and used is required. The project explored the use of open and emergent approaches to the co-development of a better product design for an end-user and explored the use of a range of methods including ethnography, social and QoL issues. It demonstrates how working openly together using a range of user research methods can be used to arrive at holistically considered optimum solutions.

The project was funded by the Wellcome program. The team consisted of clinicians, designers and engineers working with partners including people experiencing MND and researchers. The project included a range of research through design methods at the heart of the design process. This included a range of research through design methods at the heart of the design process. This included a range of research through design methods at the heart of the design process.



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Empathetic Design
Research and
Development in Practice
Co-development of an Innovative
Head and Neck Support for
People with Motor
Neurone Disease (MND)

Dr. Sarah-Jane Adams
Dr. Sarah-Jane Adams
Dr. Sarah-Jane Adams

Table with 5 columns and 1 row of items:

- White notebook with a red circle and a pen
- Black cylindrical object
- White pen
- White pen
- White pen

Table with 1 column and 1 row of items:

- Black neck support device with white trim and black straps