Co-Designing of a Menstrual Healthcare Product Aid Tool for People with an Upper-Body Impairment

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Background

Menstruation is a unique experience that varies according to each person's needs, often involving premenstrual symptoms and emotional challenges. There exists a group of people who will experience additional physical and psychological challenges. Using menstrual healthcare products might not be that easy, with challenges already faced in opening the packaging, applying the menstrual healthcare product correctly and disposing of. These issues are amplified when using them in a public bathroom, because of that limited space in that setting. The existing menstrual healthcare products, such as tampons, sanitary pads, menstrual cups, and period underwear, miss inclusive design features for situations in which a person is faced with a permanent upper-body impairment, even if it is just temporary.

Approach

The project aimed to address challenges by designing an adaptive tool specifically for people with upper-body impairments and made use of a multi-stage human-centred design methodology to understand the needs of this target group. A literature review provided an overview of existing knowledge and gaps. An online questionnaire was distributed among participants who have an upper-body impairment to gather insights from those directly affected. In addition, an expert interview with a gynaecologist was conducted to obtain medical insights.

The results then were further refined with a co-designing session of an Erb's palsy-affected participant. The design challenge was further defined, leading to the development of multiple feasible solutions. After finalizing the concept into one final concept, it was evaluated with the co-designer, to find out further suggestions and improvements

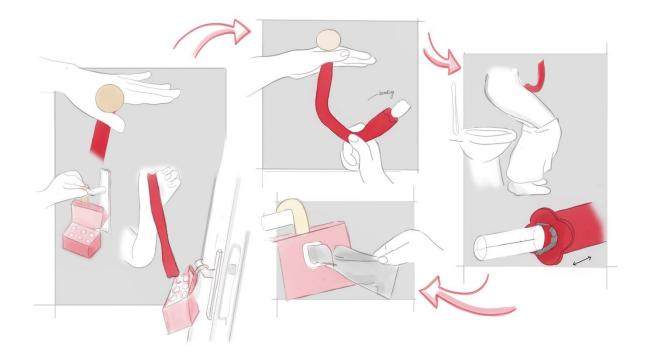
Result

The final product is a reusable tool designed to support the application of a tampon and offers enhanced comfort and usability, especially for people with limited hand dexterity or mobility. Its unique mechanism securely grabs and releases tampons. The shape of the product is designed to ergonomically fit in a hand with limited dexterity, and the bendable feature allows for customization. With it, an L-shape and U-shape can be achieved that can help in achieving more comfortable angles for insertion, but also adaptation of the tool to the users' bodies and preferences. The

sphere at the top allows for the placement of the whole product between two fingers for added stability. Overall, the design focusses on minimal effort from the user side.



Additionally, the product comes with a tampon box for tampon storage and helps in inserting the tampon into the applicator, a pouch for storage, and disposable bags for the disposing of the used tampons.



Conclusion

The project successfully developed an adaptive and reusable tool that accommodates the specific needs of people with an upper-body impairment. Especially with the addition of the tampon box, storage pouch, and disposable bags, the tool supports throughout the whole tampon usage journey and menstrual

experience. Finally, the result of this project empowers users to manage their menstrual health more independently and comfortably.