

STROKE SIMULATOR

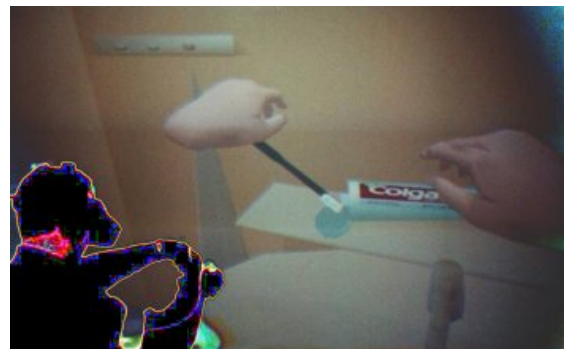
The purpose of the Stroke Simulator project for stroke patients is to improve the quality of the recovery period by creating virtual reality environments which simulate brain trauma patients' altered perceptual states in an effort to evoke empathy from patients' families and associates, medical students and caregivers



Problem definition

Every year, 35000 Swedes suffer from stroke and stroke is considered to be the largest individual medical cost per year to the Swedish health system (approx 10.000Mkr/year in 1992) (The Swedish Council on Technology Assessment in Health Care ,1992. Stroke.)

For most people and even specialized caregivers it is hard to really understand the complicated world of stroke and its damages. It affects every dimension of being a human. Such alterations are a result of damage deep within the brain and can cause multiple (seemingly inexplicable to an onlooker) changes in behavior, emotions, vision, audition, balance and sense of competence. But often there is no visible physical damage, no casts or bandages. Even the smallest task such as getting a glass of water in the kitchen, or putting toothpaste on a toothbrush becomes a major problem. Further stroke related difficulties include depression and marital problems.



Description

We've focused on inventing innovative and intuitive ways for non-computer users to navigate, by simply using a wheelchair with full force feedback in the stroke simulator. Via the stroke simulator it is possible to experience and grasp the stroke distorted perception without the real damage.

The interactive user is immersed into the world of stroke and experiences it from a patients view.



Normal
Perspective



Stroke
Perspective

