Showa Hanako 2: A realistic robot for novice dentists (w/ video)

June 30 2011, by Katie Gatto

(PhysOrg.com) -- Going to the dentist is something that we all have to do. Going to a novice dentist, and his or her drill, is something that most of us would rather avoid but they have to practice somewhere. Luckily for us researchers at Showa, a Japanese university, have been working on a solution to this thorny issue. They have created a robot, the Showa Hanako 2 that is able to not only mimic the kind of movement and gestures that a dentist may experience in the real world.

The robot is able to blink, flinch, sneeze, cough and gag, simulating some of the issues that a real dentist may have to contend with while working on his or her human patients.

The Showa Hanako 2 actually goes much farther lengths to create a realistic experience for the training practitioner. The robots mouth is designed to be as realistic as possible, down to the way that it feels. The creators of this dental bot got help from an unusual source in order to create that realism. Orient Industry, a company that is recognized as one of Japans top makers of sex dolls, was consulted to help the research team make up realistic skin, tongue and mouth areas. The system is also equipped with a basic program for voice recognition; this allows the training dentist to carry out some basic conversation with the robot during the exam or procedure.

Like any good patient Hanako can give the dentist feedback about his or her performance. Unlike most patients however, she can store and analyze the student's performance, giving then a detailed amount of experience on the computer. The robot will be on sale in Japan later this year. No details about pricing have been released at this time.

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Citation: Showa Hanako 2: A realistic robot for novice dentists (w/ video) (2011, June 30) retrieved 26 April 2024 from
https://phys.org/news/2011-06-showa-hanako-realistic-robot-novice.html