Designing a Kidney Transplant Patient's Medical Gown by Using (FEA) Model

Sara Sami O Barri

PhD student- Fashion and Textile- Faculty of Human Sciences and Design- King Abdelaziz University-Jeddah- Kingdom of Saudi Arabia.

sbarri@kau.edu.sa

Emad Eldin Sayed Gohar

Professor of clothing production technology- Fashion and Textile- Faculty of Human Sciences and Design-King Abdelaziz University- Jeddah- Kingdom of Saudi Arabia. IBCT trained instructor.

egohar@kau.edu.sa

Salwa Tashkandi

Fashion and Textile- Faculty of Human Sciences and Design- King Abdelaziz University- Jeddah-Kingdom of Saudi Arabia.

smatashkandi@kau.edu.sa

Abstract:

The medical gown is essential personal protective equipment that prevents the spread of microorganisms and body fluids while undergoing any medical procedure, where medical clothes are used in surgeries and beyond. One of these operations is kidney transplant surgery, where a person suffers from some diseases that may affect his kidneys, and thus the process of filtering blood from waste is affected. Thus, a person needs an alternative process for the work of the kidneys, which is dialysis. But when the patient's health deteriorates, leading to kidney failure, the patient resorts to a kidney transplant. Due to the importance of medical clothing, and the increase in the number of kidney transplant surgeries, it can be said that it is a health condition that must be paid attention to and the needs of this group of patients should be known. so, improving the quality of everything that can facilitate the difficulties of the post-operative period is important. So, through interviews with some members of the medical team specializing in kidney transplant surgery, the research problem is the design problems in the medical clothing for kidney transplant patients that currently used to meet the patient's clothing needs. The kidney transplant patient is exposed to short-term risks such as bleeding, clots, and infection. Also, the patient's clothing must fit him well, meet the need to cover his body, and make him feel comfortable and private. So, using a user-centered model that aims to identify the consumer is essential. The aims of this research are to identify the problems and needs of the kidney transplant patient and the medical team treating him using the FEA model. In addition, to preparing and evaluating several design proposals for kidney transplant patient clothing according to the needs of kidney transplant surgery patients and the medical team treating them from the point of view of specialists. The study used the descriptive and experimental method, and the sample of the study are 10 members of the medical team treating kidney transplant patients and 10 specialists in clothing design field from universities in the Kingdom of Saudi Arabia. A personal interview with the medical team about the problems and needs of the kidney transplant patients and a questionnaire with specialists to evaluate design proposals were used to collect data.

Keywords:

Medical Gown, Kidney Transplant, Consumer Needs Model (FEA)

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