

DEVELOPMENT OF A METHOD FOR MAKING A SET OF GARMENTS FOR PATIENTS OF A SPECIAL CATEGORY

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DOI: 10.5958/2249-7137.2022.00611.5

ABSTRACT

Hospital gowns for both patients and staff can be considered as part of the environment, as they meet the requirements of good hygiene, procedures and treatment, including patient care. Another reason patients dress is to signal equality in care needs and to represent the basis for equivalent treatment. In this article we discuss about the development of a method for making a set of garments for patients of a special category.

KEYWORDS: *creation of tissue models, clothing for patients; Role; Body; An object; Patient anonymity; Environment*

INTRODUCTION

Development of a method for making a set of garments for patients of a special category is totally essential for the people who are dire need. The design process followed a scientific and systematic design approach consisting of the following four steps: needs assessment, design direction, design presentation, and final decision. At the first stage, targeted group interviews and a survey were conducted to identify the needs of patients and nurses. Based on the results of the first stage, 3 fabric models were developed with light, modern, rhythmic, modest and ordinary images using university and hospital symbols and logos. Fixed shapes with realistic and geometric features and colors including white, yellow, blue, gray and pink were chosen to create the preferred image. Each fabric pattern was made in male and female color sets. Fixed shapes with realistic and geometric features and colors including white, yellow, blue, gray and pink were chosen to create the preferred image. Each fabric pattern was made in men's and women's color sets. The following patient gowns were made from 3 fabric samples: regular U-neck hospital pajamas with 9/10 sleeves and ankle-length trousers, a long-sleeved gown with slits for breastfeeding, and a gown with a plunging back and button closure. Different size systems for males and females have been recommended for production. Self-perception is usually rooted in a healthy existence. Conversely, wearing a hospital gown may detract from individuality and may encourage acceptance of passive and dependent behaviors associated with the patient and illness. This self-image can lead to attitudes that can interfere with well-being and the healing process. The patient's clothing can also influence the relationship between patients, doctors, and nurses. It is not clear how and to what extent the patient's clothing influences the healing process and the relationship of care and treatment. The main purpose of this article is to discuss the relationships and roles that arise between patients and hospital staff when patients wear hospital gowns and, accordingly, the type of care provided and whether this affects the potential for health recovery. Patient clothing is considered part of the care

environment and plays an important role in the interaction between people and their world. According to Topo and Iltanen-Tahkavuori, clothing is an example of bodily technology and such embodiment refers to the integration of being into the world and its connection with the body and soul. Topo and Iltanen-Tahkavuori see the hospital gown as a materialized ideology, a script to be interpreted or decoded; in other words, how "patience" is understood in relation to clothing, as well as how fashion design is a technology that allows the healthcare system to manage and manage care. Wearing a hospital gown means being a patient and taking on a role. The needs of the system take precedence over the needs of the patient. Patients must sacrifice their identity and therefore cannot present themselves as morally and culturally competent participants. Hospital gowns reinforce the impersonal view of patients, turning them into an anonymous mass that reinforces the system and role distribution. The patient's clothing becomes a materialized ideology, where standardized uniforms in addition to control also cause passivity, separation and degradation. One of the hallmarks of the disciplinary power is its oversight function. The relationship between staff and patients can be strengthened by the purposeful nature of the modern healthcare system. As a result, organizations may tend to influence the responsibilities of caregivers towards more control and oversight with less care and handling. Observations of a patient entered into a computer may become more important to review and discuss than an actual physical encounter with the patient. In such a system, reminiscent of a Panoptic on, it is easy to replace an individual caregiver, which can make a difference to the effectiveness of the system. While it is beyond the scope of this article to consider the dress of hospital staff, in the name of system efficiency, caregivers become more interchangeable if they are also anonymous to patients. Clothing can contribute to the depersonalization of the various actors in the healthcare system and prioritize role-playing over interpersonal coexistence. The clothing of the healthcare professional is an aspect of the medical profession that is steeped in culture and tradition. The role of clothing in cross-transmission remains poorly established, and until more definitive information is available, evidence-based measures to prevent nosocomial infections should be prioritized. This document is intended to provide general guidance to the medical community regarding clothing for healthcare workers outside the operating room. Recommendations for clothing for healthcare professionals should balance professional appearance, comfort, and practicality with the potential role of clothing in cross-transmission of pathogens. Although the optimal choice of healthcare worker clothing for inpatient care remains uncertain, we provide recommendations for the use of white coats, ties, shoes, bare feet strategy, and laundry. Institutions considering these non-mandatory measures should implement them with well-organized communication and educational efforts aimed at both healthcare professionals and patients. Today's garment-making technology has exceeded expectations, has become easier to learn and quickly adapt completely to the specific necessities of apparel designing. The fit is the most significant deciding factor related to the final acceptance or rejection of a garment. Getting to right design is as important as getting a right product with a perfect fit. The well-tailored fit is dependent on the pattern drafting integrating dimensions of the fit model having various shapes, contour and proportions. With the beginning of the industrial revolution and advances in textiles and clothing manufacturing, standardized patterns were vital to the success of ready-to-wear clothing. New technology platforms are facilitating greater flexibility in the areas of pattern designing, grading, marker making, waste reduction, increase in efficiency and accuracy of the cutting room and create accurate samples in time to help reduce costs are some advantage of using of computer-aided design system in composite garment

manufacturing. Increase in product development costs, the rise in shipping charges, and awful decision making are an entity that many businesses cannot afford. Efforts are required to drive a product to get to the market faster and are saleable. With that in mind, use of advanced technology in apparel manufacturing is an essential competitive advantage for retailers, brands, and manufacturers alike. This paper was designed to understand the various methods of pattern making systems. The aesthetic appearance, correct fit and the drape attributes of a garment depends significantly on every garment making process. Pattern making is considered as the first step in garment production. While making a garment as per design, templates are used to trace the various garment parts of similar style onto fabric prior to cutting and assembling. Generally, patterns are made of paper or cardboard templates that have become a skilled technical process over the centuries.

During the late medieval period, fabric weaving was done manually on primitive looms which were a slow and laborious process and therefore fabric was considered as a coveted commodity. Rectangular shaped fabric pieces were used for garment construction to minimize waste. The seminal art of pattern making began in the fifteenth century. In place of rectangular uncut fabric, pieces were carefully cut as per size and body's contour.¹ the art of pattern making prior to the industrial revolution was extremely revered. Tailors worked meticulously to customize patterns based on their client's personal measurements and clothing was elaborate and solely relegated for the rich. The onset of the industrial revolution marked the importance of standardized patterns for the success of ready-to-wear clothing. It is a basic garment pattern with no seam allowance from which other similar patterns are designed. It is also referred as basic pattern or foundation pattern to develop and design new patterns for garments. All basic sloper/block is based either by standard measurements or by custom measurements. Often called 'draping on the stand' is a pattern cutting method which involves muslin fabric for fitting of block garment generally on a designated dummy body of appropriate size. The designers/pattern makers manipulate, mark and adjust the three-dimensional mock-up until they satisfy on the shape and fitness. Mock-up or muslin is also referred as 'toile'. Toile is usually not neatly finished or hemmed like the actual garment would be, and they are made from a translucent cotton or linen fabric so that the design can be tested and perfected. Each component is transferred onto pattern paper and the required allowances added. Fashion trends come and go, the pattern making principles do not change. The rules and methods are always followed for designing and drafting pattern pieces. Finally, the production pattern is achieved that is correct and perfect, containing every pattern piece required completing the garment. In the production, a pattern has the seam allowance and all requisite information like grain line, style name, size, and sometimes the number of cuts.

Compression garments are special clothing containing elastomeric fibers and yarns used to apply substantial mechanical pressure on the surface of needed body zones for stabilizing, compressing, and supporting underlying tissues. They have been widely researched and utilized in the fields of medical applications, athletic applications, and body-shaping applications.

The compression therapy was believed that pressure exerted could levitate the side effects of gravity and uphold posture in order to benefit wound healing of the lower limbs. Compression therapy has also been used for the last 50 years for burn care and has been accepted to help minimize the formation of hypertrophic scars and enhance the maturation process of scars .

Compression garments have been utilized for medical reasons for many years. The use of compression garments has become widely common in sportswear. Sportswear with moderate compression distribution is widely used in athletics and fitness activities and is expected to enhance the performance of the athletes, decrease the possibility of injury, and accelerate the process of recovery. Likewise, compressions are becoming more popular. Compression garments are used to provide support to people who stand for longer periods or people with poor circulation. In sports, some athletes wear these garments during exercise to prevent rashes and chafing. These garments also help to ease muscle stiffness and quicken recovery time in post exercise. In medicine, compression garments are used for several years to treat venous insufficiency, edema and prevent deep vein thrombosis post operation in patients. This chapter discusses the use of manikins for the compression garments in addition to the research findings. A pressure measurement system based on a hemisphere with five built-in sensors had been developed, which can monitor the static and dynamic pressure behavior of elastic fabrics. Recently, a smart mannequin with the dimension of a standard female body was developed for measuring garment pressure. The mannequin has a rigid internal layer and covered with a soft surface, and eight built-in pressure sensors are distributed on its surface. The sensors sense pressure imposed by wearing garment and fed data into an acquisition device simultaneously. The mannequin can extend transversely at the ante medial and post medial line to the maximal level of 5 cm, which may imitate the dimensions of different human body. This smart mannequin system provides a novel tool for evaluating the pressure performance of compression garments and gives reliable data for functional product development.

REFERENCES:

1. MacRae B.A., Cotter J.D., Laing R.M. Compression garments and exercise: Garment considerations, physiology and performance. *Sports Med.* 2011;41:815–843.
2. Wang L., Felder M., Cai J.Y. Study of properties of medical compression garment fabrics. *J. Fiber Bioeng. Inform.* 2011;4:15–22. doi: 10.3993/jfbi04201102. [CrossRef] [Google Scholar]
3. Felty C.L., Rooke T.W. Compression therapy for chronic venous insufficiency. *Semin.Vasc. Surg.* 2005; 18:36–40. doi: 10.1053/j.semvascsurg.2004.12.010. [PubMed] [CrossRef] [Google Scholar]
4. Martin H.A. The india-rubber bandage for ulcers and other diseases of the legs. *Br. Med. J.* 1878; 2:624. doi: 10.1136/bmj.2.930.624. [CrossRef] [Google Scholar]
5. Staley M.J., Richard R.L. Use of pressure to treat hypertrophic burn scars. *Adv. Wound Care.* 1997; 10:44–46. [PubMed] [Google Scholar]
6. Born D.P., Sperlich B., Holmberg H.C. Bringing light into the dark: Effects of compression clothing on performance and recovery. *Int. J. Sport Physiol.* 2013;8:4–18. doi: 10.1123/ijssp.8.1.4. [PubMed] [CrossRef] [Google Scholar]
7. Duffield R., Portus M. Comparison of three types of full-body compression garments on throwing and repeat-sprint performance in cricket players. *Br. J. Sport Med.* 2007;41:409–414. doi: 10.1136/bjism.2006.033753. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

8. Fu W., Liu Y., Fang Y. Research advancements in humanoid compression garments in sports. *Int. J. Adv. Robot. Syst.* 2013; 10:66. doi: 10.5772/54560. [Cross Ref] [Google Scholar]
9. Gupta D. Functional clothing—Definition and classification. *Indian J. Fibre Text. Res.* 2011; 36:321–326. [Google Scholar]
10. Denton M. Fit, stretch and comfort. *Textiles.* 1972; 3:12–17. [Google Scholar]
11. Tanaka S., Midorikawa T., Tokura H. Effects of pressure exerted on the skin by elastic cord on the core temperature, body weight loss and salivary secretion rate at 35 °C. *Eur. J. Appl. Physiol.* 2006;96:471–476. doi: 10.1007/s00421-005-0099-z. [Pub Med] [Cross Ref] [Google Scholar]