

## RESEARCH OF MEDICAL-PROPHYLAXIS, REHABILITATION CLOTHING AND ITEMS

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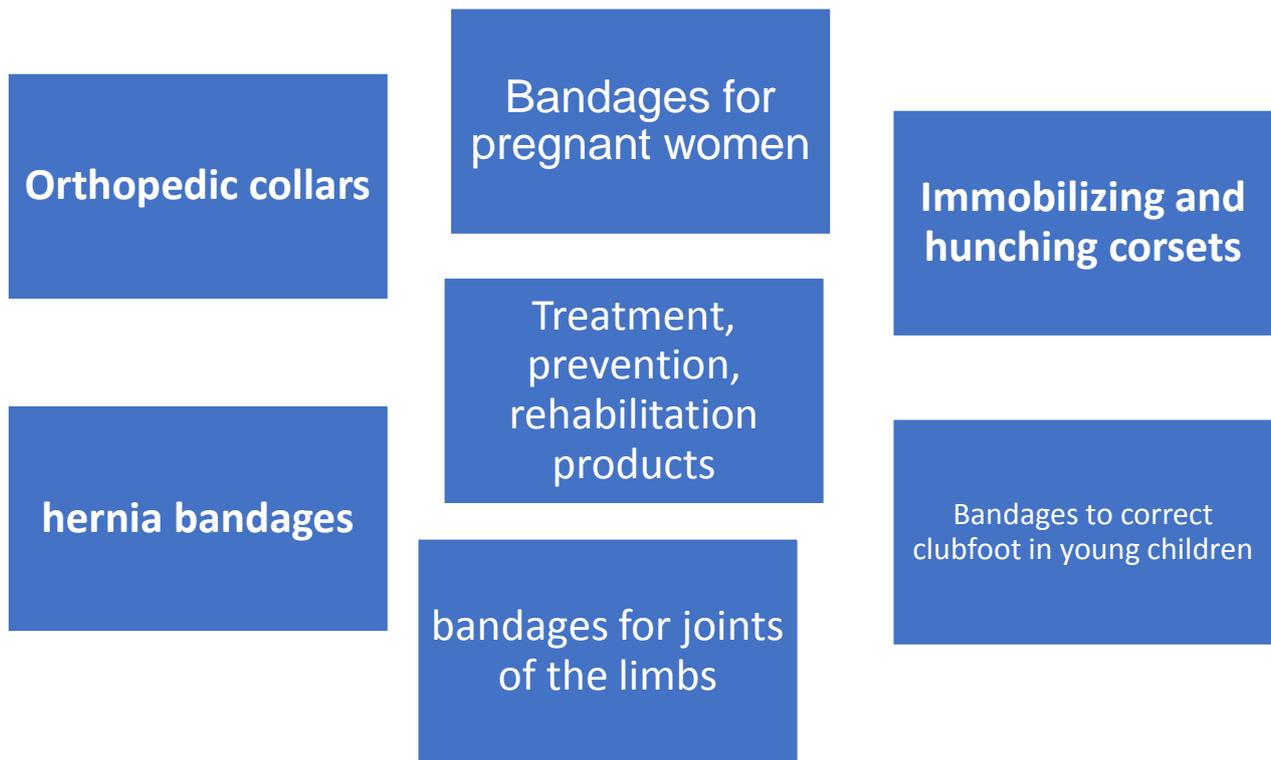
Jizzakh Polytechnical Institute, Master's degree, development of technology  
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**Abstract.** This article examines the types of clothing and items that have therapeutic, rehabilitation, and prophylactic properties. The importance of using these types of clothing and items is studied. The aspects that need to be considered at the design stage are analyzed.

**Keywords:** Medical-preventive, rehabilitation products, functional rehabilitation clothing, medical device, corsets.

Clothing is not only a means of covering the human body and protecting it from external influences, but also performs a number of functions. Clothing is sewn, knitted, or made by human hands using other methods. Clothing primarily protects the body from environmental influences and external influences. In addition, it is of particular importance because it performs an aesthetic function. According to its type, clothing is divided into outerwear, underwear, headwear, and footwear. According to the function, it can be divided into everyday clothes and clothes intended for festive and wedding ceremonies. According to the style, it is possible to classify endless styles such as classic, sports, casual, elegant, disco, grunge, rock, punk, gothic. According to the age and gender, it is divided into men's, women's, and children's clothes. In the process of manufacturing clothes, great attention is paid not only to the type of clothing, but also to the functions of the clothing. Everyday clothes are usually sewn from different fabrics according to the taste of the person, taking into account the profession and social background, for example, leisure clothes are sewn from soft and fluffy fabrics for ease of movement, festive and ceremonial clothes are sewn from expensive fabrics in the national style, and work clothes are sewn depending on the labor processes. The requirements for clothes are divided into three main types, which include hygienic requirements, operational requirements, and aesthetic requirements. Hygienic requirements mean that clothing should not harm human health when used, and should not interfere with free movement, that is, clothing worn in the summer should be light, breathable, reflect sunlight, and have high moisture absorption properties. Aesthetic requirements mean that clothing should comply with fashion trends, color requirements, and function, and satisfy the

aesthetic tastes of consumers. Operational requirements mean that clothing should be suitable for its function and conditions of use, comfortable, durable, reliable, and stable in shape. During the wearing period, clothing is exposed to various mechanical and biological influences. Several studies have shown that these indicators have a negative impact on the quality of clothing[.]. For healthy people, clothing also performs a protective function, preventing the possibility of injury and illness in extreme or adverse conditions. In case of loss of health, sewing products can serve as technical means of rehabilitation (therapeutic-prophylactic or rehabilitation products), as a means of restoring or compensating for lost body functions. To date, in addition



to the above, clothing is widely used as a healing item or set of items.

Figure 1. Types of medical, preventive, and rehabilitation products

Examples of these include corsets for the legs, arms and various damaged areas of the human body, bandages with various functions, and orthopedic and prophylactic clothing. Due to the emergence of health deviations, people have special needs related to therapeutic, rehabilitation and prophylactic treatment, while consumers' clothing should be aesthetically beautiful, in line with modern fashion and provide a sense of physical and mental comfort. Special needs related to health conditions in cases of limited mobility: the use of specially designed clothing as a solution to physical, physiological and mental problems is necessary to ensure its ease of wearing and taking off, and to provide psychological support to the consumer. The principle of the production of clothing and products intended for treatment and prevention is to perform the functions that clothing should perform in order to prevent or prevent the development of a particular disease.

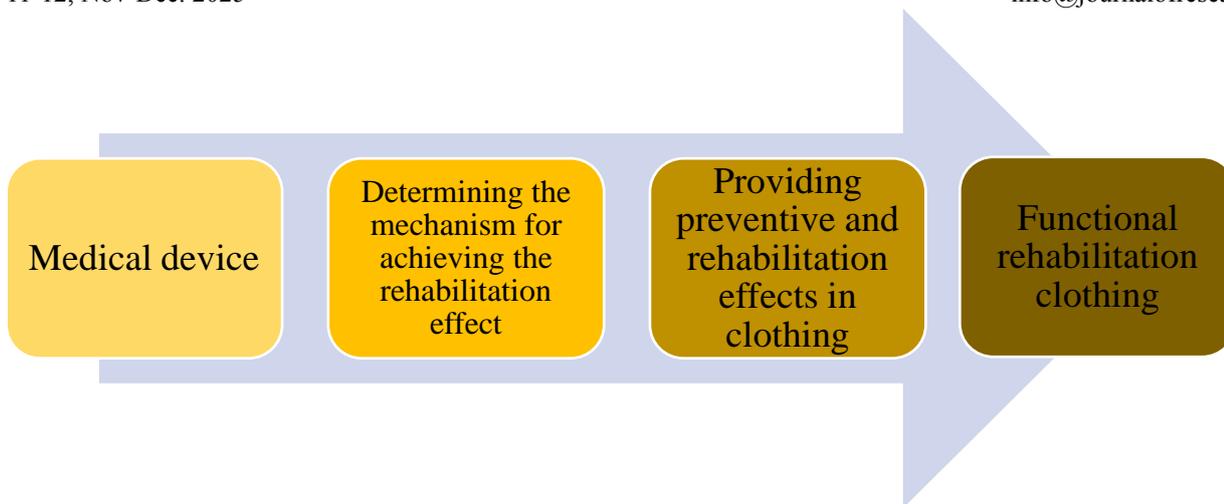


Figure 2. Design scheme for medical, preventive and rehabilitation clothing and items.

The mechanism of action of a medical device on clothing is studied, in this process, the design of clothing or medical-prophylactic and rehabilitation clothing and products is carried out. Clothing also performs the function of preventing the development of a number of socially significant diseases, for example, to prevent the development of spinal diseases - using corsets or corsets, a technical means of rehabilitation and a medical product, clothing to prevent or support the development of spinal diseases, clothing with the function of a bandage for pregnant women - prenatal and postpartum, etc. The development of this type of sewing products, medical-prophylactic and rehabilitation clothing, which can be used in various diseases, is one of the current issues today. When designing medical-prophylactic and rehabilitation clothing and items, unlike conventional clothing, it is important to pay attention to the following aspects: determining the impaired function of the body; analyzing the types of treatment effects; analyzing the relationship of treatment types with clothing and sewing items; determining the mechanism of action of medical-prophylactic, rehabilitation clothing and sewing items; analyzing the effectiveness of the mechanism of action of medical-prophylactic, rehabilitation clothing and sewing items; developing technical conditions for the production of medical-prophylactic, rehabilitation clothing and sewing items.

At the pre-project research stage, information is collected about the functions and specific features of the product being designed, as well as options for achieving a rehabilitative or therapeutic-prophylactic effect are analyzed. Studying and conducting analytical research on the characteristics of health disorders, their causes, types of disabilities helps to develop the mechanism of action of the product or clothing. Analysis of the types of treatment, the process and methods for increasing the effectiveness of treatment helps to clarify the goal and establish a specific mechanism of action of the product. At this stage, when forming the product, the specific features of the consumer's physique, lifestyle, including behavior, characteristic habits, requirements and the effect of the expected results on small elements that affect health deviations are taken into account. The mechanism of

action of rehabilitation tools and medical devices that replace disease treatment methods, rehabilitation and prevention methods is analyzed.

The goal can be achieved by properly selecting materials for the design of such clothing, including analyzing the characteristics of life, taking into account the type of health disorder, identifying the dynamics of movement of individual parts of the human body, and areas that require thermal comfort.

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