



УДК 7.05

## STUDY OF THE REQUIREMENTS IMPOSED ON FUNCTIONAL CLOTHING FOR PREMATURE BABIES

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*The paper presents the study of the requirements imposed on the functional clothing for premature babies by involving the parents of this category of wearers. Functional clothing plays an important role in the growth and development of little ones. In this context, we used the method of questioning 50 parents who answered what are the important requirements in their opinion for the clothing that children should wear depending on the gestation period. As a result, we obtained a series of requirements that were presented later. The functional clothing products developed aimed to meet the requirements of the baby in the process of growth and development.*

**Key words:** *clothes, requirements, functionality, newborn.*

### INTRODUCTION

Products for premature babies [1-3] must meet a number of requirements, to meet the needs of the wearer, but also to meet the care of doctors and parents; the most important are: to ensure comfort during intensive care, or in stage II, ease of dressing-undressing, easy maintenance, resistance to washing, rubbing and breaking, an attractive design, non-wrinkle, and last but not least thermal insulation corresponding to. The study was based on the collection of information on the requirements for the clothing of premature babies.

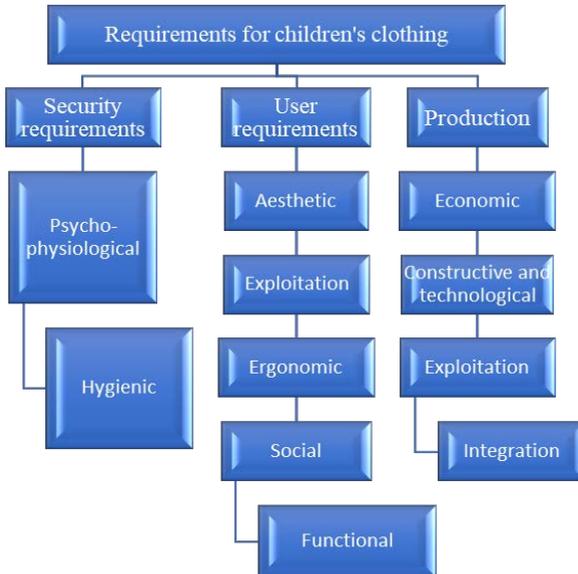
### RESULTS AND DISCUSSION

The working methodology focused on the involvement of parents in the proposed study. Using the parent questionnaire method, the most relevant requirements that accumulated the maximum score were selected. Through the answers obtained, the scheme of the specific requirements of the functional products for premature babies was made.

The requirements provide a set of objective information of paramount importance at certain stages of design. Also, in the process of designing contemporary textiles, it is necessary to perform all the necessary functions, taking into account the cost of materials and time required for manufacturing, which depend on a number of requirements conditioned by the spheres of consumption, design, production and realization of clothing. In this context, 2 groups of requirements can be mentioned: user requirements – conditioned by the wearing process, industrial requirements – conditioned by the manufacturing process [4]. Figure 1 shows the clothing requirements for premature babies. The figure shows



three categories of requirements: safety requirements, user requirements and production requirements, which are essential in the development of functional products for children. We note that among the specific requirements for the carrier group are the security requirements, the functional requirements and the requirements for product integration as a system.



**Fig. 1.** Clothing requirements for premature babies

Following the survey of parents in the intensive care unit, specific characteristics of children's clothing were identified, being considered the most important in their opinion figure 2.

The process of designing children's clothing is based on the principle of maintaining the health and proper functioning of the body. The clothing is meant to protect the epithelial tissues from environmental factors and to ensure thermal comfort by forming an optimal underwear climate. In order to ensure the necessary degree of functionality of children's clothing in general, and for infants in particular, clothing products must meet hygienic requirements, correspond to the particularities of the child's physical and mental development, comfort and aesthetics.

The utilitarian requirements imposed on children's clothing reflect the aspects of utility, convenience, rationality and economy. Starting from the need to protect the child's body from both high and low temperatures, rain and wind, currently various clothing products are made such as assortment, shape, material, colour [5].

Clothing should not damage the skin or create unpleasant sensations to the touch (it should not be sticky, cold, rough workmanship, tight fit of the baby's body parts with elastic or lace). The optical (colour, the luster), acoustic and aromatic properties of the clothing must not irritate the child's eyesight, hearing or sense.



**Fig. 2.** Classification of specific characteristics of products for premature babies

One of the most important functions of children's clothing is to create pleasant thermal sensations by ensuring the ideal parameters of the underwear microclimate (between the surface of the human body and the first layer of clothing). Children's clothing must have adequate air and water permeability. The operating requirements for children's clothing are very important and determine its resistance (shape, materials, construction, details, and assemblies) to wrinkling, tearing, bending, light, chemical cleaning, washing.

### CONCLUSIONS

Respecting and maintaining the requirements imposed on children's clothing will guarantee success in making clothing products and will ensure the satisfaction, comfort and functionality of children's clothing. Therefore, effective compliance with these requirements allows the development of products characterized by a high degree of quality and functionality.

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