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# THE CHARACTERISTIC FEATURES OF FUNCTIONAL CLOTHES FOR PREMATURE BABIES

DANILA Victoria<sup>1</sup>, CURTEZA Antonela<sup>2</sup>, IROVAN Marchela<sup>3</sup>, BALAN Stela<sup>4</sup>, TUTUNARU Irina<sup>5</sup>

<sup>1,3,4,5</sup>Technical University of Moldova, Chisinau, Moldova <sup>2</sup>"Gheorghe Asachi" Technical University of Iasi, Iasi, Romania

Research has been focused on the morphological, physiological and life expectancy aspects of composite, constructive and technologically advanced features. Characteristics of physical development premature child, include system of thermoregulations, define the types of heat and heat isolation, imposing on the one, and the idea for premature newborns in the resuscitation and intensive therapies imposed on between the functional functions.

Key words: functional clothing, premature baby, requirements.

### INTRODUCTION

The adapted clothes are designed to meet the specific needs of carrier groups and thanks to the artistic, constructive and technological solutions they are ideal for the user's anthropomorphic characteristics and conditions of use, facilitating the dressing and wearing process as well as performing the necessary medical procedures.

Taking into account the statistics indicating an increase in the number of premature births and the activities carried out by medical institutions to improve the survival of preterm infants, the results of the study contribute to improving the condition of the premature child from the incubator by functional clothing adapted to the requirements and conditions imposed.

## FORMULATION OF THE PROBLEM

The basic requirements for early childhood clothing in incubators are functional and ergonomic requirements; the products must have high functional properties for health workers so that they can dress and undress in less than one minute, especially in emergency medical situations. Products should provide stable conditions for thermal insulation due to structural and technological solutions that need to reduce heat loss by providing access to certain areas of the body without the need for complete childcare. It does not affect the medical device elements associated with medical personnel or the child's movements. The apparel products must be tailored to the child's special preferential positions, the size of the products must correspond to the anthropomorphic parameters and the fastening



systems and the assembly types must be simple and not be torn by the sensitive and immature skin of the premature baby.

The materials and products for high-quality manufacturing should be of high-quality, high-performance, heat-treated, sterilized and disinfecting materials. The natural textiles offer some specific features.

As a result of the research, the design of the projects is the foremost premise. The subject-matter of the research is the user-friendly training course. You are working on the common methodology of the systematic approach to design. For the purpose of post-graduate studies, some methods and techniques have been developed and some anthropometric and in-depth studies have been carried out.

### **RESULTS OF THE RESEARCH AND THEIR DISCUSSION**

Premature babies weighing less than 2,000 g are usually placed in incubators in intensive care units, providing optimal conditions for their development and care [3]. For their clothing, infant products are used in smaller sizes, but due to the morphophysiological characteristics of premature babies and the need for medical care and special medical procedures in the incubator, the usual clothes are anthropometric and functional and are often cut into the attachment area of a device or a medical product.

The functional clothing for babies born prematurely is designed for comfort and safety. The products are made of natural materials and the structural and technological composite solutions are adapted to the anthropomorphic and physiological characteristics of the premature baby in accordance with neonatal care requirements and compatible with the medical equipment of neonatal medicine [2].

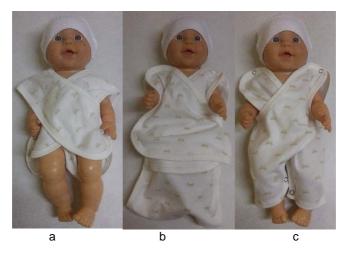


Fig. 1. Premature clothing: a - prema, b - bag, c – overalls



Baby clothing for the premature babies also offers parents psychological and moral support from the child's point of view, the use of dimensionally and morphologically adapted products [4, 5].

Functional clothes for premature infants:

1) Adapted to the conditions of wearing and processing in the incubator by its compression, size and shape;

2) Present the necessary elements for care of a premature child by forming the holes at the points of attachment of the medical devices during the closing process;

3) Contribute to increasing the probability of premature survival with the correct placement of medical devices and facilitating the rapid removal of the product in emergency medical care.

Original Construction and Technology Solutions:

- provide thermal and hygienic comfort for premature infants by covering multiple layers of material in the chest area and extremities, using natural materials and soft coatings for finished products
- provide an anthropometric correspondence of both the static positions of the child and its dynamics in terms of the size, shape and shape of the winding;

3) The winding system and button system allow you to attach the necessary medical devices and shorten the time to remove the garment for emergency medical assistance.

#### CONCLUSSION

The design of adaptive clothing for premature babies involves the application of the principles of a systematic approach to meet the system of complex requirements imposed on these types of products.

As a result of the research, a functional clothing system adapted to the incubator conditions for premature children was developed and several new types of products were developed being based on the wrapping system. The products were tested in a clinical setting, which was positively evaluated by the medical staff and parents.

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### ДАНИЛА В., КУРТЕЗА А., ИРОВАН М., БАЛАН С., ТУТУНАРУ И. ХАРАКТЕРНЫЕ ОСОБЕННОСТИ ФУНКЦИОНАЛЬНОЙ ОДЕЖДЫ ДЛЯ НЕДОНОШЕННЫХ МЛАДЕНЦЕВ

Исследования сосредоточены на аспектах морфологической, физиологической и жизнедеятельности недоношенных детей с созданием композиционных, конструктивных и технологических особенностей одежды. Особенности физического развития недоношенных детей. включая систему их терморегуляции, определяют требования к гигиене и теплоизоляции одежды, а уход за недоношенными новорожденными в отделениях реанимации и терапии одежду интенсивной налагает на повышенные функциональные требования.

**Ключевые слова:** функциональная одежда, недоношенный ребенок, требования.