



THE ROLE OF CLOTHING IN VARIOUS STAGES OF ASSISTING PEOPLE WITH AMPUTATIONS (REVIEW)

FLOREA-BURDUJA Elena^{1,3}, RARU Aliona^{2,3},
IROVAN Marcela¹, FARÎMA Daniela³, TĂBÎRȚĂ Alisa⁴

¹ Technical University of Moldova, Faculty of Textile and Polygraphy, 4 Sergiu Radautan Street, Chisinau MD-2019, Republic of Moldova

² Technical University of Moldova, Direction of Academic Management and Quality Assurance, 168 Stefan cel Mare Street, Chisinau MD-2004, Republic of Moldova

³ Gheorghe Asachi Technical University of Iasi, Faculty of Industrial Design and Business, 29 Mangeron Street, Iasi 700050, Romania

⁴ Centrul Republican Experimental Protezare, Ortopedie și Reabilitare, 1 Romana Street, Chisinau MD-2005, Republic of Moldova; Universitatea de Stat de Medicină și Farmacie „Nicolae Testemițanu” 165 Stefan cel Mare Street, Chisinau MD-2004, Republic of Moldova

Corresponding author: Florea-Burduja Elena, E-mail: elena.florea@mctt.utm.md

Abstract: *This paper presents the results of the research on the literature of textile and medical fields, to identify the actual assortment meant for persons with inferior limbs amputation and to establish the types of products relevant for different periods of life. The topic is determined by the raising number of persons with inferior limbs amputated and by the specialists that present interest in creating clothing destined for disabled persons. This paper aims are to fundament the knowledge regarding the special clothing for persons with lower limb amputations, the time of use, and its necessity. The main objective of this paper is to propose a chart of classification of the assortment destined for disabled persons in which there are specified the periods of use, from the moment of surgical amputation. The paper presents the epidemiology of lower limb amputations in the world and the dynamics of the number of amputations, registered in the Republic of Moldova in the last five years. Also, there are presented the 5 main pathological states. One of the major problems, that we try to solve, is the establishment of groups of products of clothing that would satisfy the wearer, and the people around (doctors, family, etc.). The possibility of obtaining quality products dare the specialists keep in mind not only how functional is the products, but also the environment around and the message it carries to the persons.*

Key words: *clothing, people with disabilities, amputation of the inferior limbs*

1. INTRODUCTION

Amputation is a physical disability that represents the process of surgical removing of a body endpoint which is affected by a trauma, a disease or surgery. Losing a part of the body has a strong impact over the patients. Those confront a set of complex tasks and problems, that require to be solved, it is known that the consequences of amputation are quite severe and affect the patients for the rest of the life [1].



Firstly, they need to adapt and face the sensation of a limb loss, then they have to adapt to the function loss, and in the end, they have to adapt to their new body image, and people's perception [2].

According to a research done by Trans-Atlantic Inter-Society Consensus (TASC), the frequency of amputation surgeries has increased a lot in the last 25 years, and it is considered that it will double- increase in the following 15 years [3]. Another research shows, that until 2050, the number of persons with amputations will reach the number of 3,6 million [4].

2. THE EPIDEMIOLOGY OF INFERIOR LIMBS AMPUTATIONS

It is known that the statistics of limbs amputations vary from country to country. In Europe, out of 1 million, between 180 and 280 persons suffer an amputation [5]. In Russia, annually, 500 amputations are executed [6], whereas, in the USA the number varies from 190 to 300 [5]. In GB out of 1 million, the number of amputations reach 157, whereas in Stitzerland- 140 and in The Netherlands from 180 to 200 [7]. Most of the studies state that in 90% of the cases, surgeries occur to the inferior limbs [2].

In Republic of Moldova (except the transnistrian zone), according to the National Centre of Health Management, the number of amputation surgeries is increasing [8]. So, in 2003, 1090 amputations were performed, almost 3 times less than in 2019, when 2728 amputations were performed. The dynamics of the total numbers, in the past 5 years is presented in figure 1.

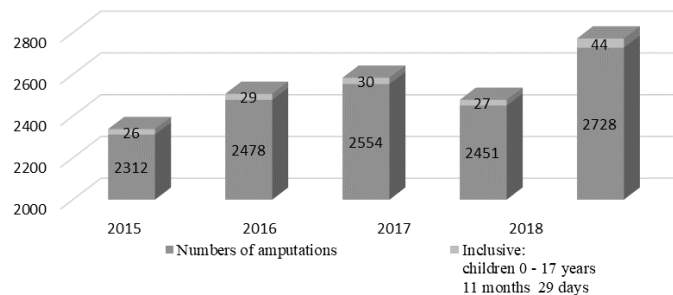


Fig. 1: Dynamics the number of amputations, registered in the Republic of Moldova (years 2015-2019) [8]

The amputation of the inferior limb is mostly the result of a cronic pathology that is constantly progressing. Reported to cause amputation, epidemiological data determine five main and unequal pathological conditions by frequency (figure 2) [8].

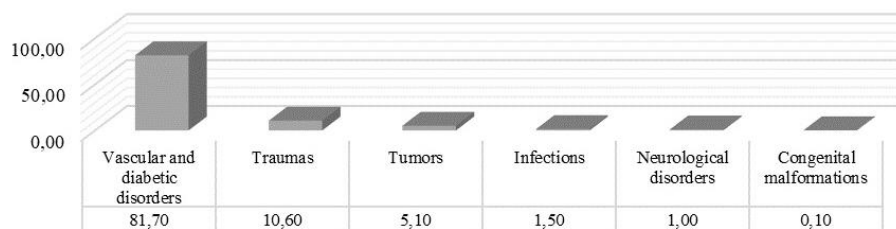


Fig. 2: Prevalence of pathologies leading to amputation of the inferior limbs [7]

The spread of those conditions is explained by the errors admitted in the process of eating and by some social factors. Fat and caloric food leads to overweight and a high level of lipids in

blood. Also, lack of movement, smoking, stress and anxiety are relevant. The hereditary gene is not neglected, and it may be kept under surveillance and control, if detected on time [2].

3. PRODUCTS DESTINED FOR PERSONS WITH INFERIOR LIMBS AMPUTATED

The quality of life of a person with a disability is a socio-economic category, which reflects the degree of satisfaction of the individual with life, depending on the satisfaction of human needs by fulfilling his role in society, developing interpersonal and family relationships, welfare, granted by the human society in which it operates and develops.

Clothing can play a key role in safety and self-esteem. For people with disabilities, clothing can be not only a means of self-confidence, but also a possibility to reduce the effort to have a normal life.

So, by analyzing the literature and online sources [9-18], were identified the needs by types of products for people with inferior limb amputations (Figure 3).

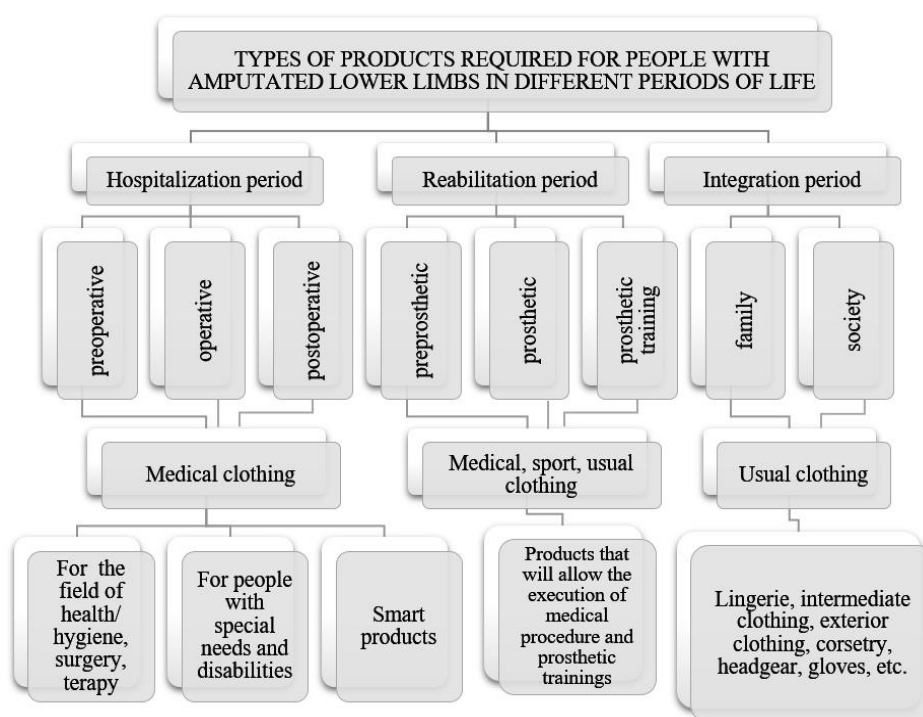


Fig. 3: Types of products for people with lower limb amputation

4. CONCLUSIONS

The personalized approach in designing clothing meant for persons with inferior limbs amputations imposes a new actual direction o field research. This is governed by the data presented by the WHO and the DIF, as according to the number of patients with inferior limbs amputation is constantly increasing.

Most studies prove that approximate 3/4 of all cases of amputations referre to he inferior limbs. Based on the gender criteria, amputations are more frequent to men, rather than women, in proportion of 3 to 1.



Approximate 80% of the cases that imply inferior limbs amputations, are caused by vascular and diabetic conditions, that affect mostly the young population. The indices are directly proportional to the age of the patient and the illness's stage development. Persons aged between 45 and 85 are more likely to be exposed to amputations caused by vascular conditions, associated or not to the diabetic ones.

The results of the preliminary study will subsequently be used in the process of elaboration of clothing products destined for persons with inferior limbs amputated.

It is generally proposed that further relevant research to be done, that would include the elaboration of a sortment of clothing destined for persons with inferior limbs amputations.

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