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The Image of The Physical "I" In People with Disabilities with Hemi Paresis as A Result of Hemorrhagic Stroke.

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ABSTRACT

The development of a stroke with hemi paresis entails changes in the physical and functional parameters of a person. This condition determines the violation of his image of his physical "I". Being a very important component of self-perception, changing the image of the physical "I" or its stability can greatly weaken the adaptive capabilities of brain activity. For this reason, the study of the state of the image of the physical "I" in people, who have become disabled due to a severe hemorrhagic stroke, contributes to the discovery of important neuropsychological mechanisms of adapting them to new conditions of life and helps to introduce new approaches to their psychological rehabilitation. A total of 65 persons of both sexes (38 men and 27 women) of the second adult age (on average 47.8 ± 2.8 years old) who became disabled due to a severe hemorrhagic stroke at least 4 years ago were examined. The subjects evaluated the degree of harmony between the degree of personal significance and the subjective attractiveness of certain anatomical, functional and image-like parameters of the image of the physical "I". Significantly significant differences were recorded in the parameters of the "anatomical" and especially "functional" characteristics of the image of the physical "I". In the characteristics of image indicators of the physical "I", the invalids did not distinguish between their personal significance and their self-esteem. The increase in the subjective significance of his physical qualities of personality found in invalids after hemorrhagic stroke should be regarded as an important resource and "point of impact" for their psycho correction after the onset of disability.

Keywords: invalids, hemi paresis, stroke, self-esteem.

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INTRODUCTION

The existence of the organism is ensured by the well-coordinated work of all its systems [1, 2]. The central place in maintaining homeostasis belongs to the interaction of the nervous and cardiovascular systems [3, 4]. This is completely true for healthy people and persons having any pathology [5], including those who suffered severe stroke and became disabled in connection with the development of hemi paresis [6, 7]. The resulting psychological trauma is a serious test for the cardiovascular and especially the nervous system [8]. The resulting chronic stress forms a crisis of the individual, which requires from her great internal efforts to restore optimal interaction with other people and with society as a whole. In this regard, studies on the problems of adaptation of people who have suffered severe stroke and become disabled as a result of him are very important [9,10]. It is important to identify the psychological factors affecting the success of the process of adaptation of the individual to the new conditions of his life activity [11, 12].

Hemi paresis always entails a change in the appearance of a person, his physical and functional characteristics, which cause a change in his physical "I" [13]. Being personally significant, the image of the physical "I", its transformation or, conversely, its immutability in a situation of traumatic stress can become serious obstacles blocking the adaptive mechanisms of higher nervous activity. In this regard, the study of the features of the image of the physical "I", the patterns of its change in persons who have suffered severe stroke and become disabled as a result of them, ensures the disclosure of deep neuropsychological mechanisms, adapting them to the new conditions of their life activity and allows finding effective ways of their psychological support [15]. Objective: to assess the state of the image of the physical "I" in the disabled with a severe hemi paresis resulting from extensive stroke.

MATERIALS AND METHODS

65 persons of both sexes (38 men and 27 women) of the second adult age (an average of 47, 8 ± 2, and 8 years) who were disabled due to severe hemorrhagic stroke no less than 4 years ago were examined as a result of persistent expressed hemi paresis.

To study the features of the image of the physical "I" personality, who suffered severe physical injuries and became in connection with this invalid, the following methods were used in the work:

- A technique for assessing the subjective significance of the components of the image of the physical "I" [16]. With its help, the person's perception of his anatomical, functional and image-like characteristics of the image of the physical "I" was studied;
- A technique for investigating the self-image of the image of one's physical "I" [17].

The data obtained during the study were subjected to statistical processing with the calculation of the arithmetic mean (M), the error of the mean value (m), and the determination of the reliability of differences in the mean values (t-Student's criterion).

RESULTS OF RESEARCHES AND DISCUSSION

The results of the analysis of the ideal physical appearance and physical qualities of a person allow us to say that persons with a disability after a stroke have functional characteristics without gender differences. All respondents with disabilities in almost 100% of cases when describing a person's physical "I" refer to the functional characteristics: strength, endurance, agility, flexibility. At the same time, anatomical characteristics are mentioned by them only in 57, 8% of cases. It becomes clear that the significance of the structure of the body, the harmony of its proportions, growth, weight for the disabled is much less than that characteristic of healthy people [18, 19].

In the course of the study, a discrepancy between the importance and self-esteem of the level of development of anatomical, functional and external characteristics in subjects was revealed. Differences have touched on a fairly limited list of characteristics.

Most of the subjects were satisfied with their clothes, hair and accessories, that is, the image characteristics of the external appearance. Significant differences were recorded in the indicators of "anatomical" and especially "functional" characteristics of the image of the physical "I" (Table 1).

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Table 1: The personal significance and state of self-evaluation of the characteristics of the physical "I" in the disabled with hemi paresis after a stroke

Characteristics of the physical "I"	Subjective significance	self-evaluation	p
Anatomic characteristics:			
1. Face:			
Hair, points	5.6 ± 0.45	5.3± 0.38	>0.05
Skin, points	5.5 ± 0.57	4.2 ± 0.43	>0.05
Face form, points	5.6 ± 0.49	4.7 ± 0.52	>0.05
Eyes, points	7.7 ± 0.62	6.5 ± 0.45	>0.05
Nose, points	6.2 ± 0.81	5.4 ± 0.52	>0.05
Lips, points	5.3 ± 0.33	5.2 ± 0.40	>0.05
Teeth, points	7.8 ± 0.36	4.5 ± 0.47	**<0.001**
Chin, points	5.7 ± 0.30	5.1 ± 0.29	>0.05
Face in a profile, points	7.9 ± 0.37	6.3 ± 0.25	>0.05
2. Figure:			
Height, points	6.6 ±0.48	5.4 ± 0.53	>0.05
Weight, points	8.1 ± 0.71	4.2 ± 0.44	**<0.001**
Correctness of proportions, points	8.6 ± 0.61	5.3 ± 0.38	**<0.01**
Neck, points	6.3 ± 0.65	5.4 ± 0.52	>0.05
Shoulders, points	6.5± 0.49	5.8 ± 0.57	>0.05
Chest, points	8.7± 0.47	4.1± 0.43	**<0.001**
Waist, points	8.7± 0.60	6.3 ±0.52	**<0.001**
Belly, point	7.3 ± 0.22	6.7 ± 0.34	>0.05
Hips, points	6.7 ± 0.40	6.3 ± 0.37	>0.05
Body in the front, points	5.6 ± 0.51	5.4 ± 0.40	>0.05
Body in profile, points	6.3± 0.28	6.0 ± 0.35	>0.05
Buttocks, points	4.3± 0.52	4.1 ± 0.32	>0.05
Contour line of back, points	6.8± 0.45	4.3 ± 0.41	**<0.01**
3. Legs:			
Shape of legs, points	8.6± 0.44	7.8 ± 0.52	>0.05
Top part, points	8.5± 0.37	7.7 ± 0.40	>0.05
Lower part, points	8.4± 0.32	7.6 ± 0.28	>0.05
Ankles, points	7.8± 0.46	7.5 ± 0.51	>0.05
Foot, points	7.7± 0.60	7.1 ± 0.56	>0.05
Length of legs, points	8.2± 0.53	7.9 ± 0.42	>0.05
4. Arms:			
Top part, points	6.8± 0.51	6.5 ± 0.36	>0.05
Lower part, points	7.1± 0.45	6.9 ± 0.32	>0.05
Wrists, points	6.8± 0.56	6.6 ± 0.48	>0.05
Brush, points	6.7± 0.37	6.5 ± 0.40	>0.05
Fingers, points	6.5± 0.36	6.3 ± 0.29	>0.05
Nails, points	4.3± 0.54	4.9 ± 0.50	>0.05
Functional characteristics:			
1. Force:			
Force of muscles of hands, points	8.7 ± 0.33	5.1 ± 0.27	**<0.01**
Force of muscles of legs, points	9.2 ± 0.41	5.6 ± 0.25	**<0.01**
Force of muscles of a back, points	9.3 ± 0.39	5.0 ± 0.23	**<0.001**
Strength of abdominal muscles, points	8.2 ± 0.28	7.3 ± 0.34	>0.05
2. Endurance:			
Power endurance, points	9.5 ± 0.45	6.1 ± 0.32	**<0.01**
Total endurance, points	9.8 ± 0.28	6.0 ± 0.25	**<0.01**
High-speed endurance, points	8.8 ± 0.40	6.1 ± 0.27	**<0.05**

3. Flexibility:			
Flexibility of the spine, points	9.2 ± 0.36	5.5 ± 0.29	**<0.01**
Flexibility of an ankle joint, points	7.6 ± 0.27	5.2 ± 0.38	**<0.05**
Flexibility of a hip joint, points	8.5 ± 0.31	6.0 ± 0.47	**<0.05**
Elastance of muscles and sheaves, points	8.1 ± 0.52	7.8 ± 0.36	>0.05
4. Speed:			
Speed of reaction, points	8.3 ± 0.28	7.8 ± 0.44	>0.05
Speed of movements, points	9,2 ± 0,35	6,2 ± 0,31	**<0.05**
5. Agility:			
Balance keeping, points	9.4 ± 0.42	6.5 ± 0.36	**<0.05**
Gait, points	9.0 ± 0.36	8.5 ± 0.49	>0.05
Clearness of movements, points	8.8 ± 0.62	7.1 ± 0.73	>0.05
Social characteristics:			
1. Clothes:			
Matching with fashion, points	6.6 ± 0.65	6.4 ± 0.61	>0.05
A combination of colors with skin color, eyes, hair, points	8.1 ± 0.58	7.8 ± 0.53	>0.05
Individual style, points	7.8 ± 0.45	7.6 ± 0.63	>0.05
Compliance with body proportions, points	8.6 ± 0.73	7.8 ± 0.56	>0.05
Compliance to an age, points	7.5 ± 0.47	7.6 ± 0.38	>0.05
Compliance of a social role, points	5.4 ± 0.52	5.7 ± 0.64	>0.05
2. Accessories:			
Shoes, points	8.7 ± 0.34	8.3 ± 0.46	>0.05
Headgear, points	8.5 ± 0.37	8.2 ± 0.32	>0.05
Bags, umbrellas, points	8.5 ± 0.48	8.3 ± 0.28	>0.05
Jewelry, points	8.6 ± 0.31	8.7 ± 0.26	>0.05
3. Cosmetics:			
Compliance with clothes, points	8.8 ± 0.62	8.7 ± 0.38	>0.05
Compliance with appearance type, points	8.6 ± 0.41	8.5 ± 0.32	>0.05

Subjects were satisfied with the image of the physical "I", as evidenced by the results of a comparative analysis of the studied indicators. In the characteristics of a face and his attractiveness, the reliability of the existing differences between personal significance and self-esteem was revealed only on the basis of "teeth". The greatest number of differences between the personal significance of the anatomical signs of the physical "I" and their subjective self-esteem was revealed in the characteristics of the figure (body weight, harmony of proportions, chest, waist, back contour), which fully corresponds to the results of many studies devoted to identifying the features of the image of the physical "I "In persons who are not burdened with any diseases [20-23].

When comparing the subjective significance and self-assessment of the accounted functional characteristics, a mismatch was revealed for most of them. This can be explained by the results of previous psychological studies [24]. The results obtained are a manifestation of deep dissatisfaction of the disabled with hemi paresis with their functional capabilities [25]. The development of their violations are the main reasons for limiting their interaction with the society [26,27] and therefore pushed into the background the presence of anatomical defects [28-30].

In the indicators of the image characteristics of the physical "I", there was no sign of any difference between their personal significance and self-esteem among the disabled with hemi paresis. Hence, their significance for the individual was hidden by dissatisfaction with the functional state of the organism and became secondary for the disabled.

CONCLUSION

Development of hemi paresis after a stroke entails a change in the external appearance of a person, his physical and functional characteristics, and changes his image of the physical "I". Studies of changes in the

image of the physical "I" in persons who have suffered severe stroke and become disabled as a result of him can ensure the disclosure of the deep neuropsychological mechanisms of adapting them to the new conditions of their life activity and help find effective ways of their psychological support.

For the majority of subjects, significant differences were recorded in the indicators of "anatomical" and especially "functional" characteristics of the image of their physical "I". In the external characteristics of the physical "I "with hemi paresis, the invalids did not distinguish between their personal significance and self-esteem in any of the characteristics. The increase in the subjective significance of their physical qualities of an individual, diagnosed in persons with severe hemi paresis, is a serious resource and "point of influence" for their psycho correction.

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