



FUNCTIONAL INDEPENDENCE IN PATIENTS WITH ISCHEMIC STROKE IN THE CHRONIC PERIOD



Dance Vasileva¹, Daniela Lubenova²

¹Faculty of Medical Sciences, University "Goce Delčev", Štip, Macedonia

² Department of Kinesitherapy and rehabilitation - National Sports Academy "Vasil Levski", Sofia, Bulgaria

INTRODUCTION

An indisputable fact is that exercises have a positive contribution to the human body. It is well known that daily physical activities can improve the performance of many systems and organs by increasing its resistance and vital body tone, and also, can significantly improve the ability for physical and mental work.

Physical work and kinesis system activities triggers some adaptations of the physiological functions in the human body, leading to a changes in the body's organs and to the system, including the neuromuscular apparatus. Regular physical activities, sports participation and active recreation are the grounds of the essential behavior for the prevention of diseases, health improvement and maintenance of the functional independence.

OBJECTIVE

To investigate the influence of the specialized physical therapy on functional independence and to compare the impact of usual physical therapy in patients with ischemic stroke in the chronic period.

MATERIALS AND METHODS

The study included 10 patients / 6 in the experimental and 4 in the control group, 6 men and 4 women with chronic right-sided and left-sided hemiparesis after ischemic stroke within 3 months. Subjects were evaluated on performance test of functional independence / FIM / at the beginning, of the 10th day, 1st month and 3 months.

We used two exercise methods: specialized physical therapy methodology (SPTM) applied in the experimental group (EG) and usual physical therapy methodology applied in the control group (CG). SPTM was developed by us based on principles of motor control, motor learning and contemporary guidance to neurodevelopmental treatment (NDT). Patients from EG after 10-day daily physical therapy continued with adapted program for home rehabilitation and requirements for it.

RESULTS

The difference in FIM-assessments at the beginning between CG (3.79) and EG (4.31) groups was not significant ($p > 0,05$). On the 10th day, FIM-assessment in the EG (5.81) was significantly greater ($p < 0,01$) compared to CG (4,38). On 1 months, FIM-evaluation in EG (6.46) was significantly greater ($p < 0,001$) in comparison to that of the CG (4.29). At 3 months, the FIM-evaluation in EG (6.81) was significantly greater ($p < 0,001$) in comparison to that of the CG (4.13).

DISCUSSION

The physical therapy applied by us, continued later as an exercise program at home, that significantly improves functional independence in patients with ischemic stroke in the chronic period.

Fig.1: Percentage preview of distribution by sex and localization of paralysis in patients with ischemic stroke in chronic period

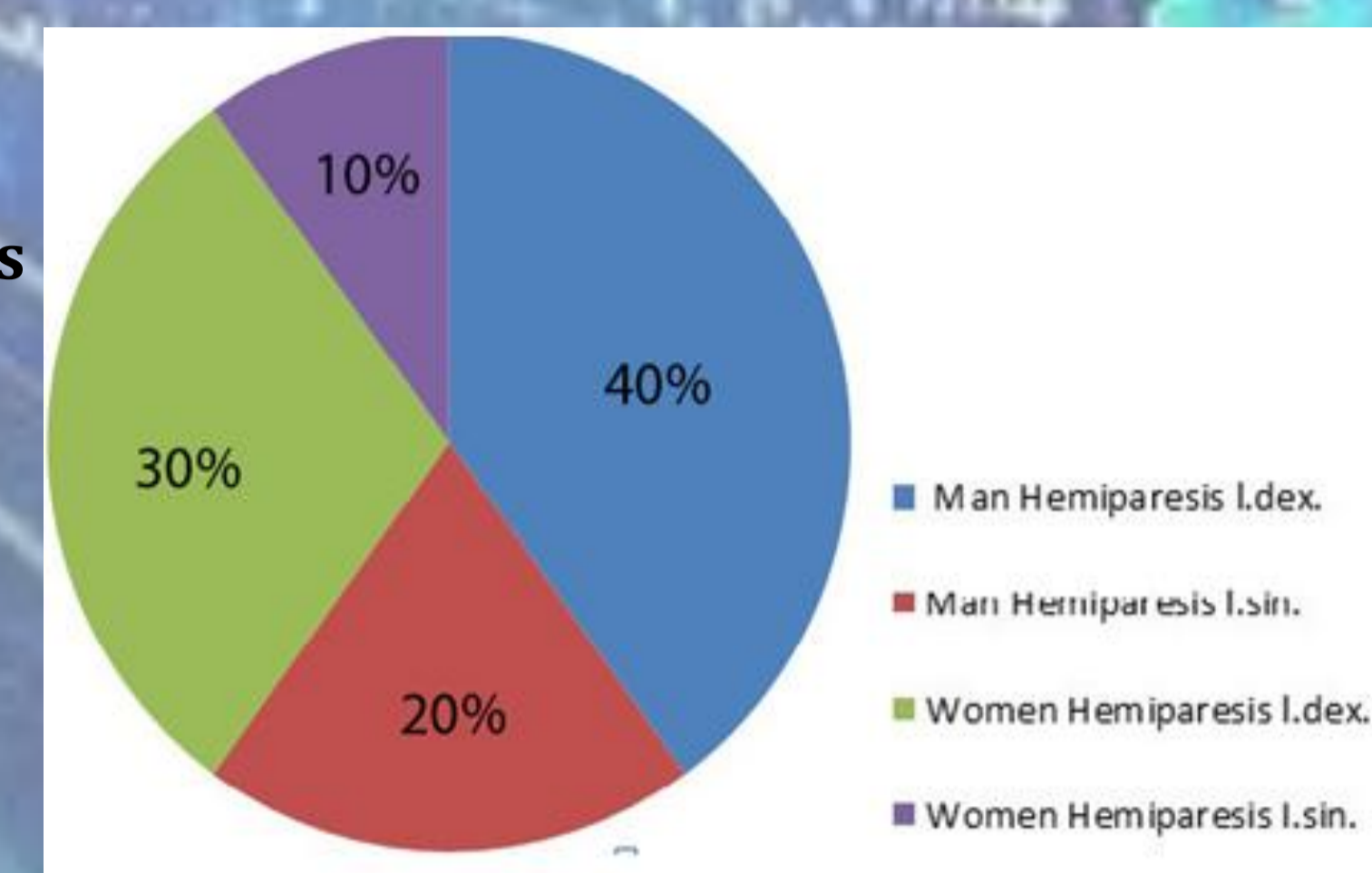


Fig.2: Graphs preview of distribution by sex and localization of paralysis in patients with ischemic stroke in chronic period

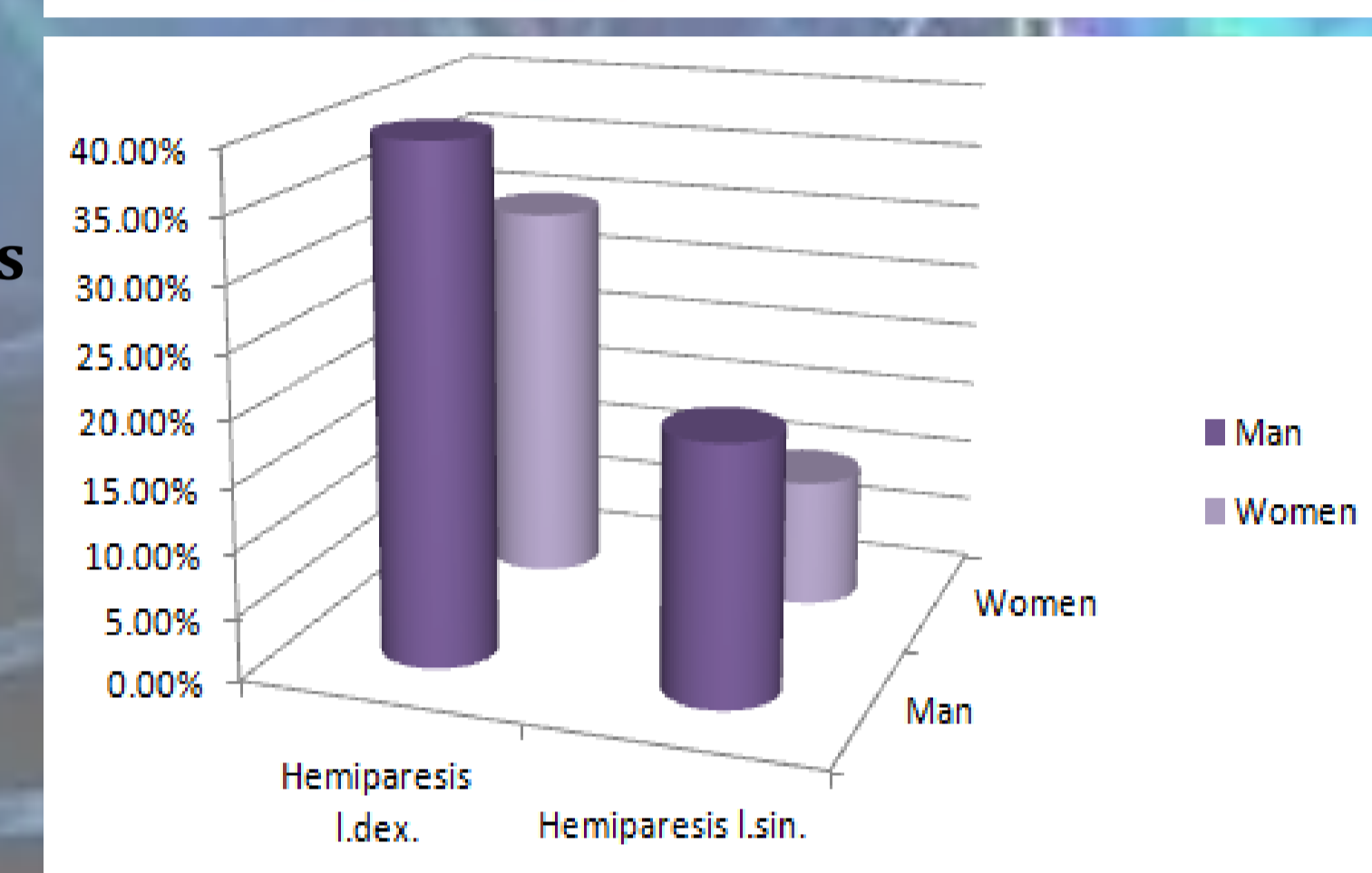


Fig.3: FIM-assessment / Differences / Experimental & Control /

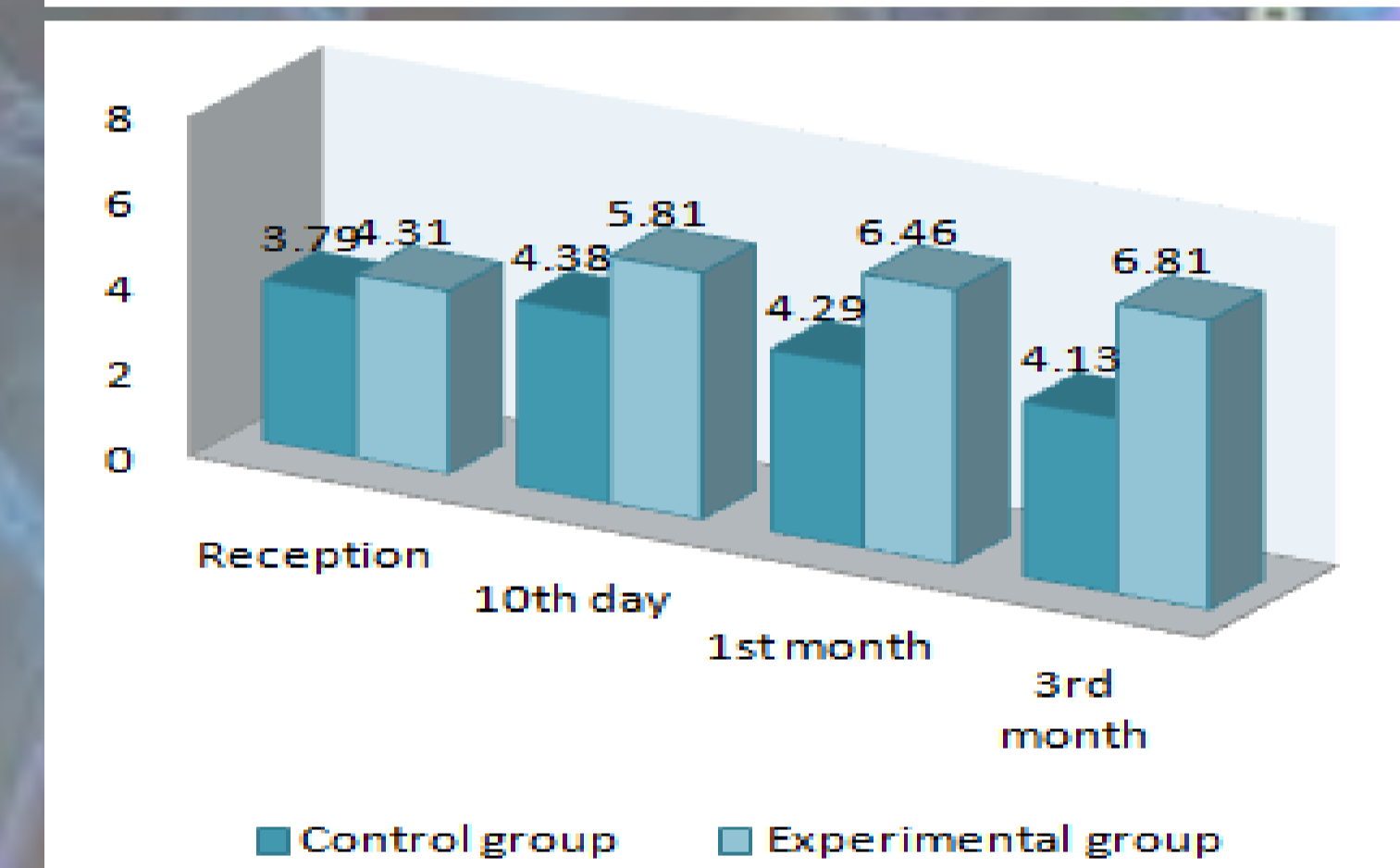
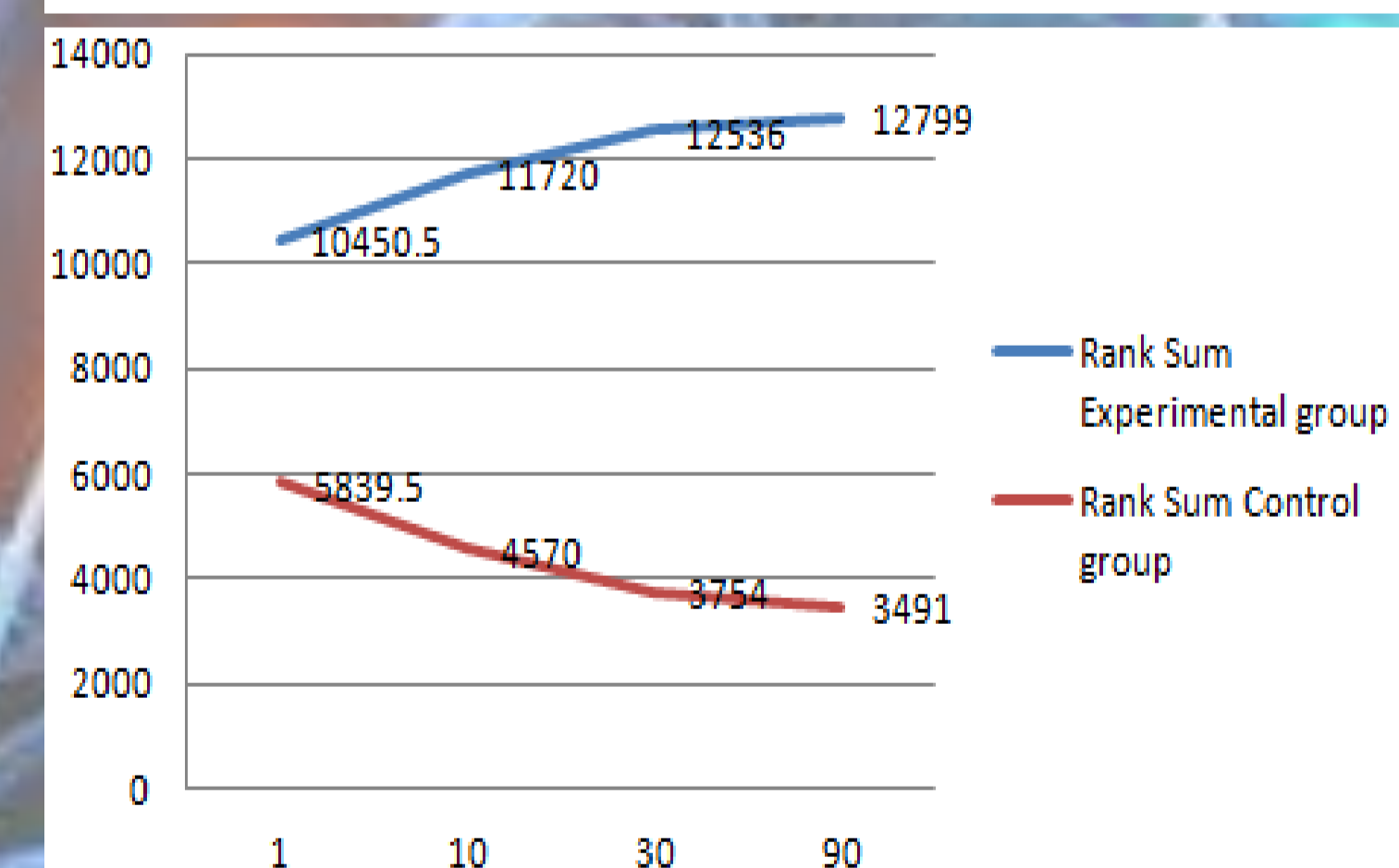


Fig. 4 Graphical representation of differences in rank sum of FIM assessments of the two groups



Tab.1: FIM-assessment / Differences / Experimental & Control /

FIM	Rank Sum Experimental	Rank Sum Control	U	Z	p-level	Z adjusted	p-level	Valid Eks.	Valid Kon.
Reception	10450,50	5839,50	3211,50	1,98	0,04	2,01	0,04	108	72
10th day	11720,00	4570,00	1942,00	5,68	0,000	5,82	0,000	108	72
1st month	12536,00	3754,00	1126,00	8,06	0,000	8,44	0,000	108	72
3rd month	12799,00	3491,00	863,00	8,83	0,000	9,89	0,000	108	72

Address for correspondence:

MSc. Dance Vasileva

Faculty of Medical Sciences

University "Goce Delchev" - 2000 Shtip, Macedonia

Email: dance.vasileva@ugd.edu.mk

PhD. Daniela Lubenova, Associate Dean

Faculty of Physiotherapy, Tourism and Sport animation

National Sports Academy "Vasil Levski" 1000 Sofia, Bulgaria

Email: [lubanova@abv.bg](mailto:lubenova@abv.bg)

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