

Familial and socio-economic changes of patients with hemiparesis stemming from stroke

Aline Ferreira Placeres¹, Maysa Alahmar Bianchin²

ABSTRACT

A stroke is considered a disease of great social impact that causes major disruptions such as job loss, decreased income, and changes in occupational roles; it can become a serious family problem. **Objective:** To analyze the changes in work and family caused by hemiparesis in patients who have experienced a stroke. **Methods:** This is a quantitative study involving 30 patients with hemiparesis due to stroke in the Hospital de Base of São José do Rio Preto. The instruments used were the identification form containing their name, age, gender, and current and previous occupation, among other things, along with a questionnaire adapted by the Occupational Therapy service with ten closed questions where the participant could respond either “yes” or “no.” **Results:** The research showed that before having the stroke, 87% of the participants were working and receiving a salary, and after the stroke none had any paid activity. The family relationships of those impaired for a longer time suffered more than of those who were impaired for a shorter time. **Conclusion:** This study found that patients with hemiparesis due to stroke may undergo changes in industrial, socioeconomic, and family relationships. This data is relevant so that health professionals can assist the return of these subjects to occupational activities after a stroke.

Keywords: Socioeconomic Factors, Stroke, Paresis, Occupational Therapy

¹ Terapeuta Ocupacional Residente, Hospital de Base da Faculdade de Medicina de Resident Occupational Therapist at the Hospital de Base of the School of Medicine of São José do Rio Preto - FAMERP.

² Professora do Departamento de Ciências Neurológicas, Faculdade de Medicina de Professor in the Department of Neurological Sciences at the Hospital de Base of the School of Medicine of São José do Rio Preto - FAMERP.

Mailing address:

Faculdade de Medicina de São José do Rio Preto -
FAMERP, Departamento de Ciências Neurológicas
Maysa Alahmar Bianchin
Av. Brigadeiro Faria Lima, 5416
São José do Rio Preto - SP
CEP 15090-000
E-mail: maysa@famerp.br

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INTRODUCTION

A stroke is the result of circulation changes in the brain, creating lesions and damage to neurological functions, making this one of the pathologies of greatest social impact in Brazil as well as the rest of the world due to the mortalities and disabilities; its incidence increases every year. Impairments and losses occur in the physical, cognitive, and/or behavioral domains.¹

One of the impairments caused by strokes is hemiparesis, leading to motor deficiency, which is characterized by weakness in the hemibody contralateral to the lesion.² The suffix “-plegia” is used when there is total paralysis and “-paresis” when the paralysis is only partial. Hemiparesis is not a disease, but rather a neurological sequelae stemming from impairment of the Central Nervous System (CNS).³

In addition to exacerbating the reduction in functional capacity, which limits the individual's independence and quality of life, these sequelae also contribute to a loss of self-esteem, social isolation, and depression, which also influence quality of life.⁴ This condition can also affect the family structure where feelings and perceptions such as the possibility of death can arise, creating great stress and anxiety and triggering changes in the family nucleus that induce the restructuring and redefinition of roles, altering the mode of life for the patient as well as the entire family.⁵

Unemployment is another significant change in the stroke subject's life who suffers the sequelae of reduced limb function that often comes with hemiparesis. The World Health Organization (WHO) estimates that impaired persons represent 10% of the world's population; data from the IBGE Census in 2000 show that physical and motor dysfunctions are the second leading impairment in the country.⁶ Around 600 million people worldwide have some type of impairment and data from the International Labor Organization (ILO) show that 386 million of these are among the economically active population, being of working age.⁶ However, in areas where there are no inclusion policies, unemployment among the disabled reaches 80% because employers believe these people to be incapable of working.⁶

Studies showing the impact caused by physical dysfunctions regarding work and family relationships are essential in order for health care professionals to serve this demographic-not just to think in terms of isolated parts such as “arms and legs,” but rather in

terms of the individual as a totality, enabling not only their return to mobility, but their return to society and life with their family with autonomy and dignity.

OBJECTIVE

To analyze the changes in work and family life brought on by hemiparesis in stroke patients.

METHOD

This was a cross-sectional, quantitative study carried out between the months of August of 2012 and February of 2013 in the outpatient clinic of the Hospital de Base's Neurology Department in the city of São José do Rio Preto - SP, after being approved by the Ethics Committee of the School of Medicine in São José do Rio Preto - FAMERP under protocol number (07457612.6.0000.5415).

Thirty patients of both genders were evaluated, all with stroke-related hemiparesis; people with significant cognitive impairments were excluded. Before the 60-minute sessions began, the therapist and patient read and signed the free and informed forms. For patients under 18, the consent forms were signed by the child's guardian. The identification sheet was then filled in with information such as name, gender, age, schooling, marital status, time with disability, current and prior profession, and whether they had a caregiver.

The questionnaire adapted by the Occupational Therapy service, which consisted of ten “yes” or “no” questions, was then applied at the end of the interview. The questions were: Has your relationship with your family changed since your hemiparesis? Have you lost all your friends since your hemiparesis? Do you feel like a different person? Do you feel as if people look at you differently since your hemiparesis? Do you feel ashamed for having hemiparesis? Are there things you feel able to do but don't do for fear of what people might say? Have you given up your former activities since your hemiparesis? Is there anything you feel incapable of doing? Are you satisfied with your life? Do you consider yourself happy? Two statistical analyses were done, the first regarding “Has your relationship with your family changed since your hemiparesis?” and the time with the disability, as shown on the identification sheet, using the Spearman

correlation for non-parametric data. The second correlated the previous and current professions, also from the identification sheet, using the Chi-square test.

This is an original and unseen work extracted from a mother project entitled “Evaluation of the upper limb in hemiparetic patients and their self-perception facing disability” (*Avaliação do membro superior em pacientes com hemiparesia e sua auto-percepção frente à disfunção*) wherein the two authors actively participated in its construction, which has never been published, has no conflicts of interest, is not currently under consideration for publication in any other magazine, and in no way infringes upon the rights of others.

RESULTS

In this study, the identification data shows that there were 30 participants, 70% of whom were male. As to their schooling, 37% had completed junior high school, none had been to university, and 57% were married. Participants' ages ranged from 13 to 80, with an average of 55.4 ± 18 years (Table 1).

The first analysis regarding “Has your relationship with your family changed since your hemiparesis?” and the time with the disability, as shown on the identification sheet, showed a high significance ($p = 0.0051$) using the Spearman correlation, indicating that those who showed modified family relationships were the ones who had suffered the disability for a longer time. From the second analysis, which correlated the previous and current professions, also from the identification sheet, it was possible to see a high significance ($p < 0.0001$) using the Chi-square test, showing that all the participants had left their paid activities after their stroke.

The correlation between previous and current professions showed that all the participants had worked before their stroke: 87% in paid activities and 13% unpaid, whereas only 20% did any activity now, and none of it was paid.

DISCUSSION

In this study, the male gender predominated; this data corroborates with data from Correia et al.⁷ wherein the majority of participants who had suffered a stroke in their research was male.

Table 1. Identification data

Data	Frequency (%)
Gender	
Male	21 (70%)
Female	9 (30%)
Schooling	
Incomplete Jr. high school	5 (17%)
Completed Jr. high school	11 (37%)
Incomplete high school	3 (10%)
Completed high school	7 (23%)
Illiterate	4 (13%)
Marital Status	
Married	17 (57%)
Single	6 (20%)
Divorced	1 (3%)
Widowed	6 (20%)
Previous Profession	
Paid activity	26 (87%)
Unpaid activity	4 (13%)
Current Profession	
Retired	18 (60%)
Off work	6 (20%)
Unpaid activity	6 (20%)
Time with Disability	
1 month	4 (13%)
2 months	1 (3%)
3 months	2 (7%)
4 months	2 (7%)
7 months	1 (3%)
12 months	3 (10%)
24 months	4 (13%)
36 months	2 (7%)
60 months	3 (10%)
72 months	1 (3%)
84 months	2 (6.7)
108 months	1 (3%)
120 months	2 (7%)
144 months	2 (7%)
Has Caregiver	
Yes	15 (50%)
No	15 (50%)

The observation that the participants who had lived with their disability for a longer time had a more difficult relationship with their families could be explained by the fact that a person having severe physical disabilities creates a crisis not only for the family, but for the person himself, for it is a condition requiring long periods of supervision, observation, and care.⁸ Due to the long-term needs, the disabled

person almost always becomes dependent upon family members for physical care, emotional control, social relationships, and finances, and this care frequently becomes a significant overload for the family.⁸ Social relationships become hampered, requiring readaptation, which are felt in the domestic economy by the expenses with treatments, the reduced family income, and by the inability of one or more family

members to work and help out with paying the bills.⁵ Due to the major family, social, and professional disruptions, the disabled subject often winds up breaking up old relationships and losing close friends.⁹

Comparing the professions before and after their strokes, one can verify that, whereas the majority of the participants used to have paid work, none of them now did. This data corroborates with the study by Vianna et al.¹⁰ on disabled persons who showed that 60% of their subjects reported having difficulties in finding work. In that same study it was verified that among the 40% of individuals who did not report having trouble finding work were college-educated. This data confirm the finding of the present study, since none of these subjects had any higher education. Also, according to Menezes et al.,⁵ a stroke carries psychological repercussions such as feelings of fear, anguish, and limitation. In the social field, unemployment, physical and financial dependence, and social isolation become increasingly noticeable and knowledge of these fragilities by health professionals can facilitate post-stroke care and family recovery/restructuring.⁵

Although physical illnesses take different forms, it is in the family environment that they will increasingly be resolved, thus health professionals need to be prepared to acquire a critical vision and offer high-quality assistance.¹¹

CONCLUSION

This study was important since it showed that people with hemiparesis can suffer socioeconomic as well as family problems. This information is extremely helpful, especially in Occupational Therapy, since this is the area where patients can achieve independence and quality of life. This study contributed to the knowledge of health professionals so that they can better understand the life situation of these patients and thereby help them return to occupational activities via humanized treatment.

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