

137 - THE PRESENCE OF HUMAN ERROR IN SERVICE TO REHABILITATION OF THE UNIFIED HEALTH SYSTEM

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1. INTRODUCTION

Generally, when we study the operation of production systems, there is the human factor as a cause of problems and generate errors, but it is impossible to devise systems without the human factor.

The literature reports that the study of human error, you need specific actions directed to consider the factors that most contribute to the generation of error, they are: environmental conditions and nature of the task, the individual nature and mechanisms that control the outcome of the action individual (REASON, 2002).

The object of this research is human error that results from the action of thinking and transcribe the rules and ordinances that control the production process of a rehabilitation center and therefore affects the product, where the implant the User Center receives and also the rehabilitation process.

In accordance with Article 23, Chapter II of the Constitution of 1988, which determines the competence of the Union, States, Federal District and the municipalities in the health care and public assistance, protection and security of people with disabilities in Health System, a joint effort between the three levels of government, in view of universal and comprehensive care and decentralization.

In recent decades, specific for people with disabilities are increasing all over the world. There are increasing concerns of technical classes and policies to improve the social integration of disabled people, with more active participation of society in general. Moving away from purely welfare approach, several steps in several areas, including health care, are performed in order to improve the quality of life of persons with disabilities (Government of Parana, 2005).

The World Health Organization, 1997, estimated that about ten percent of the population of any country in peacetime is a carrier of some type of disability. Based on these percentages, it is estimated that in Brazil there are sixteen million people with disabilities.

It is the responsibility of the State Networks for Assistance to Persons with Disabilities offer comprehensive care in health care to people with disabilities and recommended by the National Health System since its diagnosis to their social integration, with operations team and multi-disciplinary expert in physical rehabilitation (motor and sensory motor) with the prescription, evaluation, fitness, training and monitoring the dispensing of prostheses and / or auxiliary means of locomotion (OPMAL) (Government of Parana, 2005).

The completeness in the care provided by the Unified Health System - SUS organizes health care at various levels of assistance with varying degrees of complexity: Primary Health Care, Family Health Centers Comprehensive Health Services, Physical Rehabilitation - First Level Intermunicipal Reference Service, Reference Physics - Intermediate Level, the Reference Service for Physical Medicine and Rehabilitation, Rehabilitation beds in General or Specialized Hospital (Government of Parana, 2005).

The various levels of health care, work as a system produtivo. O this work will be subject of study or the Intermediate Reference Service Physics and the level of high complexity or outpatient Reference Service for Physical Medicine and Rehabilitation, which meet the demand predetermined coming of regional health. They are productive systems that work with a monthly financial limit for the dispensation of prostheses, orthoses and mobility aid involved means the User with physical disabilities.

According to Johnstone (2006), the health care, to reduce human error can be improved.

Rennie et al (2007) reported that for the reduction of human error is very important guidance and training to health professionals.

McIlvaine (2006), described the tragic impact of human error in health care in the United States.

The production process of a rehabilitation center is given as follows: User comes to the center from a referral to another rehabilitation service is through the evaluation with the multidisciplinary team, composed of physiatrist, physical therapist, psychologist, social, speech therapist, occupational therapist and nutritionist. There are cases where the User needs only the rehabilitation team, in other cases the User needs, as well as rehabilitation of an orthosis, prosthesis or an aid to locomotion (opml). Continuing the process, it has the implants and prostheses will be made in our own workshops or outsourced centers and mobility aids are generally acquired from other companies that already produce in larger quantities, enabling lower costs. A multidisciplinary team made the request opml, records the request in a printed report. Starting with the authorization of the report, the center will arrange a date for the User performing the action or templates, and prostheses, as well as auxiliary means of locomotion.

This production system would be perfect if not for the presence or unintentional human error. The error begins in the amount of monthly financial limit that falls short of the demand for regional center are supported by high complexity in physical medicine and rehabilitation, especially with regard to prosthetics and mobility aids (wheelchair transport). You must select a certain amount of patients to be treated, because the roof does not allow prompt response to all that is needed. Another problem raised by the ordinance that discriminates the items to be delivered, it is not the contemplation of items, according to the needs of each User, so that all are not treated equally, not taking into account the particularities of each disease and User (Government of Parana, 2005).

For the success of this production system is necessary that the unified health system (SUS) accredits to meet the User, a rehabilitation center, which has an appropriate multidisciplinary team and the infrastructure. However SUS should offer the availability of a center roof cover is provided in ordinances and standards appropriate to the needs and demands of users. According to Paladini (2004), the User-centered approach is concerned with aesthetics and convenience. The approach focused on the product settles in areas such as performance and durability, the approach has focused on manufacturing, is fixed in reliability and compliance, thus underscoring the importance of comprehensive analysis, increasing the responsibility of quality for all who develop some action the production process.

The need for regulatory standards, compatible with the needs and circumstances of users of the national health care

system is critical to the success of the process of rehabilitation.

The laws and ordinances emphasize the right of persons with disabilities, the same opportunities as other citizens, as well as to enjoy, on equal terms, improvements in living conditions resulting from economic development and social progress (MINISTRY OF HEALTH, 2003).

It is for managers of national health care system, according to their powers and in coordination, creating the conditions and act in order to facilitate the achievement of the purpose of rehabilitation of disabled persons in their functional capacity and human performance. The Ministry of Social Security, responsible for promoting compliance with the rules concerning the establishment and operation of institutions of rehabilitation and assist people with disabilities in their own units and those under their supervision (MINISTRY OF HEALTH, 2003).

Can suggest that if there are problems in the formulation of the legislation, even supervised the rehabilitation institutions may have problems. Based on these data, this study aims to identify the perceptions of users of the public in relation to the prosthesis received by the rehabilitation center's observations, to check how is the dispensation of prostheses and rehabilitation for users.

For Adams and Baumecker (2005), human error, especially that which occurs close to the outcome of incidents and accidents must be understood as a sign of any problem more important in the history of the present system. Errors announce the existence of potential adverse events, in particular accidents, incidents or disasters incubated in the system. And if they are not properly recovered and analyzed these events can realize their potential.

For Johnson (1999), human error is inevitable, can not be predicted and its prevention is very expensive.

2. METHODOLOGY

Qualitative research, quantitative and subjective, with characteristics of users with hearing aids, with field research in a direct, explanatory cross-sectional data collection and participatory. The study aimed to verify the users' perception in relation to prostheses received the Rehabilitation Center of FAG, considering the influence of human error.

The research was conducted at the Rehabilitation Center FAG in the city of Cascavel, between 18/04/2008 to 30/06/2008, and the 51 users interviewed prosthesis who received their prostheses at the Rehabilitation Center of FAG, randomly chosen. The sample consisted of users who make use of the prosthesis, and signed a consent form. Inclusion criteria for the study were: users receiving prostheses at the Rehabilitation Center of the FAG and are adapting to their use, the exclusion criteria were users who are not using the prosthesis.

Data collection was done through a questionnaire, consisted of sixteen questions, developed by the researcher.

3. RESULTS AND DISCUSSION

In this study it was found that the 51 users who participated in the sample, 76% are male, and 24% female. There was also that 100% of users who participated in the sample have lower limb amputations and unilateral.

According Ritsuko, 2007 at the Institute of Orthopedics and Traumatology, University Hospital of Sao Paulo in the period 1999 to 2003 it was found that 92.4% of patients have lower limb amputation, which is similar to the findings in our research.

In our study found the process of adapting to the prosthesis users, we found that 75% of users reported having performed the procedure properly and 25% did not perform the adaptation process.

In the study by Cassefo and cols.2003, who examined the epidemiological profile of amputees of the Home School San Francisco, it was found that the average pre-prosthetic training was 6.7 months and prosthetic training was 4, 8 months and median time to discharge from the rehabilitation center was 13 months for transfemoral amputees and 11 months for transtibial amputees.

In our study it was found that users who received the prosthesis 67% continued to rehabilitation in FAG, and 33% did not continue, and users who have made the process of adaptation to the prosthesis, 54.9% continued to rehabilitation. In research done by Cassefo and cols.2003, where we analyzed the epidemiological profile of 262 amputees, it was found that 32.4% of patients dropped out of rehabilitation, which is similar to the results of our work.

In this study it was found that, out of 51 users of the sample 67% reported being adapted to the prosthesis and 33% reported not being adapted. Joining the issues of the adaptation process and users that are already adapted to the prosthesis, it was shown that a significant number of users who have made the process of adaptation to the prosthesis and adapted to the same (56.9% $p = 0,00$).

According Baraúna cols.2006 and after amputation the use of a prosthesis has a normal body image, helping the individual to develop greater confidence and physical skills and improving their quality of life.

According to Abotec (Brazilian Association of Technical Orthopedics), 60% of patients abandon the use of external prostheses, especially the arm and legs, why not adapt to them. (COLUCCI, 2008).

According Ritsuko, 2007 apud Gauthier-Gagnon et.al, 1998, evaluated 396 patients with unilateral amputation of limbs, the result showed that 85% of patients used the prosthesis weekly, with 53% for activities at home and 64% for activities outside the home, 15% of respondents were not using the prosthesis prótese. A adaptation were correlated with the active use of the prosthesis inside and outside the home.

In a study by Luccia and cols.1985 where the authors evaluated 51 patients amputated for peripheral arterial disease, showed that 88% of patients achieved walking with a prosthesis after rehabilitation, which was considered a successful rehabilitation of the authors.

In another study done by Chamlian cols.2007 and noted that the predictive factors in the acquisition of walking with the prosthesis, compared to 40 amputees and prostheses unilaterally treated at the Federal University of São Paulo (UNIFESP). 60% of patients have acquired functional gait with a prosthesis and 40% of patients have acquired functional gait with a prosthesis.

In this study it was found that the 51 users interviewed, 61% reported that it received the prosthesis is adequate, and 39% was not adequate. Do not be appropriate according to the account of users meant that the prosthesis was hurting, the fit was inadequate, with a loose prosthesis, short, tight or that the prosthesis could be lighter.

In a study performed by Guarino et al. 2007, about returning to work in lower-limb amputees, found that 35.9% reported having problems adapting to the prosthesis and comfort with the mesma. Resultado which is consistent with our research.

In a study performed by Chan and Tan 2001, on the graft in the elderly amputee, received a questionnaire and found that 30% did not adapt to hearing aids, due to improper fitting, loose, pressure ulcers, and psychological factors. Comparing these studies with the present study, we observed that the main problems reported by amputees in the adaptation of the prosthesis, sensory impairments are factors related to inadequate fitting of the prosthesis.

This work was also analyzed daily use of prosthesis, 78% of users reported using the prosthesis every day and 22% did not use them daily. Although it was found that 82% of users AVDs with the prosthesis and 18% did not.

In a study done by Ritsuko, 2007 cited in Jones et al.1993, we interviewed 52 amputees with at least one year after

discharge and found that 94% of people used the prosthesis, of which 72% of all that dias. Resultado runs counter to our research. Hagberg and Branemark, 2005, evaluated 97 patients with transfemoral amputation, 95% of the patients wore dentures and 82% used the prosthesis daily.

According to Benedetto at the time of the amputee prosthesis incorporates his body scheme, is to use it automatically, so much more effective, which helps the rehabilitation process. Debastiani, 2005 assessed 6 lower-limb amputees rehabilitated with hearing aids and, on balance and functionality, and found that 76% of respondents reported performing their AVDs with the prosthesis. In this study we verified the user feedback on the rehab of FAG, 61% of users reported that the rehabilitation center's observations is good, 33% which is great and 6% who said they were regular.

In the chart that follows, we analyzed the perception that users have their hearing, the alternatives were: bad, regular, good and ótima. Da sample it was found that 4% of users reported that the prosthesis is bad, which is 24% regular, 62% believe that the prosthesis is good and 10% qualified the prosthesis as great.

The subjective well-being are a matter of private experience, their evaluation measures include both global and individual assessments referenced fields such as physical and cognitive, social relationships, family relationships and spirituality. (CROSARA, 2007).

Assessing the well-being - subjective of users in relation to the hearing, the respondents chose one of the alternatives respectively. In relation to the prosthesis received you are happy, 24% chose this alternative, is satisfied with the prosthesis 16%, 0% are disappointed, think the hearing could be better 29%, the prosthesis was excellent and exceeded expectations by 12% to prosthesis is very bad 2% and another 18%, which are mostly users who reported that the prosthesis good.

In a study performed by Diogo, 2003 which assesses the overall satisfaction with life, the Barthel index, including 40 elderly patients with lower limb amputations treated at University Hospital in Campinas, São Paulo. The results showed that study participants showed a high overall satisfaction with life (mean 7.1, median 7, 5, and standard deviation of 2.73).

4. CONCLUSION

According to the study, we conclude that patients are satisfied with the prosthesis received, but 28% of users consider their hearing bad or average and 29% feel that their hearing could be better. When questioned in relation to the prosthesis or may not be appropriate to be obtained appropriate according to the account of users meant that the prosthesis was hurting, the fit was inadequate, with a loose prosthesis, short, tight or that the prosthesis could be lighter. All this depends, in part, that the ordinances offer more possibilities for components for comfort to the hearing, they can be manufactured to suit the individuality of each User. We conclude that human error in this ordinance may be affecting the beliefs and User Satisfaction, interfering in the process of rehabilitation.

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THE PRESENCE OF HUMAN ERROR IN SERVICE TO REHABILITATION OF THE UNIFIED HEALTH SYSTEM

ABSTRACT:

The rehabilitation center of Assis Gurgacz School (FAG) has been operating since 2006 as a service of high complexity in rehabilitation, through the Unified Health System (SUS) in the city of Cascavel, Paraná, given the population with rehabilitation and the dispensation prostheses. This research aimed to identify the perceptions of users of the public in relation to the prosthesis received and see how is the dispensation of prostheses and rehabilitation of users, whereas there is human error in the formulation of rules and ordinances that control center rehabilitation. We interviewed 51 amputees, between 20/09/2009 to 15/10/2009, chosen randomly. According to the results we observed that 75% of users made the process of adaptation to the prosthesis, and 67% are adapted to it. The sample was also found that 78% of users use the prosthesis daily. With regard to user feedback regarding the hearing, it was found that 4% of users reported that it is bad, which is 24% regular, 62% believe that the hearing is good and 10% qualified as great a prosthesis. The views of users in relation to the rehabilitation center's observations showed that 6% consider regular, 61% good and 33% felt that the rehabilitation center is great. The results of this study can be seen that most users have a good sense of hearing and offered rehabilitation, but omesmo also suggested that there are problems that could be solved by better control of human error.

KEYWORDS: Human Error; Prosthesis; Rehabilitation

LA PRESENCE D'ERREUR HUMAINE EN SERVICE DE REHABILITATION DU SYSTEME DE SANTE UNIFIE

RÉSUMÉ:

Le centre de rééducation d'Assise École Gurgacz (FAG) a été exploitée depuis 2006 en tant que service d'une grande complexité dans la réhabilitation, par l'intermédiaire du Système de santé unifié (SUS) dans la ville de Cascavel, Paraná, étant donné la population avec la réhabilitation et la dispensation prothèses. Cette recherche visait à identifier les perceptions des utilisateurs du public par rapport à la prothèse reçues et voir comment est la dispensation de prothèses et de réadaptation des consommateurs, alors qu'il y a une erreur humaine dans la formulation des règles et des ordonnances qui Control Center réhabilitation. Nous avons interrogé 51 personnes amputées, entre le 20/09/2009 au 15/10/2009, choisis au hasard. Selon les résultats, nous avons observé que 75% des utilisateurs ont fait le processus d'adaptation à la prothèse, et 67% sont adaptés. L'échantillon a aussi été constaté que 78% des utilisateurs utilisent les prothèses tous les jours. En ce qui concerne les commentaires des utilisateurs en ce qui concerne l'audience, il a été constaté que 4% des utilisateurs ont déclaré qu'il est mauvais, ce qui est de 24% régulièrement, 62% pensent que l'audience est bonne et 10% qualifiés aussi grand d'une prothèse. Les points de vue des utilisateurs en ce qui concerne les observations du centre de rééducation a montré que 6% estiment réguliers, 61% bonne et 33% estiment que le centre de rééducation est grand. Les résultats de cette étude peut être vu que la plupart des utilisateurs ont un bon sens de l'ouïe et de réinsertion offertes, mais omesmo également suggéré qu'il existe des problèmes qui pourraient être résolus par une meilleure maîtrise de l'erreur humaine.

MOTS-CLÉS: l'erreur humaine; prothèses, réadaptation

LA PRESENCIA DE ERROR HUMANO EN EL SERVICIO DE REHABILITACION DEL SISTEMA UNIFICADO DE

SALUD

RESUMEN:

El centro de rehabilitación de Assis Gurgacz Escuela (FAG) ha estado funcionando desde 2006 como un servicio de alta complejidad en rehabilitación, a través del Sistema Único de Salud (SUS) en la ciudad de Cascavel, Paraná, dada la población con la rehabilitación y la dispensación prótesis. Esta investigación tuvo como objetivo identificar las percepciones de los usuarios del público en relación con la prótesis se ha recibido y ver cómo es la dispensación de prótesis y la rehabilitación de los usuarios, mientras que hay un error humano en la formulación de normas y ordenanzas que el centro de control rehabilitación. Hemos entrevistado a 51 amputados, entre el 20/09/2009 al 15/10/2009, elegido al azar. Según los resultados se observó que el 75% de los usuarios hizo que el proceso de adaptación a la prótesis, y el 67% se adaptan a ella. La muestra también se encontró que el 78% de los usuarios utilizar la prótesis diariamente. Con respecto a comentarios de los usuarios respecto de la audiencia, se constató que el 4% de los usuarios informó de que es malo, que es del 24% regular, 62% cree que la audiencia es buena y el 10% calificado como prótesis grande. Las opiniones de los usuarios en relación a las observaciones del centro de rehabilitación mostró que el 6% la considera regular, 61% buena y 33% consideró que el centro de rehabilitación es grande. Los resultados de este estudio se observa que la mayoría de usuarios tienen un buen sentido de la audición y de rehabilitación que ofrece, pero omesmo sugirió también que hay problemas que podrían resolverse mejor control de errores humanos.

PALABRAS CLAVES: Error Humano; prótesis, rehabilitación

A PRESENCIA DO ERRO HUMANO EM UM SERVIÇO DE REABILITAÇÃO DO SISTEMA ÚNICO DE SAÚDE.

RESUMO:

O centro de reabilitação da Faculdade Assis Gurgacz (FAG) atua desde 2006 como serviço de alta complexidade em reabilitação, através do Sistema Único de Saúde(SUS), na cidade de Cascavel, Paraná, atendendo à população com reabilitação e fazendo a dispensação de próteses. Essa pesquisa teve como objetivo identificar a percepção dos usuários do SUS em relação à prótese recebida e verificar como está a dispensação de próteses, bem como a reabilitação dos usuários; considerando que existe o erro humano na formulação das normas e portarias que controlam o centro de reabilitação. Foram entrevistados 51 amputados, entre os dias 20/09/2009 à 15/10/2009, escolhidos aleatoriamente. De acordo com os resultados obtidos foi possível verificar que 75% dos usuários fizeram o processo de adaptação a prótese, e 67% estão adaptados a mesma. Da amostra ainda foi constatado que 78% dos usuários usam a prótese diariamente. Em relação à opinião dos usuários em relação à prótese, obteve-se que 4% dos usuários relataram que a mesma é ruim, 24% que é regular, 62% consideram que a prótese é boa e 10% qualificaram a prótese como ótima. A opinião dos usuários em relação ao centro de reabilitação da FAG mostrou que 6% o consideram regular, 61% bom e 33% opinaram que o centro de reabilitação é ótimo. Com os resultados desse estudo pode-se observar que a maioria dos usuários tem uma boa percepção da prótese e da reabilitação oferecida, porém omesmo ainda sugeriu que existem problemas que poderiam ser resolvidos com melhor controle do erro humano.

PALAVRAS-CHAVE: Erro Humano; Próteses; Reabilitação

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