

# Performance of insured workers in the rehabilitation service at the National Institute for Social Security

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ORIGINAL ARTICLE

## ABSTRACT

The main objective of this study was to evaluate the performance of insured workers who participated in the vocational rehabilitation program from the INSS (National Institute of Social Security) in Porto Alegre/RS. **Method:** We selected all of the insured workers participating in the vocational rehabilitation process during the year of 2008 in Porto Alegre/RS at INSS. Through the Administration System for Disability Benefits and the National Register of Social Information, all information was collected regarding the benefits and vocational rehabilitation program. The data was tabulated using SPSS 17.0 for Windows in which all tests were made. **Results:** The results showed that 553 (69%) of the insured were men and 249 (31%) were women. Their ages ranged from 18 to 60 years with an average of 38.9 years. Initially, 645 (80.4%) were employed and 157 (19.6%), unemployed. One year after the end of the rehabilitation program, 29.4% of the insured were working. While 40.6% of those employed had returned to work, 76.7% of the unemployed had not. Those on leave for accidents at work returned 58.7% of the time, and also 29.6% of those on sick leave. Those who remained on leave for one year had a success rate of 72.4%, and those with more than five years 24.7%. **Conclusion:** Those who remained employed, went on sick leave for a shorter time, and were rehabilitated within the company enjoyed a higher rate of return to work than those who became unemployed, were off work for a longer time, and whose company did not offer them another job.

**Keywords:** rehabilitation, social welfare, vocational, workers

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## INTRODUCTION

The practice of professional rehabilitation (PR) is generally defined by Seyfried,<sup>1</sup> as an intervention program structured to develop therapeutic and professionalizing activities that reach a totality of individuals and strengthens them to deal with and overcome the difficulties imposed on them by their disabilities. The International Labor Organization (ILO), through the Convention No. 159 of June 1, 1983, establishes the goal of professional rehabilitation as "to allow a handicapped person to obtain and maintain an appropriate job and evolve in it, while promoting his or her social inclusion".<sup>2</sup>

In Sweden, the increase in the number of workers leaving their jobs to receive social benefits has increased alarmingly and, for this reason, as of 1990, investments in rehabilitation have increased. Employers started to value the rehabilitation process of their employees. According to Hensing et al.<sup>3</sup> in 1992, social security became responsible for the supervision and co-participation of all types of rehabilitation, including for the unemployed.

In Brazil, professional rehabilitation by the INSS is the only official service with this purpose, for workers of all professional categories who contribute to Social Security and who receive benefits for disability extendable to their dependents older than 16 with disability. It also includes those retired by invalidity who spontaneously want to return to work or when they had their benefits reviewed. In addition, it includes invalid pensioners and disabled people with no link to Social Security by technical-financial cooperation covenant with institutions and companies.<sup>4</sup>

In the 90s, Maeno<sup>5</sup> affirmed that, even with the professional rehabilitation centers functioning, there were clear signs of inefficiency in the service to the new population of workers referred by the INSS experts.

Souza & Estrela<sup>6</sup> add that there has been an increase in notifications and sick-leaves stemming from occupational illnesses. The complexity of the discussions on the capacity/incapacity for work has increased, as much in the technical dimension, requiring new technological solutions, as in the socio-political dimension, incurring changes inside the Social Security in that period, as well as insufficient actions on this theme in the field of Worker's Health, in the Unified Health System, and in the social movement.

According to Maeno et al.,<sup>7</sup> the PR structure changed within the Social Security system in 1995. This process, called the Professional Rehabilitation Modernization Plan, became official through decree no 2.172 of March 5, 1997, duly standardized by resolutions that established the end of any therapeutic activity by the teams, and instituted regulatory functions, later strengthened by the possibility of professional rehabilitation being done by the companies and merely homologated by the INSS, through a sub-program from the medical sector called *Reabilita*.<sup>8</sup>

*Reabilita* is a service rendered by the INSS, compulsory and independent of any waiting period. This service decentralizes the professional rehabilitation operations and integrates the Medical Expertise and other services of the INSS. According to Cannalunga,<sup>9</sup> since 2000 rehabilitation has been searching for new direction for its implementation, always seeking to improve the service offered.

The national literature on the Social Security PR programs reveals mistrust in its effectiveness in relation to the objective of keeping the worker active. Doubt has been cast on any real opportunities for reinsertion into the work market for those who are on leave and with some functional limitation. In the current context, it seems insufficient to train those on leave who are largely without qualification or only semi-qualified to compete fairly for the few positions available.<sup>10</sup> Actually, the effectiveness of professional advisors is questioned by Maeno & Vilella<sup>5</sup> when they affirm that many of them have no familiarity with the real working world and its demands.

Watanabe<sup>11</sup> describes a successful experience in PR being done within a company by technical cooperation covenant with the INSS. The results show positive evaluation by the workers, who alleged having obtained confidence in their new function by the acceptance of co-workers and by those responsible for monitoring the training.

The flowchart in Figure 1 describes the steps followed by the insured, nowadays, and summarily, from the beginning of his or her benefit.

## OBJECTIVE

Since the data is unknown that shows the return to work of the worker after a clean bill of health from INSS, the objective

of this study was to analyze the performance of the worker who participated in the INSS professional rehabilitation program in Porto Alegre, RS.

## METHOD

This is a transversal, observational, individual, retrospective study, in which the study factor is the INSS professional rehabilitation and the main result, the worker's reinsertion into the work market. The population for the study was of insured workers who were in the INSS PR program in Porto Alegre, RS, in the period of January to December of 2008, regardless of when they were referred to the program, but who had concluded it by July 30, 2009. As The main Variables were: being a registered employee, professional activity, time since the beginning of sick-leave and starting the rehabilitation process, time in the PR program, total time away from work, type of benefit, classification of the disease, rehabilitation model adopted, most frequent pathologies, and whether the worker has remained at the company after the program and one year later.

Through a data collection protocol, the data was collected through the *Sistema de Atendimento de Benefício por Incapacidade (SABI)* (Disability Benefit Service System-DBSS) using a specific password from the operational control, in addition to using the *Cadastro Nacional de Informações Sociais (CNIS)* (Social Information National Caster-SINC), where the information referring to registered employment was obtained, as well as the situation one year after concluding the program.

Ethical considerations: the IPA Ethical Committee issued a favorable opinion understanding that the present project is in agreement with the ethical norms under the CEP protocol no. 06/2010. The INSS, through process 35239.002141/2009-2 issued by the Worker's Health Directorate in November 30, 2009, has also issued a favorable opinion. The non-utilization of information that could damage the people involved was guaranteed. All the social, moral, religious, ethical and cultural values were respected. The benefits from the research will be returned to the people who collaborated. The main author of this work, although being a medical expert at the INSS, is not part of the PR program and had no contact with the insured workers during the course of the study.

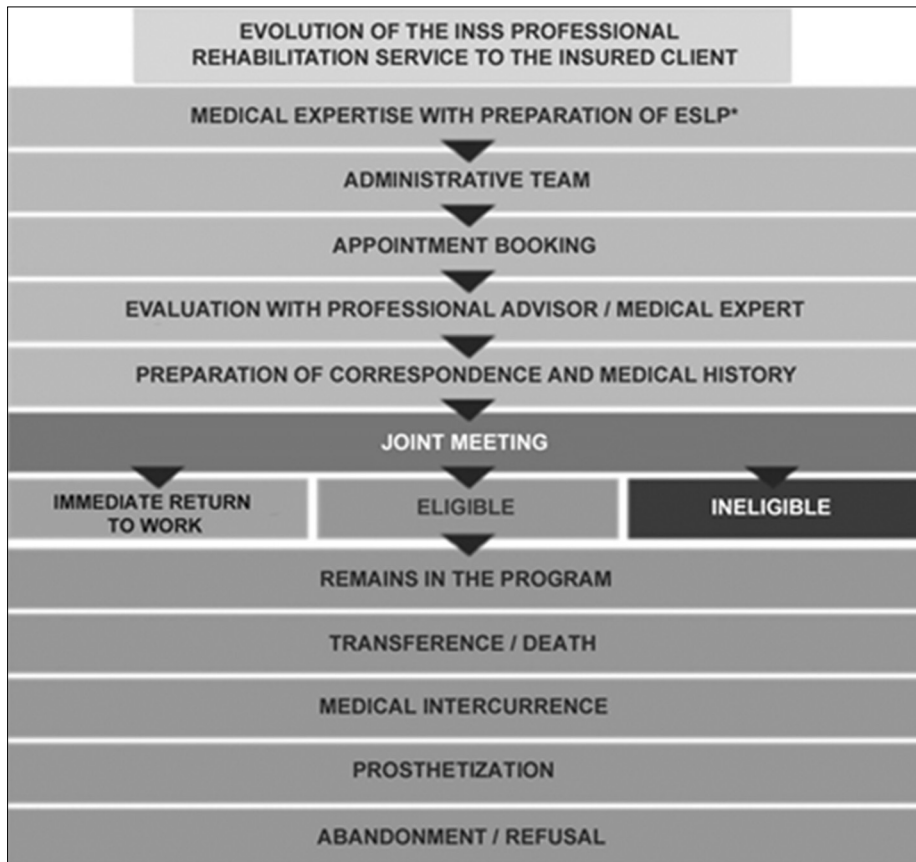


Figure 1. Flowchart of steps followed by the insured

Data analysis: the data collected was typed into the statistical program SPSS for Windows 17.0, in which all the analyses were made. For the variables of gender, registered employment, occupation, and diagnosis, a descriptive analysis of frequency was made with absolute and relative values, averages, and standard deviations for the associations between these variables using the Chi-squared test. The level of significance used was 5%.

## RESULTS

The present study analyzed 802 insured workers who passed through the PR program at the INSS in 2008. A descriptive analysis was made and 553 (69%) were males and 249 (31%) were females. The age of the insured workers varied from 18 to 60 years with an average of  $38.9 \pm 8.85$ . Of the total number of participants, 645 (80.4%) had registered employment when they were referred to the professional rehabilitation program and

157 (19.6%) were unemployed. The type of benefit called sick pay was in effect in 633 of the cases (78.9%) and work accidents in 169 (21.1%). The criterion chosen as success in this program was based on the literature and all the insured workers who returned to work at the same company or at another were thus classified. There was success in the rehabilitation of 29.6% among the insured workers receiving sick pay, and 58.7% among the insured workers who had had work accidents.

In Table 1, we show the minimum, average, and maximum period of time the insured worker remained bonded to the company in addition to the minimum, average, and maximum period of time of those receiving benefit and in the rehabilitation program.

The main objective of the work refers to the situation of the insured worker one year after the end of the rehabilitation program. The data in Table 2 shows these results in addition to the situation of the insured worker at the end of the professional rehabilitation program. Table 3 shows the comparison of the time period averages receiving benefit

with the performance in the professional rehabilitation program.

We analyzed the rehabilitation model adopted and compared the results obtained by the insured workers who were rehabilitated inside the same company with those who opted for taking external courses. Figure 2 records these results.

## DISCUSSION

We confirmed that the majority of the insured workers referred to the program during the period studied was employed. In addition to this decisive factor, age, the size of the company, and education, among other things, also contributed to a positive result towards success in the program. Most insured workers were coming from sick pay benefits and we do not know for sure whether there were sub-notifications of work accidents from the companies.

The insured workers who remained the longest in the program were those who receive courses paid by the INSS. The insured workers who were interested in a new function/skill were able to choose among the courses offered by the INSS that they wanted so that they could attend the course during the program. There were cases of medical intercurrent during the program where the insured workers had to suspend and return after their clinical situation had stabilized.

We observed that, at the end of one year after the end of the PR program, adding up the insured workers who were working, a percentage of 29.4 was found. These results are similar to those found in Sweden according to Frank & Prins,<sup>12</sup> and others below, as Ahlgren<sup>13</sup> describes. This latter author and his collaborators found a success rate of 41.7% of return to work two years after the end of the professional rehabilitation done in Stockholm.

In a PR program at the Federal University of Minas Gerais the success rate was 83%.<sup>14</sup> Our data shows that 70.6% of the insured workers who participated in a long program, receiving benefits the whole time, remained out of the work market for one year after the end of the rehabilitation. Some of the reasons indicated for such a high index were:

- retirement by disability (judicial or not)
- retirement by time of contribution
- continuation of sick pay or work accident benefit given by INSS or judicially obtained

**Table 1.** Descriptive analysis of the periods of time in years evaluated in the present study

	n	Minimum	Maximum	Average	SD
Period of Time/Company	645	.1	31	5.44	6.31
Pre-Rehabilitation Period	802	.1	7.9	2.52	1.76
Rehabilitation Period	802	.1	5.7	.95	.71
Period of time/Benefit	802	.2	11	3.50	1.92

**Table 2.** Situation of the insured worker at the end of the rehabilitation program and 1 year after that

Insured worker situation	At the end of the Program		01 year later	
	n	%	n	%
Employed at the same company	280	34.9	182	22.8
Employed at another company	16	2.0	49	6.1
Unemployed working	5	0.6	4	0.5
Unemployed not working	142	17.7	170	21.2
INSS Sick pay	31	3.9	41	5.1
Judicial Sick pay	124	15.5	131	16.3
INSS Retirement	156	19.5	161	20.1
Judicial retirement	48	6.0	50	6.2
Retirement for time of contribution	0	0	13	1.6
Total	802	100	802	100

**Table 3.** Association of the periods of time receiving benefit with the performance in the professional rehabilitation program

Success in the professional rehabilitation	Time receiving benefit						Total
	Up to 1 year		From 1 to 5 years		From 5 years up		
	n	%	n	%	n	%	
Yes	42	72.4	197	34.8	44	24.7	283
No	16	27.6	369	65.2	134	75.2	519
Total	58	7.2	566	40.5	178	22.3	802

- resignation
- refusal of the company to accept the return of the insured worker
- lack of interest by the insured worker
- abandonment of the program.

Once understood by the medical expert that the insured worker could not perform the same function, he was referred to the PR. Initially the company is consulted on the possibility of offering a new function to the worker. There are many small companies that are obliged to fulfill a quota of a minimum number of employees with disabilities or coming from the PR.

The next step would be a new skill through the courses offered by the INSS. Once these possibilities are exhausted, if the insured worker cannot remain in the profession that provided support, legislation determines that he or she is therefore considered disabled and must retire.

There are a considerable number of people receiving judicially obtained benefits once a judge names a medical expert to make a medical evaluation. This dramatic number should lead us to question physicians qualified for this task without the due expertise that the function demands. It is common knowledge that many times the appointed Medical Experts do not even know about the possibility of referring the insured worker to the INSS professional rehabilitation program.

Some insured workers are mistakenly referred to the PR, so they then acquire the minimum requirements to retire for time of contribution. Many of them seek rehabilitation, but when they are seen by the team there is a disagreement when the team understands that they are not eligible for the program and do not include the insured workers in it, keeping them only on sick pay. There are a number of insured workers who are fired as soon as they complete one year

at the company after the accident and complete one year of stability. Some companies fire the worker even before this period is completed.

Others do not accept the insured worker after his or her return from Social Security benefit. It becomes more interesting to hire a new employee much younger and at a lower salary. It is also known that a great number of companies do not have occupational medicine composed by qualified professionals.

Many insured workers have no interest in returning to work for they understand that it is more interesting to receive the benefit that, many times, is higher than the monthly salary they received at the company. Many of them, parallel to the program, seek judicial retirement and, when it is obtained, they abandon the program instantly.

We are obliged, given our limitation, to rethink the system searching for alternatives for the PR in effect, in view of the importance that it has in a context in which there is an increase of life expectancy nowadays in addition to the growing number of chronic diseases.

Therefore there is no way of thinking about this without following the current view from Canada where Sokoll<sup>15</sup> understands that "we should rehabilitate people to return to work, but make them return to work to rehabilitate". Simple practices today such as the insured worker staying on part-time at the company while going through the PR program, his/her taking new courses on skills that are being sought in the work market, inspection at the work stations, and the re-evaluation of the real interest of the insured worker in participating in the program when they should be referred before the injuries are consolidated are at least situations that the system needs to re-examine.

The education level of the insured workers is still very low. Many times to attend a course, he or she is obliged to elevate his or her education, since it is usually a pre-requisite that the insured worker have completed junior high school. Among the professions perfectly visible in our data, there are bus drivers who were hired not too long ago even being functionally illiterate. In this condition, it is too difficult to place this worker back in the job market. The courses offered by the INSS in general demand a minimum level of education that the insured worker does not have.

The longer the rehabilitation period, the less the successful the program, which is represented in table three. Data shows that

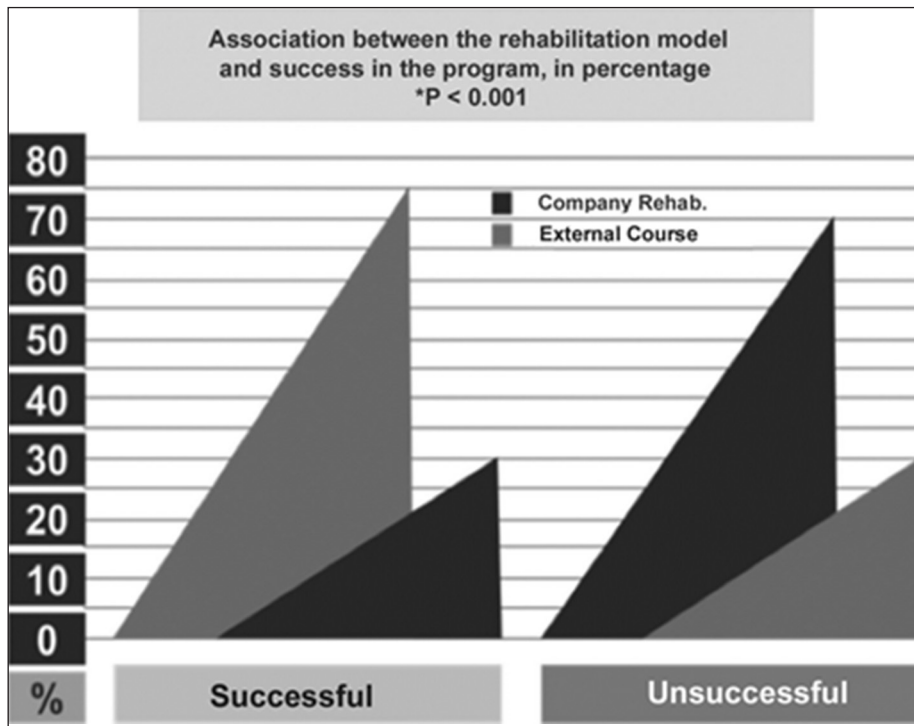


Figure 2. Association between the rehabilitation model and success in the program, in percentage \*  $p < 0.001$

only 11 insured workers receiving benefit for more than five years returned to work. The longer the time the insured worker spends receiving benefit, without being integrated in the PR, the more difficult will be his or her return to work. This fact occurs, initially, by occasion of the referral to the PR by the medical expert who attends this insured worker at a medical evaluation. Based on the INSS criteria, the worker must be referred when the disease is stabilized. There are many factors behind the worker's lack of interest in returning to work - frustration with the occupation he or she has, secondary gains, attachment to the benefit, performing another activity as self-employed, amount of the benefit higher than the salary the company pays, the commonly called "ghost" bond, when in fact the worker is bonded to the company only to have rights to the benefit. Limited access to the SUS service and the long wait for surgeries or even physical therapy lengthen this list. Conversely, many specialists and specialized clinics are sought needlessly every day, merely to get a medical certificate for the medical expert, increasing the waiting of those who really need help.

Among the insured workers who chose to take an external course, a limited return to the work market was observed. Our data

showed that in the external course category there was no significant association. Only 56 people who took a course maintained by the INSS returned to work while 132 remained unemployed (or retired/sick leave) one year after its conclusion. A worrisome situation occurs when the insured workers who, during the rehabilitation process, took courses for another activity, and returned to the same company performing the same function they did before. It is known that there is a covenant between the INSS and the companies that provide the current courses. At the same time, it is known that there are many other courses, made available by other organs, that could awaken the interest of the insured workers and later help them to be absorbed by the currently competitive work market.

## CONCLUSION

We can conclude that the insured workers who participated in the rehabilitation program in the employed condition obtained better results than those reinstated in the same company. Those registered with the company who were not accepted back at their original company have, in their majority, become

unemployed, were retired by the INSS or judicially, or remained on sick pay. At the end of the program and one year after its end the data showed that the majority of insured workers were not accepted back into the work market. The time in which he or she remained receiving benefits until being referred to the program or even during the program itself has shown to be inversely proportional to success; that is, the longer the time receiving benefits, the less the success. Those with work accident benefits and, in the same way, those legally registered with the company confirmed having higher chances of reintegration. The most frequent pathologies were the musculoskeletal, psychiatric, and traumas, which concurs with the literature. The rehabilitation model adopted that demonstrated the most efficacy was the reinstatement/intervention of the INSS within the same company.

## REFERENCES

1. Seyfried E. Vocational rehabilitation and employment support services. In: Disability and Work. Encyclopedia of Occupational Health and Safety [CD-ROM]. Geneva: International Labour Organization; 1998.
2. Brasil. Decreto n. 129, de 22 de maio de 1991. Promulga a Convenção n. 159, da Organização Internacional do Trabalho - OIT, sobre Reabilitação Profissional e Emprego de Pessoas Deficientes. Diário Oficial da União, Brasília (DF); 1991 Maio 22; Seção I: 9783.
3. Hensing G, Timpka T, Alexanderson K. Dilemmas in the daily work of social insurance officers. Scand J SOC Welfare. 1997;6:301-9.
4. Brasil. Lei n. 8213 de 24 de julho de 1991. Dispõe sobre os Planos de Benefícios da Previdência Social e dá outras providências. Diário Oficial da União, Brasília (DF); 1991 Jul 25; Seção I: 14809.
5. Maeno M, Vilela RAG. Reabilitação profissional no Brasil: elementos para a construção de uma política pública. Rev Bras Saúde Ocup. 2010;35(121):87-99.
6. Souza NSS, Estrela T. Evolução da morbidade e do perfil dos trabalhadores atendidos em um centro de referência de saúde do trabalhador no Estado da Bahia no período de 1991 a 2000. In: Cadernos de Saúde do Trabalhador. Salvador: Cesat; 2003. p.23-31.
7. Maeno M, Takahashi MAC, Lima MAG. Reabilitação profissional como política de inclusão social. Acta Fisiatr. 2009;16(2):53-8.
8. Brasil. Decreto n. 2172, de 05 de março de 1977. Regulamenta os Benefícios da Previdência Social. Diário Oficial da República Federativa do Brasil, Brasília (DF); 1977 Mar 06; Seção I:4199.
9. Cannalunga LS. Projeto de Revitalização da Reabilitação Profissional [texto na Internet]. Campinas: Centro Brasileiro de Segurança e Saúde Industrial [citado 2012 Feb 05]. Disponível em: [http://www.proreabilitacao.com.br/?p=pc\\_leila](http://www.proreabilitacao.com.br/?p=pc_leila)
10. Mello LEA. Serviço de (re)habilitação do INSS - uma proposta de análise das necessidades e construção do modelo lógico. In: Lassance Jr. A. Cadernos do Ceam: temas em políticas públicas. Brasília: UNB; 2002. p.87-108.

11. Watanabe MA. Reabilitação é possível: um estudo de caso de uma empresa de economia mista [Dissertação]. Campinas: Universidade Estadual de Campinas; 2004.
12. Bloch FS, Prins R. Who returns to work and why? A six country study on Work Incapacity and Reintegration. Brunswick: Transaction; 2001.
13. Ahlgren A, Bergroth A, Ekholm J, Schüldt K. Work resumption after vocational rehabilitation: a follow-up two years after completed rehabilitation. *Work*. 2007;28(4):343-54.
14. Sampaio RF, Silveira AM, Viana SO, Oliveira GBA, Frade F. Implantação de serviço de reabilitação profissional: a experiência da UFMG. *Fisioter Pesqui*. 2005;12(2):28-34.
15. Günther S. Service orientation in health care. Indicators for more quality: the example of occupational accidents. Geneva: ISSA; 2001. p.77-88.