



Research Paper

Investigating the Correlation Between the Level of Estimated Needs and Social Integration of People With Spinal Cord Injury in Saqez City, Iran in 2021







1. Department of Rehabilitation Management, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran.



*This work has been published under CC BY-NC-SA 4.0 license.

Article info:

Received: 12 Jul 2023 Accepted: 09 Aug 2023 Available Online: 10 Dec 2023

Funding

The article was extracted from the master thesis, of Diman Nikooee, Department of Rehabilitation Management, School of Rehabilitation Sciences, Iran University of Medical Sciences. Tehran, Iran,

Conflict of interest

The authors declared no conflict of interest.

ABSTRACT

Background and Objectives: One of the crucial purposes of the rehabilitation of people with spinal cord injuries (SCI) is to integrate them into society and improve their quality of life. Therefore, it is necessary to research on the importance of people's needs in self-development and integration in society. This study aims to determine the level of needs of people with SCI in Saqez City, Iran, and investigate its correlation with the level of integration of these people after the injury in society.

Methods: This research was conducted in a cross-sectional descriptive-analytical type. The necessary information was collected using a community integration questionnaire (CIQ) and Kimbrol's needs in the form of a census from 110 people with SCI in the rehabilitation unit of the Welfare Department and other related departments (aid committee, Martyr Foundation) in Saqez City. A total of 99 people participated in this study. Finally, data were analyzed using SPSS software, version 24.0 at a significance level of 0.05.

Results: In this study, 72.73% of the participants were men and the mean age was 44.67±13.91. The mean score of integration at home was 3.55±3.23, the score of the production activities scale was 2.33±1.52, and the integration score in the community was 6.97±2.83. The need for an improved house that was adapted to the conditions of the SCI people was one of the critical unfulfilled demands for these people in the direction of integration at home and social integration and productivity. On the other hand, the need for effective social and friendly activity is one of the unappreciated needs of people with SCI, which has a significant impact on their quality of life, social integration, and employment.

Conclusion: The primary demands of people with SCI, especially the need to adapt the place of residence and the workplace to increase the social integration of people with SCI, should be evaluated and intervened.

Keywords: Estimated need, Social integration, Participation, Spinal cord injury



Cite this article as Nikooee D & Kamali M. Investigating the Correlation Between the Level of Estimated Needs and Social Integration of People With Spinal Cord Injury in Saqez City, Iran in 2021. Function and Disability Journal. 2023; 6:E261.1. http://dx.doi.org/10.32598/fdj.6.261.1

doi http://dx.doi.org/10.32598/fdj.6.261.1

* Corresponding Author:

Mohammad Kamali, PhD.

Address: Department of Rehabilitation Management, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran. Tel: +98 (21) 22221577

E-mail: kamali@mkamali.com, kamali.mo@iums.ac.ir



What is "already known" in this topic:

Community integration of people with spinal cord injury is low. People with spinal cord injury have needs that affect their community integration. The rehabilitation team should assess the basic needs of these people to help them achieve community integration.

What this article adds:

One of the critical steps to increase the community integration of people with spinal cord injury in Saqez, Iran, is the provision of improved housing, which has not been met. The welfare organization should plan to meet the housing needs of these people.

Introduction

pinal cord injury (SCI) is a devastating neurological condition with many psychological and physical consequences in personal, social, and economic fields. In the past 30 years, its global prevalence has increased from 236 to 1 298 cases per million populations [1].

Every year, many people suffer from injuries to the spine and spinal cord due to war, accidents, falls from a height, and diseases of the spine, spinal cord, and neck. Among the consequences of SCI in an individual context, we can mention neurological, pulmonary, digestive, cardiovascular, kidney and urinary tract problems, weight control problems, bedsores, pain, psychological problems, such as depression, anxiety, post-traumatic stress disorder, suicide, sadness, anger, decreased selfconfidence, impaired self-concept, and guilt. After that, the social and extra-familial correlation of the person with disabilities is also affected, and economically, it results in a lack of salary, rehabilitation and treatment costs, financial problems, and loss of job. One of the crucial goals is to rehabilitate people. It has SCI, integration in society, and improvement of quality of life [2]. Social integration has three aspects, integration at home, which includes active participation in household chores, integration in society, which includes doing activities outside the home, such as shopping and meeting friends, and integration in productive activities related to employment, job, and educational activities [2]. Social integration of people with disabilities is a key target in all scopes of rehabilitation and is the focus of all healthcare professionals. SCI occurs after a sudden event and usually leads to a change in a person's performance, such as a decrease in job performance, social integration, and participation in the family environment, leisure time, and school activities, and this decrease in performance is influenced by factors related to the severity and the type of damage

and internal factors, such as cognitive, psychological and motor skills, demographic variables such as age, gender and culture, education level, economic status, and social support [3]. In a study, Akyuz et al. reported that social integration of people with SCI was low. Also, they reported that problems related to adapting to the environment and design and access, understanding, and attitude of other healthy people to SCI, as well as health-related problems, especially pain, problems economic and psychological problems, were cited as obstacles to their social integration, respectively [4].

On the other hand, supporting people with SCI and meeting their needs greatly contributes to social integration [5]. A need is a lack that is felt by a person and forces a person to find a way to solve it, for this reason, it is also called motivational demands. Satisfying demands, especially satisfying the highest demands (self-fulfillment and self-fulfillment) makes a person actively try in society. If a person's demands are not given importance, the person's compatibility with his surroundings and his participation and productivity will decrease [6]. Although most of the research is related to meeting people's demands in terms of health and well-being, less attention has been paid to it about people with disabilities and in rehabilitation programs. This study was conducted to determine the correlation between the level of estimated needs and social integration in people with SCI in Sagez City in 2021.

Materials and Methods

The present study was descriptive, analytical, and cross-sectional. The statistical population in the present study was people with SCI in Saqez City in 2021. The statistical sample of the present study was 99 people with SCI in the rehabilitation unit of the Welfare Department and other related departments (aid committee, Martyr Foundation) of Saqez City, who were selected as non-proba-



bly and available. After selecting people with SCI who have been injured for at least one year and whose injury is at the trunk and lumbar level and can use their hands, in cooperation with the rehabilitation unit of the Welfare Department (aid committee, Martyr Foundation) of Saqez City and the special worker for people with SCI, the list of these people was taken along with their detailed information, place of life, and phone number, and with the cooperation of the worker and through phone calls with them, coordination was made with the people who wanted to attend the welfare center and complete the questionnaire in person. They attended the welfare office by observing the health protocols of COVID-19 and travel expenses were also covered by the researcher, and they completed the valid questionnaires on Community Integration Questionnaire (CIQ) and Camberwell Assessment of Need for the Elderly (CANE). For people who did not want to attend, or were unable to visit in person due to illness or special disability, did not want the researcher to be present at their place of home, the questionnaire was remotely completed (through the Internet and applications or phone calls), and if the person wanted to be at home, the person's place of residence or his workplace was referred to, and in the total process, one person visited, and protocols, such as wearing a mask, and preserving safe distance were considered. Before completing the questionnaire, the visitor was given the necessary information on how to complete the questionnaire and how long it would take to complete it, and the answers were done in calm conditions and in sufficient time, with the help of a helper if needed, and in case of inability to read and write, the visitor or researcher reads the questions to the individual. Two questionnaires on social integration and psychological needs were provided to the individual, and the first author was also with the individual to resolve any doubts. Information was also collected by a questionnaire consisting of two demographic sections and a needs assessment questionnaire based on the standard tools of CANE and CIQ.

Camberwell assessment of need for the elderly (CANE) questionnaire

CANE questionnaire is a comprehensive tool to assess needs that is suitable for different clinical and research environments [7]. Camberwell's needs assessment questionnaire enables a comprehensive assessment of multi-dimensional needs related to social, psychological, physical health, and environmental demands. This questionnaire is conducted in the form of an interview with the individual, informal caregivers as people who provide informal assistance, and staff of centers providing official services, and provides the possibility of

comparing their views and differences. This questionnaire has 24 items, each of which has 24 titles related to the user, two titles A and B related to the caregiver, and four columns for scoring so that one or more users, staff, caregivers, or evaluators can express their opinions. The total score is obtained based on the scores of section 1 of each of the 24 problem areas. The Camberwell tool was recently validated and reliable by Davatgaran et al. in 2016. The intraclass correlation coefficient for the total scores (met and unmet needs) was obtained with a confidence coefficient of 0.78 and 0.87 [8].

Community integration questionnaire (CIQ)

CIQ is designed to evaluate integration at home, social integration, and productive activity [9]. Wheeler et al. designed and used the first version of this tool for people with brain damage. This tool includes 15 items in three sub-sets of integration at home (1 to 5), integration in the community (6 to 11), and production activities (12 to 15). The scores of the questionnaire items are different and between 0 and 2 in the form of a Likert scale. The Persian version of the CIQ has repeatability (intraclass correlation coefficient [ICC] \geq 0.7) and internal consistency ($\alpha \geq$ 0.7) [10].

Data analysis

All statistical analyses were performed using SPSS software, version 24.0. at a significance level of 0.5. The Kolmogorov-Smirnov test was used to check whether data were normally distributed. Descriptive statistics indicators included mean±standard deviation (SD). Multiple regression was used to check the correlation between the variables due to the non-normal distribution of the data.

Results

According to the results of the descriptive statistics in Table 1, among the 99 participants in this study, 72 people (72.73%) were men. The mean and SD of the age of the subjects was 44.67±13.91 and most of the 33 participants (33.33%) had primary education.

Also, Table 2 presents the distribution of integration scores in the home, community, and productive activities of the study of SCI individuals, based on which the mean and SD of the integration score at home was 3.55±3.23, and integration in the community was 97.00±2.83. 6.6 and production activities were 2.33±1.52.



Table 1. Demographic characteristics of the participants

Variables	Category	No. (%)/Mean±SD
Gender	Female	27(27.27)
	Male	72(72.73)
Age (y)		44.67±13.91
Education	No education	9(9.1)
	Primary school	33(33.33)
	Mid school	15(15.15)
	High school	6(6.06)
	Diploma	30(30.30)
	Associate degree	3(3.03)
	Bachelor and Master	3(30.3)
Sum		99(100)

Table 2. Distribution of consolidated scores

Scale of Integration	Category	No. (%)
Incorporating at home	≤3	49(49.50)
	4-6	27(27.27)
	7≤	23(23.23)
Integration in the community	≤3	15(15.15)
	4-6	24(24.24)
	7≤	60(60.61)
	≤3	81(81.82)
Production activities	4-6	15(15.15)
	7≤	3(3.03)

 Table 3. Correlation test results between study scales

Variables	r	Р
Incorporating at home	-0.418	0.001
Integration in the community	-0.541	0.001
Production activities	-0.444	0.001



Also, a significant negative correlation was observed between the mean score of unestimated needs and the integration scale at home (P=0.001, r=-0.418). This means that by reducing the score of unestimated needs, the score of integration at home increases. A significant negative correlation (P=0.001, r=-0.541) was observed between the mean score of unestimated needs and the social integration scale. This means that by decreasing the score of unestimated needs, the score of integration in the community will increase. A significant negative correlation was observed between the mean score of unestimated needs and the productivity scale (P=0.001, r=-0.444). This means that by reducing the score of unestimated needs, the productivity score increases (Table 3).

Discussion

This study was conducted to investigate the correlation between the level of estimated needs and the community integration of people with SCI in Saqez City in 2021. The study showed that out of the 24 basic needs raised in the Camberwell questionnaire, 17 basic needs of a person had an effect on his integration and 7 other needs had no effect.

The results of the descriptive statistics showed that most participants in the study were men, which was according to the results of the study conducted by Zhao et al. [11], Tsai et al. [12], Callaway et al. [13]. Also, the mean age of the participants was 44 years, which was according to the study conducted by Kennedy et al. [14] and Zurcher et al. [15]. Therefore, based on previous studies and the results of this study, it seems that SCI often occurs among men and in older age groups, and in the current study, age has a significant inverse correlation with the integration score at home, integration in the community, and the integration score in productive activities. Therefore, the older the person is, the lower their level of integration is, and according to the results of this research, more intervention measures are required to increase integration at home, in the community, and productive activities. Traumas leading to SCI are more common among men than women [16].

The results of inferential statistics showed that one of the vital unestimated needs of people is the need for improved housing, in this regard, Kashif et al. reported that one of the vital unestimated needs of SCI people is the need for improved housing. Failure to estimate the need for improved housing has caused the integration of these people at home to be low and they cannot perform many of their tasks at home [17]. Hosseini et al. [18] reported people with SCI who use a non-automatic

(manual) wheelchair as their main tool of mobility, their ability to perform wheelchair manual skills was associated with higher community participation and satisfaction with life. Factors contributing to low success rates should be investigated and interventions needed to improve these rates [18]. Thus, one of the critical steps to increase the integration score of SCI people at home is the provision of improved housing, which has not been met, effective practical measures should be taken in this scope, and more research is needed in this respect, and how to make changes at home. Examining the results of the scale of productive activities indicated a low score of integration of productive activities in SCI people. In this regard, Kee et al. [19] reported in a study that the return to employment activities of SCI people is necessary for social integration. Samuel T. Gontkovsky stated in a report that the independence and social adjustment of SCI people are highly related to their occupational independence [20]. Therefore, the crucial issue to improve integration (directly and indirectly) of people with SCI is to increase the scale score of productive activities and empower them for employment.

Khanjani et al. [21] reported one of the effective factors in a person's adaptation to a lesion is various social participation, including being active in social work, such as active membership in disabled groups, occupational activities, as well as recreational and sports activities, despite all existing obstacles. It was for the presence of these people in the society. On the other hand, the increase in social participation has made these people visible and finding solutions to remove obstacles [21]. Another study reported that family formation leads to better adaptation to SCI [22]. Tyagi et al. [23] also stated that, during the discharge of people with SCI, all caregivers should be informed about environmental factors, such as barriers or facilitators, capacity, performance, and participation of people so that they can practice their teachable skills at home [23].

Therefore, effective activity and return to the society and daily life of people with SCI is still required, which requires more effective steps. Customized housing according to the conditions of the SCI people is a main demand for these people to integrate at home and social integration and productivity. Unfortunately, it has not been met for a significant part of people with SCI. On the other hand, the need for effective social and friendly activity is one of the unappreciated and common needs of SCI people, which has a significant impact on their quality of life, social integration, and employment.



Conclusion

The results demonstrated that the unmet needs of people with SCI are related to the level of integration in the three levels of home, social integration, and integration in production activities. So, we suggest the basic needs of people with SCI, especially the need to adapt their place of residence and workplace, should be evaluated and intervened. Rehabilitation managers and disability support organizations should have plans to reduce the unmet needs of people with SCI.

Ethical Considerations

Compliance with ethical guidelines

The Ethics Committee of the University of Social Welfare and Rehabilitation Sciences has approved this study with ethics code 22448. In this study, before the interview and after explaining the purpose and process of the research, written consent was obtained from the participants and they were assured that their information would be kept confidential and the participants were allowed to withdraw from the study at any stage. Also, due to the epidemic of COVID-19 disease, it was essential to observe health tips in all stages of research, especially about the disabled.

Funding

The article was extracted from the master thesis, of Diman Nikooee, Department of Rehabilitation Management, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran.

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

References

[1] Khorasanizadeh M, Yousefifard M, Eskian M, Lu Y, Chalangari M, Harrop JS, et al. Neurological recovery following traumatic spinal cord injury: A systematic review and meta-analysis. J Neurosurg. 2019; 30:683-99. [DOI:10.3171/2018.10.SPINE18802] [PMID]

- [2] Willer B, Rosenthal M, Kreutzer JS, Gordon WA, Rempel R. Assessment of community integration following rehabilitation for traumatic brain injury. J Head Trauma Rehabil 1993; 8(2):75-87. [DOI:10.1097/00001199-199308020-00009]
- [3] Ioncoli M, Berardi A, Tofani M, Panuccio F, Servadio A, Valente D, et al. crosscultural validation of the community integration questionnaire-revised in an Italian population. Occup Ther Int. 2020; 2020:8916541. [DOI:10.1155/2020/8916541] [PMID]
- [4] Akyuz M, Yalcin E, Selcuk B, Degirmenci I. The barriers limiting the social integration of wheelchair users with spinal cord injury in Turkish society. Neurosurg Q. 2014; 24(3):2258. [DOI:10.1097/WNQ.0000000000000116]
- [5] Whiteneck G, Tate D, Charlifue S. Predicting community reintegration after spinal cord injury from demographic and injury characteristics. Arch Phys Med Rehabil. 1999; 80(11):1485-91. [DOI:10.1016/S0003-9993(99)90262-9] [PMID]
- [6] Razavi SMH, Hossseini SE, Abedini J. [Investigating the relationship between sports coaches' job satisfaction according to Mazloba's theory, the level of their needs in South Khorasan (Persian)]. J Appl Exerc Physiol. 2007; 3(6):11-27. [Link]
- [7] Post M, Noreau L. Quality of life after spinal cord injury. J Neurol Phys Ther. 2005; 29(3):139-46. [DOI:10.1097/01. NPT.0000282246.08288.67] [PMID]
- [8] Ebrahimi Z. [Effectiveness of cognitive-behavioral group therapy on depression in men with spinal cord injuries (Persian)]. J Psychol-New Ideas. 2020; 5(9):1-11. [Link]
- [9] Salehkamaee S, Kamali SR, Mobaraki H. [The relationship between community integration and environmental barriers in people with spinal cord injury in Tehran, 2018-19 (Persian)]. J Disabil Stud. 2022; 12:119. [Link]
- [10] Negahban H, Fattahizadeh P, Ghasemzadeh R, Salehi R, Majdinasab N, Mazaheri M. The Persian version of community integration questionnaire in persons with multiple sclerosis: Translation, reliability, validity, and factor analysis. Disabil Rehabil. 2013; 35(17):1453-9. [DOI:10.3109/09638288.2012.741653] [PMID]
- [11] Zhao H, Zhang Y, Wang W, Cole S. Contribution of travel participation to social integration and life satisfaction after spinal cord injury. Disabil Health J. 2021; 14(4):101167. [DOI:10.1016/j.dhjo.2021.101167] [PMID]
- [12] Tsai I, Graves DE, Chan W, Darkoh C, Lee MS, Pompeii LA. Environmental barriers and social participation in individuals with spinal cord injury. Rehabil Psychol. 2017; 62(1):36-44. [DOI:10.1037/rep0000117] [PMID]
- [13] Callaway L, Enticott J, Farnworth L, McDonald R, Migliorini C, Willer B. Community integration outcomes of people with spinal cord injury and multiple matched controls: A pilot study. Aust Occup Ther J. 2017; 64(3):226-34. [DOI:10.1111/1440-1630.12350] [PMID]
- [14] Kennedy P, Lude P, Taylor N. Quality of life, social participation, appraisals and coping post spinal cord injury: A review of four community samples. Spinal Cord. 2006; 44(2):95-105. [DOI:10.1038/ sj.sc.3101787] [PMID]
- [15] Zürcher C, Tough H, Fekete C; SwiSCI Study Group. Mental health in individuals with spinal cord injury: The role of socioeconomic conditions and social relationships. PLoS One. 2019; 14(2):e0206069. [DOI:10.1371/journal.pone.0206069] [PMID]



- [16] Tabesh H, Rabiei A. [Epidemiological study of vertebral trauma in Isfahan Province during 2012- 2018 (Persian)]. Feyz. 2019; 23(1):107-2. [Link]
- [17] Kashif M, Jones S, Haider Darain HI, Raqib A, Butt AA. Factors influencing the community integration of patients following traumatic spinal cord injury: A systematic review. J Pak Med Assoc. 2019; 69(9):1337-43. [PMID]
- [18] Hosseini SM, Oyster ML, Kirby RL, Harrington AL, Boninger ML. Manual wheelchair skills capacity predicts quality of life and community integration in persons with spinal cord injury. Arch Phys Med Rehabil. 2012; 93(12):2237-43. [DOI:10.1016/j.apmr.2012.05.021] [PMID]
- [19] Kee KM, Mohamad NZ, Koh PPW, Yeo JPT, Ng YS, Kam JC, et al. Return to work after spinal cord injury: A Singaporean pilot community-based rehabilitation program. Spinal Cord. 2020; 58(10):1096-103. [DOI:10.1038/s41393-020-0459-x] [PMID]
- [20] Gontkovsky ST, Russum P, Stokic DS. Comparison of the CIQ and CHART Short Form in assessing community integration in individuals with chronic spinal cord injury: A pilot study. NeuroRehabilitation. 2009; 24(2):185-92. [DOI:10.3233/NRE-2009-0467] [PMID]
- [21] Khanjani MS, Khankeh HR, Younesi SJ, Azkhosh M. [The main factors affecting the acceptance and adaptation with spinal cord injury: A qualitative study (Pesian)]. J Rehabil Arch. 2018;19(4):291-76. [DOI:10.32598/rj.19.4.276]
- [22] Shamshiri M, Eskandar Oghli B, Vafaee M, Molaei B. [Adaptive coping strategies in patients with spinal cord injury: A phenomenological study (Persian)]. Iran J Psychiatry Clin Psychol. 2021; 26(4):478-89. [DOI:10.32598/ijpcp.26.3.2975.1]
- [23] Tyagi N, Amar Goel S, Alexander M. mproving quality of life after spinal cord injury in India with telehealth. Spinal Cord Ser Cases. 2019;5:70. [DOI:10.1038/s41394-019-0212-x] [PMID]





مقاله يژوهشي

بررسی ارتباط سطح نیازهای برآوردشده و تلفیق اجتماعی افراد دارای ضایعه نخاعی شهرستان سقز، سال ۱۴۰۰

ديمن نيكوي الله محمد كمالي الله الله

۱. گروه مدیریت توانبخشی، دانشکده علوم توانبخشی، دانشگاه علوم پزشکی ایران، تهران، ایران.



تاریخ دریافت: ۲۱ تیر ۱۴۰۲ تاریخ پذیرش: ۱۸ مرداد ۱۴۰۲ تاریخ انتشار: ۱۹ آذر ۱۴۰۲

مندمه یکی از اهداف مهم درتوانبخشی افراد دارای آسیب نخاعی، تلفیق در جامعه و بهبود کیفیت زندگی آنهاست. از اینرو، پژوهش درباره اهمیت نیازهای افراد در خودشکوفایی و تلفیق در جامعه موردنیاز است. این مطالعه با هدف تعیین میزان نیازها در افراد آسیب نخاعی در شهرستان سقز و بررسی ارتباط آن با میزان تلفیق این افراد بعد از آسیب در جامعه انجام شد.

مواد و روشها این تحقیق بهصورت توصیفی ــ تحلیلی از نوع مقطعی انجام شد. اطلاعات لازم از طریق پرسشنامههای تلفیق اجتماعی و نیازهای کمبرول بهصورت سرشماری و از ۱۱۰ نفر از افراد آسیب نخاعی در واحد توانبخشی اداره بهزیستی و سایر ادارات مرتبط (کمیته امداد، بنیاد شهید) شهرستان سقز جمعآوری شد. در این مطالعه بهطور کلی ۹۹ نفر شرکت کردند. درنهایت تحلیل دادهها با استفاده از نرمافزار SPSS نسخه ۲۴ در سطح معنی داری ۰۰۵/۰ انجام شد.

یافته ها در این مطالعه ۷۲/۷۳ درصد از شرکتکنندگان مرد و میانگین سن افراد برابر با ۴۴/۶۷±۱۳/۹۱ سال بود. میانگین نمره تلفیق در منزل ۴۴/۶۷±۱/۹۳ درصد از شرکتکنندگان مرد و میانگین سن افراد برابر با ۴۴/۶۷±۱/۹۳ گزارش شد. نیاز به مسکن در منزل ۴/۵۲±۷/۹۳ گزارش شد. نیاز به مسکن بهسازی شده که متناسب با شرایط بیمار آسیب نخاعی مناسبسازی شده باشد یکی از نیازهای مهم برآوردهنشده برای این افراد در جهت تلفیق در منزل و تلفیق اجتماعی و بهرموری بود. از طرفی نیز نیاز به فعالیت اجتماعی و دوستانه مؤثر از نیازهای دیگر برآوردهنشده شایع افراد دارای آسیب نخاعی بود که بر روی کیفیت زندگی و تلفیق اجتماعی و اشتغال آنها تأثیر قابل توجهی دارد.

نتیجه گیری نیازهای پایهای افراد دارای آسیب نخاعی خصوصاً نیاز به مناسبسازی محل سکونت و مناسبسازی محل کار برای افزایش میزان تلفیق اجتماعی افراد دارای آسیب نخاعی باید مورد ارزیابی و مداخلات قرار گیرد.

كليدواژهها:

نیاز برآوردشده، تلفیق اجتماعی، مشارکت، آسیب نخاعی



Cite this article as Nikooee D & Kamali M. Investigating the Correlation Between the Level of Estimated Needs and Social Integration of People With Spinal Cord Injury in Saqez City, Iran in 2021. Function and Disability Journal. 2023; 6:1-8. http://dx.doi.org/10.32598/fdj.6.261.1

doi http://dx.doi.org/10.32598/fdj.6.261.1

» نویسنده مسئول:

دكتر محمد كمالي

نشانی: گروه مدیریت توانبخشی، دانشکده علوم توانبخشی، دانشگاه علومپزشکی ایران، تهران، میرداماد، میدان مادر، خیابان شهید شاهنظری، کوچه نظام. تلفن: ۲۲۲۲۱۵۷۷ (۲۱) ۹۸+

kamali@mkamali.com ,kamali.mo@iums.ac.ir رایانامه: