

Impact of Family Role on Patients Psychological Aspect Post Spinal Cord Injury in Ibn- Al-kuff Medical Rehabilitation Center.

Dr. Narmeen B. Tawfiq AL-Barody, PhD¹, Aqeel Habeeb Jasim, MSc².

¹(Professor, Adult Nursing Department, College of Nursing, University of Baghdad)

²(Instructor, Fundamental of Nursing Department, College of Nursing, University of Baghdad)

Abstract: The family is considered a critical and essential key role in a successful rehabilitation outcome of the individual with a spinal cord injury and family functioning can impact multiple dimension of an individual's life, including the the psychological health status .

Objectives: to estimate the impact of family functioning role upon psychological health status for patients with spinal cord injury in Ibn- Alkuff Medical rehabilitation center.

Results: The study showed that the family role have positive impact on most patient health status (psychological) domain..

Conclusion: The study concluded that the family role impact upon psychological patients health status .

Recommendations: The study recommended that, an instructional program should be designed should be applied to patients' and their family to increase their information toward spinal cord injuries to improve patients health status.

Keywords: Family Role, Psychological Aspect, Spinal Cord Injury.

I. Introduction

Spinal cord injury is considered one of the chronic disease and its effect is not only on young adult and elderly patients but also on the bio- psychosocial and spiritual functioning of the family members and peers^[1]. Spinal cord injuries that occurred due to traumatic events lead to suddenly decrease normal general health status and may lead to immobility and the individual will depend on the family and may lead to apprehensiveness on his life^[2]. The injuries were subversive events for individuals and their family with many social, psychological and economic problems, patients may be rely on their family for long period and need support from them for months or years^[3]. Spinal injury can lead to change the basic function and dynamic role of the family member especially caregivers which lead to change his life role and style^[4]. It's necessary to decisive integrate the patient with spinal injury in routine life, every members of family and friends should be involved into the rehabilitation program of the patients because they provide social and emotional support , in addition to assist him for adaptation to use the resources and supplies^[5]. Family member and friends are sharing in patient assistance in perceptible way and the patients will be happy for involvement of their family and friends in aspects of rehabilitation and to achieve many goals with his peers^[6]. Life satisfaction in patients with spinal cord injury determined by many family and patients factors like: family value and attitude and family culture and how the basic human need to be met^[7]. In spite of the important role of the family , there is limited research in the relationship of the family functioning and the health status and quality of life of patients with spinal cord injuries^[8].

II. Methodology

A descriptive (correlational analytical) study was used to describe the impact of family functioning role upon psychological health status for patients with spinal cord injury in Baghdad city. The study was initiated from (January, 2015 through October, 2015). A purposive (non-probability) sample of (100) spinal cord injury patients and were selected who attend to outpatients Ibn-Alkuff medical rehabilitation center for the medical follow up. A questionnaire was constructed and designed by the researcher and was consisted from three parts: part one: patient information Data: this part measure the patient demographic characteristics which include: age, gender, marital status, level of education, monthly income. Part two: the psychological aspect which consist of negative feelings: (10) items, thought and memory disturbance: (5) items, psychological adaptation: (10) items to measure the variable underlying the present study and which were described patients psychological aspects in the community, Part three: family role domain was designed to measure of family functioning role after spinal cord injury and consisted from (35) items, reliability was done through alpha value = (0.90). The validity of the instrument was achieved through a panel of experts, the developed questionnaire was designed and presented to (16) experts, The data were collected through structured interview with the

patients, the subjects were individually interviewed in the Ibn-Alkuff Medical rehabilitation center in Baghdad city. Data were analyzed through the use of statistical package of social sciences (SPSS) version16.

III. Results

Table (1) Patients' demographic Characteristics

Socio-demographic characteristics		Frequency	Percent	Cumulative
Gender	Male	72	72	72
	Female	28	28	100
	Total	100	100	
Age	Less than 20	8	8	8
	20-25	21	21	29
	26-30	24	24	53
	31-35	26	26	79
	36-40	17	17	96
	41-45	4	4	100
	Total	100	100	
	Mean= 29.76	SD= 6.048		
Marital Status	Single	29	29	29
	Married	71	71	100
	Total	100	100	
Educational Level	Read and write	14	14	14
	Primary school graduate	16	16	30
	Intermediate school	18	18	48
	Preparatory School	33	33	81
	Institute/College graduate	19	19	100
	Total	100	100	
Monthly Income	Insufficient	20	20	20
	Mostly Sufficient	63	63	83
	Sufficient	17	17	100
	Total	100	100	

Table (1) result show that the highest percentage (72%) of the study sample male and (26%) of the patient are of (31-35) years old and that most of study sample (71%) were married and one third of the study sample (33%) were educated at an Preparatory School level .

Table (2) Assess for Psychological Aspect and Family Role for Patients with Spinal Cord Injury

Psychological Aspect	Variables	Levels	Frequency	Percent	Cumulative Percent
	Psychological Aspect	Patients Psychological Symptoms	Low	26	26.0
Moderate			39	39.0	65.0
High			35	35.0	100.0
Total			100	100.0	
Patients Thought Disruption		Low	27	27.0	27.0
		Moderate	38	38.0	65.0
		High	35	35.0	100.0
		Total	100	100.0	
Patients Adaptation		Low	27	27	27.0
		Moderate	51	51	78.0
		High	22	22	100
		Total	100	100	
Family Role	Low	30	18.5	30.0	
	Moderate	42	25.9	72.0	
	High	28	17.3	100.0	
	Total	100	100.0		

Table (2) represent health status domain among spinal cord injury, shows moderate level rated in most Psychological Aspect health status domain as follow: patients psychological symptoms =39% in moderate level and (26%) in low level, thought=(38%) in moderate level and (27%) in low level, patients adaptation=(51%) in moderate level and (21%) in low level, table also show high percentage (25.9%) of family role in moderate level and low percentage (18.5%) of them rated in low level.

Table (3) Linear Regression Model impact of Family Role upon Psychological Health Status Domain Among (100) Patients with Spinal Cord Injury

Model	Unstandardized Coefficients		Standardized Coefficients	R	R Square	T	P. value	Sig.	
	B	Std. Error	Beta						
1	Patients Psychological Symptoms	.210	.101	.206	.206	.043	2.086	.040	(S)
2	Patients Thought Disruption	.175	.102	.170	.170	.029	1.712	.090	(NS)
3	patients Adaptation	.188	.091	.205	.205	.042	2.074	.041	(S)

(beta) regression coefficient, (r) pearson correlation, (R²) determination coefficient, (t) test the significant of regression equation, (Sig) significant Probability value (P < 0.05), S= Significant, NS= Non Significant.

Table (3) represent regression model of family role by Psychological health status aspects for patients with spinal cord injury, Model indicates that family role has positive impact on most patient psychological health status aspects which show in statistical significant association between family role and patients health status aspects (patients adaptation and psychological symptoms).

IV. Discussion

Family member can affect patients health status, patients prevention and treatment, rehabilitative process of patients and family primarily exposed to psychological health implications regarding patients conditions, the nurses should be alert to the role of the family and involve the family in the process of care and provide counseling and education and assist them to find necessary resources because the family is considered the unit of care^[9].

The result reveals that general health status in the most of study samples were rated as having moderate health status level in all health status aspects (psychological = psychological symptoms , thought disruption, patients adaptation) , this result agree with the following studies: Abed Ali and Tawfiq presented in their study that the spinal cord injury patients have major effect mostly on social aspect and level of independence domain and less effect on the psychological section in their result^[10]. Van Leeuwen and his colleagues stated that there are different pathway that lead to reveal the influences of mental or psychological health and life satisfaction of spinal cord injury^[11]. Tramonti and his colleagues showed there are some associations between health related quality of life and avoidance-oriented and / or task-oriented coping^[12].

Martz and his colleagues reported that patients with spinal cord injury have negative psychological response like: anxiety and depression, and low adapted to disability like: disengagement-type coping (avoidance and disability denial)^[13]. Kennedy and his colleagues reported that the study participants were emotionally well-adjusted, and positive emotional reactions to their events and using effective coping approach^[14]. WEBB and his colleagues revealed in their study that results present that forgiveness plays important role in spinal cord injury patient life satisfaction and their health status and some patients with spinal cord injury may fight, to deal with of : responsibility, anger, blame, hostility, depression, irritability ,fear and anxiety^[15]. Kreuter and his colleagues demonstrated that Australian group of sample suffer from depressive feelings during their research^[16].

Regarding family role toward spinal cord injury patients, result showed that more than two third of total family functioning role was in moderate level and low percentage of them rated in low level of function , this result agrees with these studies: Wilson revealed that the family as a unit plays important role to keep each member who defined as a patient in the health level^[17]. Openshaw stated that one-third of his sample (33.3%) recorded family function semi-balanced, and (31.3%) of the patients had balanced families, and (28.1%) of them scored in the unbalanced family, and there is a strong evidence and relationship between family function flexibility, cohesion and communication^[18].

Regarding the association between family role and spinal cord injury patients psychological health status aspects, The result indicated that family role has positive impact on most patient health status aspects which shows in statistical significant association between family functioning role and patients psychological health status , this result agree with these studies: Kolakowsky-Hayner and ishore, revealed that the emotional distress and family dysfunction are important in following traumatic injury, and they record anxiety, and depression and communication deficits, increased stress, are barrier to the process of spinal cord injury patients rehabilitation, and they emphasized in their study that dysfunction of the family and emotional distress are serious and difficulties of following traumatic injury^[19]. Openshaw stated that there is significant association between family functioning and resilience with patients quality of life^[18]. Kennedy and his colleagues presented in their study that participants were mostly satisfied with their family life, contact and attach with peers and friends and good relationship with their family and partners^[14].

V. Conclusions

According to the present study findings, the researcher concludes the following :

- The study shows moderate level rated in psychological health status domain.
- The study results represent the total family functioning role in moderate level .
- The results depicted that the family functioning role has positive impact on most patient health status aspects which shows in statistical significant association between family functioning role and patients health status aspects (patients adaptation and psychological symptoms).

VI. Recommendations

According to the results of the study the researcher recommends an educational program should be designed for patients' family to increase their information toward their key role in rehabilitation process to improve their patients health status.

References

- [1] Denham, S. A.; Looman, W.: Families with Chronic Illness, chapter 10, in , Gedaly-Duff, J. R.; Coehlo, V.; Hanson, D. P.: Family health care nursing: theory, practice and research,4th edition, F. A. Davis Company, Philadelphia, 2010,P.p.: 249-259.
- [2] Tussler,D. : Patient-centred practice in Tetraplegia and Paraplegia ,Sixth Edition, Mosby Elsevier Inc. Philadelphia, 2006, P.P.:31-34.
- [3] Kwon ,B.K.; Tetzlaff ,W.; Grauer, J.N.; et. al.: Pathophysiology and pharmacologic treatment of acute spinal cord injury, Spine J. ,2004, Vol.4:P.p.451-464.
- [4] Molazem, Z.; Falahati,T.; Jahanbin, I.; Ghadakpour, S.; Jafari P.: The effect of psycho-educational interventions on general health of family caregivers of patients with spinal cord injury: A Randomized Controlled Trial, Jundishapur Journal of Chronic Disease Care,2013,Vol.2,No.4,P.p.:1-10.
- [5] Dua,S.: Rehabilitation for Spinal Cord- Injured Patients: Looking Beyond Bladder, Bowel and Bed Sores, Supplement To Japi , 2012 , Vol. 60 ,P.p.:25-29.
- [6] Harvey,L.: Background information in Management of Spinal Cord Injuries, 1st edition, Mosby company, Philadelphia , (2008).
- [7] Brown, R. I.;Schalock, R. L.; Brown, I.: Quality of life: Its application to persons with intellectual disabilities and their families- introduction and overview, Journal of Policy and Practice in Intellectual Disabilities,2009,Vol. 6.
- [8] Sander, A. M.;Caroselli, J. S.;High, W. M.; Becker, C.; Neese, L.; Scheibel, R.: Relationship of family functioning to progress in a post-acute rehabilitation programme following traumatic brain injury, Brain Injury, 2002,Vol.16.
- [9] Denham, S. A. :Family health: A framework for nursing ,1st edition ,Philadelphia, F.A. Davis company, (2003).
- [10] Abed Ali, D. K.; Tawfiq, N. B.: Assessment of Spinal Cord Injured Persons Quality of Life, Kufa Journal For Nursing Sciences, 2013, Vol. 3, No. 1,P.p.:231-243.
- [11] Van Leeuwen, C.M.; Post, M.W.; Westers, P.; van der Woude, L.H.;de Groot, S.; Sluis, T.; Slootman ,H.; Lindeman, E.: Relationships between activities, participation, personal factors, mental health, and life satisfaction in persons with spinal cord injury, Arch Phys Med Rehabil, 2012, Vol.93, P.p.:82-89.
- [12] Tramonti,F.; Gerini,A.; Stampacchia, G.: Individualised and health-related quality of life of persons with spinal cord injury, Spinal Cord , 2013, | doi:10.1038/sc.2013.156.
- [13] Martz, E.; Livneh, H.; Priebe, M.; Wuermsler, L.A.; Ottomanelli, L. : Predictors of psychosocial adaptation among people with spinal cord injury or disorder, Arch Phys Med Rehabil ,2005,Vol.86, P.p.:1182-1192.
- [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,Vol. 44, P.p.95-105.
- [15] Webb, J. R. ;Toussaint, L. ; Kalpakjian, C. Z. ;Tate, D. G. : Forgiveness and health-related outcomes among people with spinal cord injury, Disability and Rehabilitation, 2010,Vol. 32, No.5, P.p.: 360-366.
- [16] Kreuter,M.; steen,A.S.; Erholm, B.; Bystro'm, U .; JBrown,D.: Health and quality of life of persons with spinal cord lesion in Australia and Sweden, Spinal Cord, 2005,Vol. 43, P.p.:123-129.
- [17] Wilson, V.: Supporting family carers in the community setting, Nursing Standard,2004,Vol. 18, No.29,P.p.: 47-53.
- [18] Openshaw, K. P.: The Relationship Between Family Functioning, Family Resilience, and Quality of Life Among Vocational Rehabilitation Clients, Published Dissertation, Utah State University, Logan, Utah, 2011.
- [19] Kolakowsky-Hayner ,S.A.; Rekha- Kishore,R.: Caregiver functioning after traumatic injury, **NeuroRehabilitation**, 1999,Vol.13.