Impact of Neck Pain on Self Care Abilities among Patients With Cervical Disk at A university Hospital

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ABSTRACT

Back ground: Cervical disc disorder is the most common medical conditions with significant impact on health related quality of life, self care abilities like bathing, wearing clothes, feeding; use of health care resources and socio-economic costs. **Purpose:** is to assess impact of neck pain on self care abilities among patients with cervical disc. **Research design:** A descriptive exploratory design was utilized in the current study. **Sample**: purposive sample of (80) adult. **Setting:** Rheumatology and Rehabilitation out-patient clinics patients in El- Manial Hospital**. Tool of data collection**: 1) Demographic and medical data tool, 2) Structured Arabic version of Neck Disability Index scale (NDI). **Results:** samples age ranged from 23years to 60 years with mean of 46.61 ± 9.86. The overwhelming majority of samples were female (77.5%). The vast majority of the samples were married (91.3%). Regarding cervical disc problems as reported by the study subjects were neck tightness, shoulder pain, weakness of upper limb, numbness and presence of headache (78.8%, 98.8%, 50%, 90% and 91.3%) respectively. Regarding period of neck pain the overwhelming majority of samples have neck pain since more than 3months (77.5%). Also it was shown that pain intensity was ranged between(1.3%- 48.8%) and less than bare majority were (48.8%) reported that the pain is fairly sever at the moment. Regarding self care ability, it was ranged between (2.5%-47.5%) and less than bare majority were (47.5%) stated It is painful to look after myself and I'm slow and careful. **Conclusion**: The study concluded that patients with cervical disc disorders suffer from problems as neck pain which affect patients self care abilities. **Recommendation:** Based on the findings suggested follow up for all patients with cervical disc disorders to assess their health conditions and to detect early complication. Adequate necessary skills and information about coping with pain and performance of self care must be given to the patients and their families.

Key words: Cervical Disc Disorders- Neck pain- Self care.

Introduction

Cervical disc disease is among the most common medical conditions with significant impact on health related quality of life, use of health care resources and socio-economic costs. Cervical disc disease is a general term for usually age-related، wear-and-tear degenerative changes affecting the vertebrae, intervertebral discs, the facet and other true joints, and the associated ligaments (Tracy and Bartleson, 2010).

The bodies react to aging process and stress of lives in a number of different ways.

In the case of spine، it is common for deposits and years of wear and tear to cause cervical disc disease which affect spinal canal to become narrow and begin pressing on the spinal cord. When this narrowing does occur, it is usually not reversible and can quickly lead to many problems (Neuro Spine Institute, 2015).

American Association of Neurological Surgeons, (2013) emphasized that, patients with cervical disc have problems in neck, shoulders, arms and/or hands. They may experience neck pain, numbness, tingling and/or weakness in any or all of these locations. Also Jacobs, Willems, van Limbeek, Bartels, Pavlov, Anderson, & Oner, (2011) added that cervical disc disease is part of the natural aging process of the human spine and can cause complications stemming from the nerve root or spinal cord. Cervical disc disease can lead to many problems as significant neck pain, instability, headache, numbness, upper and lower limb weakness, neurological problems and disturbances with the nerve roots or spinal cord injury, or a combination of them. The cause of these problems come from compression of the nerve.

Neck pain is a condition that is commonly treated by health care professionals. It has been estimated that the annual prevalence of neck pain in the general population is 30-50%, with the prevalence of activity limitations due to neck pain ranging between 11-14%. Neck pain can be categorized based on the duration of symptoms as acute (less than 7 days), sub-acute (between 7 days and 3 months), or chronic (greater than 3 months). Whereas the majority of individuals who experience acute symptoms do not seek professional care, chronic neck pain has a prolonged negative impact on health and health care expenditure (Shahidi, Johnson, Curran-Everett, & Maluf, 2012).

Fehlings, and Arvin, (2009) reported that cervical disc disorder is the most common cause of acquired disability in patients over the age of 50. This disabilities are a raised from the previous problems and compression of nerve root. Patients with cervical disc disorders are facing a loss of ability to perform basic functions, such as walking, eating, and talking, loss of ability in their physical activity and in performing activity of daily living (ADLS). Also Sitthipornvorakul, Janwantanakul, Purepong, Pensri, & van der Beek, (2011) added that neck pain cause personal suffering, disability, and impaired quality of work and life in general, which can be a great socio-economic burden on patients and society.

The Problems and disabilities that caused by cervical disc usually accompanied by a substantial effect on daily life that result in extensive use of health care resources. The patient with cervical disk should seek help from health care provider to overcome activity limitation. One of the imperative role of nurse as member of health care provider is to assess patient's problems and its allied activity limitation which ensue to such patients. This problem may affect personal care, work status, sleep, concentration, lifting, reading, headaches, recreation and driving. The nurse must observe and assess the patient's ability to perform activity of daily living (ADLs) to determine the level of independence in self-care and the need for nursing intervention. Complete assessment will help health care provider to determine level of limitation that lend a hand to them in providing appropriate treatment and intervention (Sitthipornvorakul, Janwantanakul, Purepong, Pensri, & van der Beek, 2011).

Therefore, the aim of this study is to assess impact of neck pain on self care ability among patient with cervical disc.

Significance Of The Study

World Health Organization (2013) (WHO) mentioned that every year around the world between 250.000 and 500.000 people

suffer from a spinal cord injury. Manchikanti, Acash, Pampati, &Malla (2012) stated that, cervical disc worldwide is a common source of chronic neck pain in adult with prevalence of 30% to 50%, associated with high pain intensity and disability in 14% of the adults.

Hefny, Ghaly, Greish, Abo-gresha, &Fahim (2012) added that cervical disc in Egypt is the most common source of neck problems, with two-thirds of Egyptian population having it at some point in their lives.

From the investigator observation in the clinical setting at neurological in-patient and out-ptient, there were many patients with cervical disk. According to medical records (2014), in Al-Manial university hospital, the average numbers of patients with cervical disc who seek medical advice are100/year. Patients with cervical disc suffer from a stiff neck and numbness, tingling, and weakness in the neck, arms, and shoulders as a result of a cervical nerve that has been irritated or pinched by the degeneration. Such cervical symptoms may persist for several months and fluctuate in terms of intensity. These symptoms may cause disability and limitation in patient activity.

There are few researches regarding assessment of problems & disabilities for patients' with cervical disk, consequently there is a gap of knowledge regarding this issue so we would like to assess impact of neck pain on self care ability of such patient utilizing neck disability index tool (NDI) as one of assessment tool.

Aim Of The Study

The aim of the current study is to assess impact of neck pain on self care ability among patients with cervical disc at university hospital.

Subject And Methods

Research design:

A descriptive exploratory research design was utilized in the current study. Descriptive research is designed to describe, observe, document in details some process, event, and outcome. This design allows the researcher to deduce, summarize, describe data obtained from empirical observation and measurment and this is the case in this research. Exploratory research is a research approach that was designed to explore and describe a given phenomenon and generate new knowledge (Houser, 2011; Polit & Beck, 2014).

Setting:

The current study was conducted mainly at Rheumatology and Rehabilitation clinics and also in Orthopedic, Neurological clinics and Neurological in patients unit in El- Manial Hospital.

Subjects:

Purposive sample of (80) adult male and female patients diagnosed with cervical disc was included in the current study.

Tools of data collection:

The study was collected by using the following tool as follows:-

1- Structured Interview Questionnaire was developed by the investigator, this tool consists of two parts:

- Demographic data that covered questions as age, gender, level of education , occupation, marital status….etc..

- Medical data sheets which include questions related to presence of chronic illness, diagnosis, duration of illness, medication regimen, and surgical intervention...etc

2-Structured Arabic version of Neck Disability Index scale (NDI):

The Neck Disability Index is a 10-item scale. Each item assesses different neck pain complaints. It is a one-dimensional scale based on the Oswestry Index modified by Vernon (1991) and its Arabic version was developed by Shaheen, Omar, Vernon (2013). Most of the items related to restrictions in activities of daily living, such as driving and reading, except one item measuring pain intensity. Each item is expressed by 6 different assertions in the range 0–5, with 0 indicating no disability and 5 indicating highest disability. The total score ranges from 0 to 50.

Methods of data collection:

Primary approval was obtained from the research ethics committee of Faculty of Nursing, Cairo University. Also an official permission was obtained from hospital administrators to conduct the study. Each patient was informed about the purpose of the study and its importance, each subject has the right to withdraw from the study without any penalities. Written informed consent was obtained from the subjects. Anonymity and confidentiality are assured through coding the data. Subjects were assured that this data will not be reused in another research without permission. The final official agreement about the data collection was obtained from the Faculty of Nursing after data collected to insure ethical and legal consideration

Content validity was done to identify the degree to which the used tools measure what was supposed to be measured. Validity of the tools was reviewed by five experts of ethical committee for clarity, relevance, comprehensive, simplicity and applicability. Reliability of the of total items in the tool was tested using Cronbach's alpha which showed satisfactory test-retest reliability for the questionnaire score (alpha scores = 0.65).

A pilot study was conducted on 10% of the sample to estimate needed time for data collection and to test feasibility, applicability, and clarity of the study tool. There is no modifications needed. The pilot study was included in the actual research subject.

Once official permission was granted to proceed with the proposed study; the study participants were interviewed individually to explain the nature and purpose of the current study. Written consent was obtained from the patients who are willing to participate in the study and the data collection was filled out by literate patients or through structured interview for illiterate. The investigator met each participant for once at clinical setting. The investigator introduced herself to the participant, nature and purpose of study was explained, then, demographic data sheet which contain (6) questions regarding age, sex, marital status, education level, occupation and place of residence was obtained from patients in 10 minutes. Then, medical data sheet which contain (8) questions regarding presence of chronic illness, period of neck pain, occurrence of neck tightness, shoulder pain, numbness, weakness of upper limb, occurrence of headache and seeking medical help was obtained from patients in 15 minutes. The last sheet is related to Arabic version of neck disability index scale which contain (10) questions related to pain intensity, self care ability, lifting ability, reading ability, severity of headache, concentration ability, working ability, driving ability, sleeping troubles and engagement in recreational activities each of them have grade from 0 to five, it was obtained from patients in 20 minutes. Finally, through interviewing the patient, the investigator was assessing problems and disabilities among patient with cervical disk using Arabic version of neck disability index scale using (NDI) tool.

Statistical analysis:-

Obtained data was, tabulated, computed and analyzed using statistical package for the

social science (SPSS) program version 21. Descriptive statistics including frequency distribution means and standard deviation, suitable statistical analysis was utilized: probability of errors will be p<0.05.

Results:

As indicated by table (1) study subjects consisted of 80 adult patients; Their age ranged from 23 years to 60 years with a mean of 46.61 ± 9.86. The overwhelming majority of samples were females (77.5%) and the rest 18 were males (22.5%). The vast majority of the samples were married (91.3%); on the other hand (6.3%) were widow and the rest were single(2.5). In relation to level of education (43.8%) not able to read and write, (3.8) able to read and write, (7.5%) finished primary school, (12.5%) finished preparatory school, (23.8%) completed secondary school and (8.8) completed their university level. In reference to occupation, (73.8%) of total sample weren't working ,while (10.1%) were working in labor work, (5%) were working in office work, and the rest of them (11.3%) were working in other jobs. Additionally, large majority of the sample (57.5 %) were residing in city region and the rest (42.5%) were residing in rural region.

Table (2) showed that less than one third of sample (27.5%) has chronic illness, (17.5%) was suffered from hypertension, (7.5%) was suffered from diabetes, (1.3%) was suffered from diabetes and hypertension and 1.3% was suffered from other disease. Regarding cervical disc problems as reported by the study subjects were neck tightness, shoulder pain, weakness of upper limb, numbness and presence of headache (78.8% , 98.8% , 50% , 90% and 91.3%) respectively. Regarding period of neck pain the overwhelming majority of samples have neck pain for more than 3months (77.5%) while (5%) of samples have neck pain since 3 months, (11.3%) of samples have neck pain since two months, and (6.3%) of samples have neck pain since one month. The same table clarifies that overwhelming majority of samples (87.5%) asked medical help.

Table (3) clarified that the percentage of subjects who suffered from pain was ranged between(1.3%- 48.8%) with Mean 3.1 ± 0.73 and less than bare majority were (48.8%) reported that (The pain is fairly sever at the moment).

Regarding self care ability, in table (4) it was shown that the subjects who suffered from self care disability ranged between (2.5%-47.5%) with Mean 2.31 ± 1.03 and less than bare majority were (47.5%) stated that (It is painful to look after myself and I am slow and careful).

It was apparent from table (5) that there was positive correlation between pain intensity and self care ability (r = .668 at p≤ .01).

According to table (6) there was positive relation between sex and pain intensity.

Regarding table (7), there was positive relation between education, job and pain intensity.

Table (1) Frequency and Percentage Distribution of Socio-demographic data among the study subjects (n=80):

Variable	Frequency	Percentage%
Age		
Early adult hood(18-29)	5	6.3
Middle adulthood(30-44)	20	25
Late adult hood(45-60)	55	68.8
Total	80	100
(X ± SD)	46.61 ± 9.86	
Gender		
Female	62	77.5
Male	18	22.5
Total	80	100
Marital status		
Married	73	91.3
Widow	5	6.3
Single	2	2.5
Total	80	100
Education level		
Don't read and don't write	35	43.8
Read and write	3	3.8
Primary education	6	7.5
Preparatory education	10	12.5
Secondary education	19	23.8
University education	7	8.8
Total	80	100
Occupation		
Not working	59	73.8
Working		
Office work	4	5.0
Labor work	8	10.1
Other jobs	9	11.3
Total	80	100
Place of Residence		
Urban	46	57.5
Rural	34	42.5
Total	80	100

Table (2) Frequency and percentage distribution of cervical disk problems among study subjects (n=80):

Variable	Frequency	Percentage %
Presence of chronic illness		
	58	
No	22	72.5
Yes		27.5
Hypertension and diabetes	1	1.3
Hypertension	14	17.5
Diabetes	6	7.5
Other disease	1	1.3
Period of neck pain		
Since One Month	5	6.3
Since Two Months	9	11.3
Since Three Months	4	5.0
More Than Three Months	62	77.5
Neck tightness		
No	17	21.3
Yes	63	78.8
Shoulder pain		
	1	
No	79	1.3
Yes		98.8
Weakness of upper limb		
No	40	50.0
Yes	40	50.0
Numbness		
No	8	10.0
Yes	72	90.0
Headache		
No	7	8.8
Yes	73	91.3
Asking medical help		
No	10	12.5
Yes	70	87.5

Table (3) Frequency and percentage distribution of pain intensity among study subjects(n=80):

Variables	Frequency	Percentage%
Pain intensity		
The pain is moderate at the moment	17	21.3
The pain is fairly sever at the moment	39	48.8
The pain is very sever at the moment	23	28.8
The pain is the worst imaginable at the moment	1	1.3
$(X^2 \pm SD)$	3.1 ± 0.73	

Table (4) Frequency and percentage distribution of self- care ability among study subjects(n=80):

Self care ability		
Can look after themselves normally without causing extra pain	2	2.5
Can look after themselves normally but it causes extra pain	13	16.3
Painful to look after themselves and they slow and careful	38	47.5
Need some help but can manage most of their personal care	12	15.0
Need help every day in most aspects of self care	15	18.8
$(X \pm SD)$	2.31 ± 1.03	

Table 5.correlation between age, pain intensity and self-care ability among study subjects (n=80):

Variables	Age		Pain intensity	
	R	(P) value	R	(P) value
Pain intensity	0.52	0.648	1	-
Self care ability	0.148	0.190	0. 668[**]	0.000

** Significant at the 0.01 level.

Table 6 . Independent T-test between sex and variables of neck disability index tool(pain intensity &self care ability) among study subjects (n=80):

Variables	Sex (X ± SD)		T	(P) value
	Male	Female		
Pain intensity	2.61 ± .69	3.24 ± .69	-3.39-	.001*
Self care ability	2.05 ±1.10	2.38± 1.01	-1.19-	.23

* Significant at the 0.05 level

Table7. One way ANOVA between education, job and variables of neck disability index tool (pain intensity & self care ability) among study   subjects (n=80):

Variables	Education		Job	
	F	(P)value	F	(P) value
Pain intensity	1.648	.158	2.764	.034*
Self care ability	1.198	.319	1.411	.239

* Significant at the 0.05 level.

Discussion

In relation to study subjects age, it was revealed that the age ranged from early adult hood to late adulthood. Addition to that, Hefny, Ghaly, Greish, Abogresha, & Fahim study about Spinal accessory neuropathy in patients with chronic neck pain (2012) stated that the respondents age was ranged between early adult hood to late adulthood. Moreover Tidy (2013) study cervical disc protrusion and lesions, this study revealed that prevalence of cervical disc disorder is high in age group between adulthood to late adulthood and suggested that the majority of men older than fifty years and women older than sixty years have evidence of cervical disc disorder.

Regarding gender it was found that the overwhelming majority of samples were females. Also, it is matched with the study about Spinal accessory neuropathy in patients with chronic neck pain by Hefny, Ghaly, Greish, Abogresha, & Fahim (2012) revealed that more than half of respondents were females. Also, this results are in agreement with the study about reliability,

responsiveness and interpretability of the neck disability index-Dutch version in primary care by Ailliet, Rubinstein, de Vet, van Tulder, & Terwee, (2015) who reported that the large majority of respondents were females. Cervical disc disorders are more common in women than in men, this is result of hormonal effect, some women get the disease at times when their sex hormones are shifting, such as after pregnancy or around menopause.

The vast majority of the samples were married. This results were supported with the study about reliability, and validity of the Copenhagen Neck Functional Disability Scale in patients with chronic neck pain: Turkish version by Yapali, Günel, & Karahan, (2012) who revealed that the over whelming majority of sample was married. Marriage can affect in occurrence of cervical disc disorder as it cause stress, physical and psychological stress.

In relation to level of education less than bare majority of respondents were not able to read and write. This results were contra versed with the study about reliability,

and validity of the Arabic version of Neck Disability Index in patients with neck pain by Shaheen, Omar, & Vernon, (2013) who stated that the over whelming majority of their respondents finished high school.

From investigator perspective, patients with high educational level may be more concerned about the symptoms of the disease and when their symptoms started, they will be able to report that more accurately than low educated people. Education level can reflect patient response's to disease and helping in preventing complications of the disease.

As regards the occupation, the over whelming majority of the study subjects weren't working. This results are contradicted with this study about Neck pain and disability scale and neck disability index: validity of Dutch language versions by Jorritsma, Vries, Dijkstra, Geertzen, & Reneman, (2012) reported that the vast majority of the study sample was working. Nature of occupation can affect in occurrence of that disease. Herkowitz, Garfin, Eismont, Bell, & Balderston, (2011) revealed that occupations requiring excessive cervical motion and overhead work may accelerate the process of disc degeneration, as can vibration caused by heavy equipment, Some occupations like driver, accountant and heavy working expose patients to whole body vibrations, heavy lifting and a sedentary position.

Regarding place of residence, small majority of the sample were residing in city region. This results are in agreements with the study about reliability, and validity of the Arabic version of Neck Disability Index in patients with neck pain by Shaheen, Omar, & Vernon, (2013) who revealed that the vast majority of their study subjects were from urban. It may be argued that the university hospitals as a setting for this study considered as one of the oldest and largest health care facility in Cairo. It has multiple specialties and serves people in Cairo and nearby towns. Therefore it attracts many patients seeking treatment by trained and specialized staff.

It was found that less than one third of samples have chronic illness. Diabetes mellitus (DM) is a chronic systemic disease with a wide range of complications in the musculoskeletal system. Diabetic patients suffer from diverse rheumatic conditions, neuropathy which are common and, while not life threatening, are an important cause of morbidity, pain, and disability that affect their quality of life Goto, (2016).

Regarding cervical disc problems finding as reported by the study subjects. It was found that the vast majority of patients have shoulder pain, numbness and headache, also the overwhelming majority has neck tightness and bare majority has weakness of upper limb. This results are supported with study about Individual factors associated with neck disability in patients with cervical radiculopathy scheduled for surgery: a study on physical impairments, psychosocial factors, and life style habits by Wibault, Johanna, et al (2014) who revealed that the vast majority has neck pain, less than bare majority has headache, the overwhelming majority has numbness, tightness and the large majority has upper limb weakness. Also this results in agreement with the study about Surgical Outcome of Anterior cervical diskectomy for cervical spondylosis with myelopathy by Al Walily, El Shazly, El Fouly, Kamel, Beheiry, Saleh (2010) who revealed that the large majority has neck pain , the vast majority has neck of tightness and less than bare majority has numbness and tingling. This are the major sign and symptoms of cervical disc disorder.

Regarding period of neck pain, the overwhelming majority of samples who have neck pain since more than 3 months. This results in agreements with the study about Individual factors associated with neck disability in patients with cervical radiculopathy scheduled for surgery: a study

on physical impairments, psychosocial factors, and life style habits by Wibault, Johanna, et al (2014) who revealed that the vast majority has neck pain since more than 3 months. This results are supported with reliability, and validity of the Arabic version of Neck Disability Index in patients with neck pain study by Shaheen, Omar, & Vernon, (2013) who revealed that the over whelming majority of sample who has neck pain since more than 7 weeks. Addition to that study about reliability, responsiveness and interpretability of the neck disability index-Dutch version in primary care by Ailliet, Rubinstein, de Vet, van Tulder, & Terwee, (2015) supported the study results as revealed that the over whelming majority of respondents have neck pain since > 6 weeks and the large majority of study samples have neck pain since more than 3 months. Period of neck pain differ from person to person according to condition if it acute or chronic.

The current study revealed that overwhelming majority of samples (87.5%) asked medical help. This revealed that cervical disc disorder has a negative impact on patient ability to self care and lead to disability.

Neck disability index sheet is a tool to assess limitation in ADLS that occurred due to cervical disc disorder and neck pain. Each item in NDI was ranged from 0 to 5 also pain intensity in NDI was ranged from 0 to 5.

The current study revealed that pain intensity was ranged between(1.3%- 48.8%) with Mean 3.1 ± 0.73. Also the study about Translation of the Neck Disability Index and validation of the Greek version in a sample of neck pain patients by Trouli, Vernon, Kakavelakis, Antonopoulou, Paganas, & Lionis (2008) stated that the Mean of pain intensity in the first test was 0.95 ± 1.07, in re-test after one week was 0.63 ± 0.96. In addition to that study about The reliability of the Vernon and Mior neck disability index, and its validity compared with the short form-36 health survey questionnaire by

McCarthy, Grevitt, Silcocks, & Hobbs, (2007) reported that Mean of pain intensity was 2.2 ± 0.1. Pain intensity was ranged from 0-5 and it can be affected by many factors as age, sex, type of work and general health. Pain also has a great negative impact on person's ability to perform ADLS. It's the main cause of the acquired disability among patients with cervical disc disorders.

Regarding self care ability, it was ranged between (2.5%-47.5%) with Mean 2.31 ± 1.03. As mentioned in the study about Translation of the Neck Disability Index and validation of the Greek version in a sample of neck pain patients by Trouli, Vernon, Kakavelakis, Antonopoulou, Paganas, & Lionis (2008) that the Mean of personal care in the first test was 0.72 ± 0.94, in re-test was 0.55 ± 0.88. As reported in the study about The reliability of the Vernon and Mior neck disability index, and its validity compared with the short form-36 health survey questionnaire by McC McCarthy, Grevitt, Silcocks, & Hobbs, (2007) that the Mean was 1.4 ± 1.2. Self care ability, can cover many aspect like person's ability to wear or take off his clothes, to have shower, even walking to bath room. Self care ability can be ranged from dependent, partially dependent, in-dependent, need assistance. There are internal and external factors can affect personal care ability like age, sex, neck pain and its associated symptoms and general health status.

The current study results declared that, there was positive relation between pain intensity and self care ability as a item of NDI. In a study by Luo, Edwards, Richardson, and Hey, (2004), revealed that there were significant correlation between pain and items of NDI. In accordance to that in study about relationships among selected measures of impairment, functional limitation, and disability in patients with cervical spine disorders by Hermann, & Reese,(2001), who reported that there were strong relationships were noted between pain and items of NDI.

As regarding sex, there was study carried out by Uddin, MacDermid, Woodhouse, Triano, Galea, & Gross (2014) about The Effect of Pressure Pain Sensitivity and Patient Factors on Self-Reported Pain-Disability in Patients with Chronic Neck Pain highlighted that pain threshold was lower in women than men and prevalence and incidence of Neck pain was higher in females than males due to the greater sensitivity of females to pain threshold and tolerance. Moreover, study about Gender differences in response to pain by Graven-Nielsen, & Arendt-Nielsen, (2007) highlighted that the gender difference in pain sensitivity might partly be linked to the female sex hormones but is also dependent on a complex interaction between psychosocial and physiological factors.

In the same manner, The present study results showed that there was positive relation between pain intensity and job . As regarding job, this results are in agreement with a study by Luo, Edwards, Richardson, and Hey, (2004) they reported that working status were significantly correlated with items of NDI, which means that there were a relation between working status and pain intensity as it is an item of NDI.

Cervical disc patient's suffer from many problems that affect their abilities to be a productive person. So it was noticed that all patients with cervical disc disorders are suffering from limitations in physical activity and activities of daily living.

Conclusion

Cervical disc disorder is the most common medical conditions with significant impact on health related quality of life, use of health care resources and socio-economic costs. It has been found that the sample of the study were suffering from neck pain since more than 3 months, neck tightness, shoulder pain, numbness, headache and upper limb weakness as consequences' of cervical disc disorder. It is noticed also in this study that the previous problems affect in performance of ADLS as shown in NDI score results .The study concluded that patients with cervical disc disorder suffers from problems and acquired disability that affect their life and self care.

Recommendation

In the light of the findings of the present study, the following are recommended:

- Follow up for all patients with cervical disc disorders to assess their health conditions and to detect early complication.

- Adequate necessary skills and information about coping with cervical disc disorders must be given to the patients and their families.

- Replication of the study on a larger probability sample selected from different geographical areas in Egypt is recommended to obtain more generalizable data.

- Doing further studies in the field of caring of patients with cervical spine disorders.

- Doing further studies about different modalities about self management technique on neck disability among patient with cervical disc disorders.

- As a nurse educator one of our role, is to stress on the topic of cervical disc problems and self care management with our the student.

- Encourage patient to perform neck exercise and maintain neutral neck posture.

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