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RESEARCH ARTICLE

DISC PROLAPSE AWARENESS AMONG POPULATION IN TAIF- SAUDI ARABIA.

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Key words:-

Disc Prolapse; Awareness; Taif; Saudi Arabia.

Abstract

Background:- Prolapsed Intervertebral Disc (PID) is a major cause of disability in developing countries.

Aims: The study aimed to investigate the awareness of disc prolapse (DP) among people in Taif city, Saudi Arabia.

Settings and Design:- Descriptive cross section study was conducted in different areas in Taif (Taif University, schools, Mall and hospitals) during the period from September to December 2015.

Methods and Material:- This study was done on a sample of 1034 people living in Taif were selected randomly at different areas.

A structured questionnaire was designed for data collection by researchers based up on review of literature. It includes 4 parts: The socio-demographic data, Knowledge and awareness about risk factors of (DP), Knowledge of participant about diagnosis of (DP) and Knowledge of participants about protection from (DP).

Results:- The sample distributed to 716 (69.2%) male and 318 (30.8) female with common age group 18-28 years by percentage (52.8%), most of participant were Saudi 972 (94.0%) and Universal and education level (60.2%), the married and employee participant represent (51.8%), (50.1%) respectively with office occupation type. Most of sample haven't complaining of (DP) with percentage (81.4%) and (53.8%) of participant have no family history, (66.5%) of participant heard about (DP) and most of them have an information about the risk factors of (DP) with highest percentage (81.6%) regard diagnosis of (DP) most of participant answer MRI is the best modality for diagnosis of (DP) by percentage (61.5%) . Also, statistical significant difference between participants complaining of (DP), risk factors and demographic data $P \leq 0.05$.

Conclusions:- most of participant haven't complaining of (DP), have no family history, have good knowledge about risk factors and lack of information about diagnosis and protection from (DP).

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Introduction:-

Herniated lumbar disc is a displacement of disc material (nucleus pulposus or annulus fibrosus beyond the intervertebral disc^[1] Intervertebral disc are pads of fibrocartilage that link the vertebral bodies together. Their main function is mechanical, transmitting loads arising from body weight and muscle activity through the spinal column and allowing bending, flexion, and torsion.^[2] When you have a prolapsed disc (commonly called a slipped disc), a disc does not actually slip, the happens is that part of the inner softer part of the disc (the nucleus pulposus) bulges out (herniates) through a weakness in the outer part of the disc. **www. Patient.co.uk,(2015)**^[3]: Disc protrusions vary in size from small, focal herniations (less than 25% of disc circumference on an axial image) to broad-based (25-50%). If the herniated disc travels behind a vertebral body it is described as migrated and if a piece break off from the main herniation it is turned a sequestered fragment.^[4] There are many structures surrounding a disc intervertebralis: annulus fibrosus, anterior longitudinal ligament, posterior longitudinal ligament, nerve roots, nerves and muscles. A disc herniation can cause mechanical irritation of these structures which in turn can cause pain. This is presented as low back pain with possible radiculopathy if a nerve is affected.^[5] Disc herniations are often asymptomatic, and 75% of the Intervertebral disc herniations recover spontaneously within 6 months. In 95% of the lumbar disc herniations the L4-L5 and L5-S1 discs are most commonly affected. The cervical disc herniations are most locate at level C5-C6 and C6-C7.^[5] Chronic or sudden forcible hyper flexion or torsion can cause a disc hernia, but mostly there are no specific inciting events. Other possible causes can be a whiplash, poor posture, obesity smoking and occupational risks such as driving for a long time.^[6] The arm pain from a cervical herniated disc results because the herniated disc material “pinches” or presses on a cervical nerve, causing pain to radiate along the nerve pathway down the arm. Along with the arm pain, numbness and tingling can be present down the arm and into the fingertips. Muscle weakness may also be present. www.spine-health.com^[7] Leg pain (also known as sciatica) is the most common symptom associated with a herniated disc in the lumbar spine. Approximately 90% of herniated discs occur at L4-L5 and L5-S1, causing pain in the L5 or S1 nerve that radiates down the sciatic nerve. Symptoms of a herniated disc at these locations are described below: A herniated disc at lumbar segment 4 and 5 (L4-L5) usually causes L5 nerve impingement. In addition to sciatica pain, this type of herniated disc can lead to weakness when raising the big toe and possibly in the ankle, also known as foot drop. Numbness and pain can also be felt on top of the foot.^[7] It is not clear why some people develop a prolapsed disc and not others, even when they do the same job or lift the same sort of objects. It seems that some people may have a weakness in the outer part of the affected disc. Various things may trigger the inner softer part of the disc to prolapse out through the weakened outer part of the disc. For example, sneezing, awkward bending, or heavy lifting in an awkward position may cause some extra pressure on the disc. In people with a weakness in a disc, this may be sufficient to cause a prolapse.^[3]

Factors that may increase the risk of developing a prolapsed disc include: a job involving lots of lifting, a job involving lots of sitting (especially driving), weight-bearing sports (weight lifting, etc.), smoking, obesity, and increasing age (a disc is more likely to develop a weakness with increasing age.^[3,8]

Hasan M. Keriri,(2013)^[9], reported that the prevalence and risk factors of low back pain among nurses in Taif (48.41%) were complained of low back pain and significantly more than male participants ($p=0.002$). Other study; reported by **Asghar Ali, et al , (2013)**^[10], reported that : A total of 477 patients with chronic low backache were included in the study out of which 274 (57.4%) were males. Age of the patients ranged from 19 to 75 (39.92 ± 12.31) years. Out of 477 patients 38 (7.9%) had significant radiological evidence of disc prolapse at lumbar vertebral levels, the management of prolapsed lumbar intervertebral discs (PIDs) has changed over time with developments in diagnostic technology (computerized tomographic scans and magnetic resonance imaging), newer minimally invasive surgical approaches and the continued use of complementary therapy. According to the researchers knowledge there are a few studies done in Saudi Arabia and there was no research done in this field in Taif. So the present study aimed to investigate the awareness of disc prolapse among people in Taif city, Saudi Arabia.

Subjects and Methods:-

Subjects of the study

A sample of 1034 people were selected randomly at different area .Inclusion criteria: **i)** Adults people, ages 20 and older. **ii)** Living in Taif city. Exclusion criteria: people who are not willing to participate in the study.

Research design:- A descriptive cross section study was design ,during the period from September to December 2015.

Setting:- The study was conducted in difference areas in Taif city (Health College, Taif University , schools, residential areas, shopping Mall (Kalb El Taif Mall) and Taif hospitals.

Tool of data collection:- A structured questionnaire was designed for data collection by researchers based up on review of literature. It includes four parts.

First part:- Socio-demographic data; age, gender, occupation, marital status, Nationality, level of education and family history.

Second parts:- Knowledge and awareness about risk factors of disc prolapse.

Third part:- Knowledge of participant about diagnosis of disc prolapse.

Fourth parts:- knowledge of participants about protection from disc prolapse.

Methods:-i) Oral permission to carry out this study was obtained from all participants . **ii)** A pilot study was carried out after the development of the tools on 10 % of the sample size, **iii)** Data was collected through structured questioner to fill information related to demographic data and knowledge about disc prolapse .Once the participants who meet inclusion criteria are identified, the research assistants explained the purpose of the study to all participants, and they were informed that their participation in the study is voluntary. Then the questionnaires were distributed to the people after informed consent obtaining from all participants. people were take 10-15 minutes to complete the questionnaire. After all questionnaires were filled by participants, all data had been entered into computer for data analysis using SPSS program version 0.20.

Statistical analysis:- The data was code, enter, and analyze using SPSS . Descriptive statistical analysis was used to determine frequency distribution and demographic variables. M(mean), SD (standard deviation) of disc prolapse awareness total score. Cross tabulation test used to assess differences in disc prolapse awareness groups by demographic variables .The level of significance for this study was set at ($p = 0.05$) to detect any indication of differences found in the data available.

Ethical considerations:- All participants were informed about the nature of the study and oral consent obtained from participants who agreed to participate in the study. All participants were informed that their participation in the study is voluntary.

Results:-

Table 1:- Socio-demographic characteristics of study sample (N=1034).

Variables	No	%
Gender		
Male	716	69.2%
Female	318	30.8%
Total	1034	100.0%
Age group		
18-28 years	546	52.8%
29-39 years	202	19.5%
40-50 yrs	228	22.1%
More than 50 yrs	58	5.6%
total	1034	100%
Meanand SD	30.7 ± 11.6	
Nationality		
Saudi	972	94.0%
Non Saudi	62	6.0%
Total	1034	100.0%

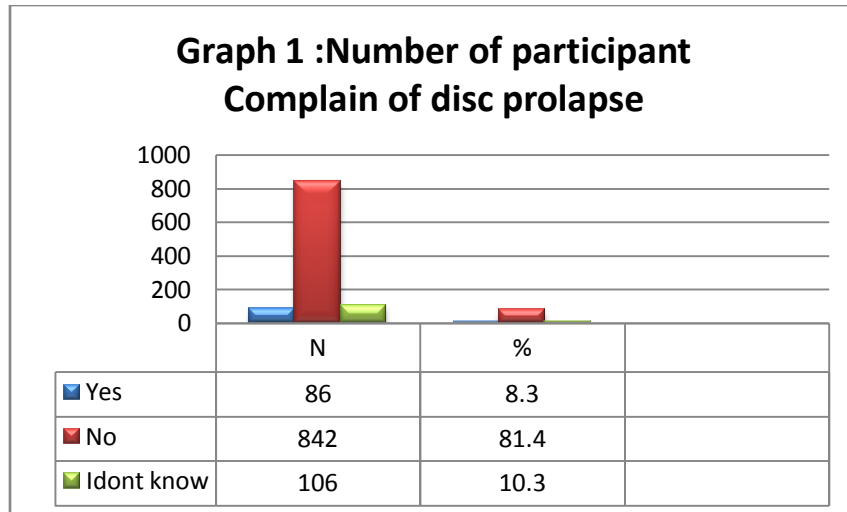
Education level		
Primary	12	1.2%
Secondary	26	2.5%
Intermediate	374	36.2%
Universal and above	622	60.2%
Total	1034	100.0%
Marital Status		
Single	484	46.8%
Married	536	51.8%
Divorced	12	1.4%
Total	1034	100.0%
Occupation		
Student	358	34.6 %
Employee	518	50.1%
Non-employee	158	15.3%
Total	1034	100.0%
Occupation Type		
Office	132	12.8%
Worker	23	2.5%
Military	38	3.7%
House wife	116	11.2%
Healthy Workers	78	7.5%
Educational	400	38.7%
Others	244	23.6%
Total	1034	100.0%

*Table (1): This table represent that most of participant were male , age group ranged from (18-28yrs) with mean \pm DS30.7 \pm 11.6, Saudi, university and above, married and employee ,(69.2%), (52.8%), (94%), (60.2%), (51.8%) and (50.1%),respectively).Regard Occupation type, most of sample working educators (38.7%).

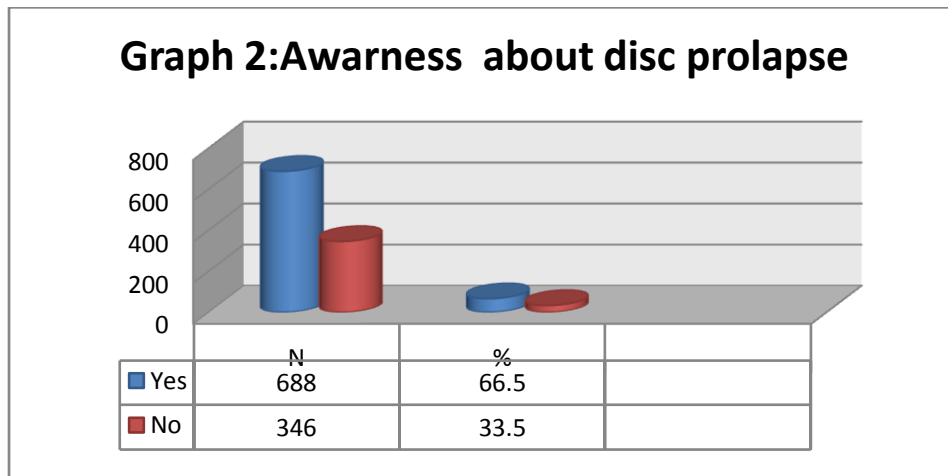
Table 2:-Family History of participant regard disc prolapse. (N=1034)

Variable	Yes N%	No N%	I don't Know N%
There Are any history of disc prolapse in your family ?	374(36.1%)	556(53.8%)	105(10.1%)
If yes, How many cases?	Number	Percentage	
1-3	358	95.7%	
5-7	10	2.8%	
7-10	4	1.0%	
More than 10	2	0.5%	
Total	374	100%	

*Table (2): This table show that (53.8%) of participant answer no family history and 36.1 present family history ,(95.7%) number of case ranged between (1-3) case.



Graph 1:- This graph Shows that ,Most of sample haven't complaining of disc prolapse.



Graph 2:- This graph Showed that (66.5%) of participant had heard about disc prolapse.

Table 3:-Knowledge of participant about risk factors of disc Prolapse. (N=1034)

Variable	Yes N/%	No N/%	I don't Know N/%
Do you think that bad habits will increase the risk factor of the disc prolapse?	844(81.6%)	52(5.0%)	138(13.4%)
Do you think the lack of knowledge will increase the risk factor of the disc prolapse ?	824(79.7%)	108(10.4)	102(9.9%)
Do you think the bad diagnosis of the disc prolapse one of the reason for sever disc prolapse?	814(78.7%)	72(7.0%)	148(14.3%)
Do you think increase age will produce disc prolapse?	664(64.2%)	184(17.8%)	186(18.0%)
Do you think obesity is one of causes of the disc prolapse?	622(60.2%)	180(17.4%)	232(22.4%)

***Table (3):**This table show that ,most of participant have information about the risk factors of disc prolapse, highest percent regard the bad habits will increase the risk factor of the disc prolapse, lowest percentobesity is one of causes of the disc prolapse,(81.6%and 60.2%,respectively).

Table 4:-Total knowledge of participant about risk factors of disc Prolapse. (N=1034)

Variables	No	%	Cumulative Percent
Good knowledge	888	85.9	85.9
Poor knowledge	146	14.1	100.0
Total	1034		

***Table (4):** This table showed that most of participants have had good knowledge about risk factors (85.9%).

Table 5:-Knowledge of participant about diagnosis of disc Prolapse. (N=1034)

Variable	Yes N%	No N%	I don't Know N%
Do you know the diagnosis of the disc prolapse	208(20.1%)	823(79.9%)	0(0%)
If yes, what is it?	No	%	
MRI	128	61.5%	
CT	52	25%	
X-ray	28	13.5%	
Total	208	100%	

***Table (5):** This table showed that most of participant 79.9 % answer no regard diagnosis of disc prolapse,61.5% from participant answer yes regard MRI is best modality for diagnosis disc prolapse.

Table 6:- Knowledge of participant about protection from disc Prolapse. (N=1034)

Variable	Yes N/%	No N/%	I don't Know N/%
know how to deal with the disc prolapse	222(21.5%)	812(78.5%)	0(0%)
know how to prevent yourSelf from the disc prolapse	314(30.4%)	720(69.6%)	0(0%)
think the analgesics can be used always to manage the disk prolapse symptoms	136(13.2%)	644(62.3%)	254(24.5%)
Have ever visited an awareness activity about disc prolapse	62(6.0%)	972(94.0%)	0(0%)
Do you think the regular exercise will prevent you from the disc prolapse	734(71.0%)	120(11.6%)	180(17.4%)
Do you know what is the correct way to bake up something from the floor	660(63.8%)	374(36.2%)	0(0%)

***Table (6):** This table illustrate that knowledge of participant about disc prolapse ,most of participant haven't knowledge regard you have visited an awareness activity about disc prolapse, how to deal with disc prolapse, how to prevent yourself from disc prolapse, and you think the analgesics can be used always to manage the disk prolapse symptoms, (94%,78.5%,69.6%,and 62.3%,respectively)

Table7:-Association between awareness of disc prolapse and demographic data. (N=1034)

Variable	Awareness of disc prolapse		X2	P.
	Aware	Unawareness		
Sex			0.13	0.71 NS
Male	480(69.7%)	236(68.2%)		
Female	208(30.3%)	110(31.8%)		
Total	688(100%)	346(100%)		
Age group			6.7	0.03 S
18-28 years	344(50%)	202(58.4%)		
29-39 years	130(18.8%)	72(20.8%)		
40-50 years	174(25.3%)	54(15.6%)		
More than 50 yrs	40(5.9%)	18(5.2%)		
Total	688(100%)	346(100%)		
Marital Status			3.35	0.18 NS
Single	304(44.2%)	180(52.0%)		
Married	376(54.7%)	160(64.3%)		
divorced	8(1.1%)	6(1.7%)		
Total	688(100%)	346(100%)		
Occupation			5.07	0.07 NS
Student	216(31.4%)	142(41.0%)		
Employee	366(53.2)	152(44.0%)		
Non-Employee	106(15.4%)	52(15.0%)		
Total	688(100%)	346(100%)		

***Table (7):**This table represent no statistical significant difference between awareness and Sex, Marital status, Occupation = P:>0.05,but significance difference between awareness and age = P: 0.03

Table 8:-Association between participant complaining of disc prolapse and demographic data. (N=1034)

Variable	Complain from disc prolapse			X ²	P.
	Yes (N/%)	No (N/%)	Don't know(N/%)		
Gender				0.79	0.67 NS
Male	64(74.4%)	582(68.1%)	70(66.0%)		
Female	22(25.6%)	260(30.9%)	36(34.0%)		
Total	86(100%)	842(100%)	106(100%)		
Age group				37.3	0.00 S
18-28 years	20(23.3%)	456(54.2%)	70(66%)		
29-39 years	12(14%)	182(21.6%)	8(7.5%)		
40-50 yrs	44(51.1%)	158(18.8%)	26(24.5%)		
More than 50 yrs	10(11.6%)	46(5.4%)	2(2%)		
Total	86(100%)	842(100%)	106(100%)		
Marital Status				16.27	.003 S
Single	16(18.6%)	410(48.7%)	58(54.7%)		
Married	68(79%)	420(49.9%)	48(45.3%)		
divorced	2(2.4%)	12(1.4%)	0		
Total	86(100%)	842(100%)	106(100%)		
Occupation				21.36	0.00 S
Student	6(7%)	298(35.3%)	54(51%)		
Employee	64(74.4%)	416(49.4%)	38(35.8%)		
Non-Employee	16(18.6%)	128(15.3%)	14(13.2%)		
Total	86(100%)	842(100%)	106(100%)		

***Table (8):** This table showed statistical significant difference between participants complains from disc prolapse and demographic data(age, marital status and Occupation) $P \leq 0.05$

Table 9:-Association between participant knowledge about risk factors and demographic data. (N=1034)

Variable	Total Risk factors		X ²	P.
	Good knowledge	Poor knowledge		
Gender			9.82	0.002 S
Male	592(66.7%)	124(85%)		
Female	296(33.3%)	22(15%)		
Total	888(85.9%)	146(100%)		
Age group			41.8	0.00 S
18-28 years	418(76.6%)	128(87.7%)		
29-39 years	194(96.0%)	8(5.5%)		
40-50 yrs	222(97.4%)	6(4.1%)		
More than 50 yrs	54(93.1%)	4(2.7%)		
Total	888(85.9%)	146(100%)		
Marital Status			30.75	.000 S
Single	372(42%)	112(76.8%)		
Married	502(56.5%)	34(23.2%)		
divorced	14(1.5%)	0		
Total	888(85.9%)	146(100%)		
Occupation			50.49	0.000 S
Student	254(28.6%)	104(71.3%)		
Employee	488(55%)	30(20.5%)		
Non-Employee	146(16.4%)	12(8.2%)		
Total	888(85.9%)	146(100%)		

***Table 9:** This table shows that statistical significant difference between participant knowledge about risk factors of disc prolapse and age, marital status, occupation $P \leq 0.05$ and no statistical significant difference between male and female regard risk factors > 0.05 .

Discussion:-

Prolapsed Intervertebral Disc (PID) is a major cause of disability in developing countries, so the present study aimed to investigate the awareness of disc prolapse among people in Taif city, Saudi Arabia. This study was done by distributed 1034 questionnaire to public area (hospitals, schools and malls). The current study represent 66.5% of

participant have heard about disc prolapse as in **figure (2)**, this study due to 60.2% of participants are high educated ,50.1% employee .According to association between awareness of disc prolapse and demographic data ,**as in table 7**, this table reveals that the male and female they have awareness about disc prolapse with higher percentage in the male 480(67.0%),this result due to 69.2% are male more complain from disc prolapse. All marital Status of participants they have awareness about disc prolapse with higher percentage in married participants 376(70.1%).there are no significance difference between sex ,marital status $P>0.05$. Regard age ,there are statistical significance difference between age groups $P\leq 0.05$. all age groups aware of disc prolapse with high percentage in age group 40-50years followed by age more than 50(76.3% and 69%,respectively) with increase age level of awareness increase due to lift style factors some of which continue into old age. All occupational participants aware about disc prolapse with higher percentage in employee 366(70.7%). This result related to employee in outdoor activity which expose them to continuous traveling trauma to the spine so they are more aware than other group.

Our study concordant with reported that of the disc prolapse with highest prevalence is among people aged 30-50 years, certain work activities, such as repeated lifting. Driving a motor vehicle has been suggested to be a risk factor for disc herniation.^[11] Other study, increasing prevalence with increasing age, and some findings (disk degeneration and signal loss) were present in nearly 90% of individuals 60 years of age or older^[11] According to the history of participant regard disc prolapse as in **table (2)**, we found that above half of participant they haven't family history of disc prolapse 556(53.8%), and the family history of participants represented 358(34.6%) ranged between 1-3 cases. This study agree with **Postacchini and colleagues** suggested that there may be a genetic predisposition for disc prolapse (herniation). In a review of 63 patients under the age of 21 who had lumbar disc prolapse, 32% had a positive family history for that same lesion; in the control group, only 7% had a positive family history. Although no genetic markers have been proposed, certain congenital spinal abnormalities such as asymmetric facet orientation and a small vertebral canal hypothetically predispose certain individuals to symptomatic disc prolapse.**k.w.ongeti, et al.(2012)**^[12] reported that, although there is generally a male predominance, quantitative differences exist in the degree of gender bias, suggesting that variations in genetic or environmental factors influence the gender distribution. Regarding participant complain of disc prolapse 842(81.4%) reported no complain as in **figure 1**. This result due to above have of participant age 18-28ys and this age Intervertebral disc more strength. This study confirm by **K.W.ongeti et al(2012)**^[12] reported that, PID(prolapse intervertebral disc) is infrequent in adolescent, disc prolapse occurs most frequently in fourth decade and that it is infrequent before 20 and after 65 years. But according to previous study on 2014 we found "The prevalence of disk degeneration in asymptomatic individuals increased from 37% of 20-year-old individuals to 96% of 80-year-old individuals. Disk bulge prevalence increased from 30% of those 20 years of age to 84% of those 80 years of age. Disk protrusion prevalence increased from 29% of those 20 years of age to 43% of those 80 years of age."^[11]

According to association between participant complain from disc prolapse and demographic data in **table 8**, this table represent the male more complain from disc prolapse than female participants with higher percentage in male 64(8.9%). Also, no significant difference between them $P>0.05$. this result due to large number of male than female. This study agree with **Asghar Ali, et al , (2013)**^[10], in (Pakistan) about Lumbar Disc Herniation in Patients with Chronic Backache, they found that: Out of 477 Patients 38 had significant radiological evidence of disc prolapse at lumbar vertebral levels, with 26 (9.5%) males and 12 (5.9%) females. Also, disagree with disc prolapse is commoner in female than male may be due to the gender difference in the angulation of the lumbar spine ,also reflects the quality and quantities of work the women at home, breast feeding and manual labor.^[13]

Regarding age, there are statistical significance difference between age and complain from disc prolapse ≤ 0.05 age 40 and more is more complain than other group(19.3%,17.2% ,respectively). This study supported by Jo Jordon et al.2009, who reported that The highest prevalence is among people aged 30-50 years, with a male to female ratio of 2:1. A number of previously published studies have demonstrated the increasing prevalence of degenerative spine findings with increasing age in asymptomatic patients,^[14] A cross-sectional study of 975 individuals (symptomatic and asymptomatic) found that the prevalence of an Intervertebral disk space with disk de-generation increased from approximately 70% of individuals younger than 50 years of age to 90% of individuals older than 50 years of age.^[15] Also, **W. Brinjikji,(2014)**^[11] Disk protrusion prevalence increased from 29% of those 20 years of age to 43% of those 80 years of age. Regarding marital status, 12.7% married complain from disc prolapse than other group, this study supported by **Moussa et al(2014)**^[16], reported that highest rate of MSP(musculoskeletal pain) was detected among married women followed by divorced.

Regard Occupation , employee 12.4% of participant more complain than the other group, may due to unhealthy position during working and lack of physical activity add computer used during work for long time **www. Patient.co.uk,2015**^[3] a job involving lots of lifting, a job involving lots of sitting (especially driving) are risk factors of disc prolapse.

Concern in **table 3 and 4**: This table represent most of participant have good knowledge about risk factors of disc prolapse 85.9% , we found that the most of participant they think the bad habits and lack of knowledge will increase the risk factor of the disc prolapse with percentage 422(81.6%), 412(79.7%). The most of participants they think the bad diagnosis of the disc prolapse one of the reason for sever disc prolapse with percentage 407(78.7%). Also, increase age and obesity will produce disc prolapse represented with percentage 332(64.2%), 311(60.2%). Previous studies which demonstrate that major risks include occupational risk factors type of work and position of the body assumed at work, In developing countries many people spend their day in unsuitable working positions. For this later categories, education on work posture modification and provision of appropriate furniture may be worthwhile. Hypertension and diabetes mellitus are frequently cited as risk factors for PID.^[11,14]

Concern participant knowledge about diagnosis of disc prolapse, The most of participants they don't know diagnosis and modalities used of the disc prolapse with percentage 826(79.9%) ,but 208(20.1%) have knowledge about diagnosis, 128(61.5%) answer MRI is best modalities for diagnosis disc prolapse as in **table (5). Raghavendra et al.,(2014)**^[17], reported that MRI is recommended as an appropriate, noninvasive test to confirm the presence of lumbar disc herniation. other study CT scan, myelography and/or CT myelography are recommended as appropriate tests to confirm the presence of lumbar disc herniation.^[18] The level and extent of disc protrusion can be confirmed and monitored using MRI of the spine, which is considered to be safe in pregnancy,^[19] Magnetic resonance imaging (MRI) is the gold standard imaging method of the spine as it is able to visualize the spinal cord, nerve roots and intervertebral disc.^[4]

Knowledge of participant about protection from disc prolapse as in **table (6)**. The participants they haven't visited an awareness activity about disc prolapse represented higher percentage, they don't know how to deal with disc prolapse, they don't know how to prevent them self from disc prolapse, and they don't think the analgesics can be used always to manage the disk prolapse symptoms, (94%, 78.5%, 69.6%, and 62.3%, respectively), this result due to lack of health education about disc prolapse especially about correct position, body mechanic, also may be due to lack of awareness from health care provider, defect from social media and lack of research about protection of disc prolapse, but 71% know regular exercise prevent from disc prolapse and 63.8% correct way to bake up something from the floor. **Moussa et al.,(2013)**^[16] Most of the patients were aware by the fact that lack of physical exercise is an impotent causes of musculoskeletal pain 88.9%. However awareness about the role of osteoporosis and the use of computer and mobiles for long duration was not satisfactory (23.6% and 42.1%) respectively, **Darwish and Zuhair,(2013)**^[20] reported that, Knowledge obtained from participant in other Saudi areas varies from area to another. Appositive mental attitude ,regular activity, and a prompt return to work are all very important element of recovery.

Conclusion:-

most of participant haven't complaining of disc prolapse, have no family history, have good knowledge about risk factors and lack of information about diagnosis and prevention of disc prolapse.

Recommendations:-

More education about prevention of disc prolapse must be implemented in Taif community.

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