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THE PREVALENCE OF BACKPAIN AMONG TEXTILE WORKERS AT MOUSAL CITY-1991

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نسبة انتشار الام الظهر لدى العاملين في الصناعة النسيجية في مدينة الموصل / ١٩٩١

الخلاصة :

تم دراسة ١١٢٢ من العاملين في صناعة النسيج بمدينة الموصل فتبين ان معدل انتشار الام الظهر هو ١٦.٥٪. لقد وجد ان معدل انتشار الام الظهر يزداد مع زيادة العمر او زيادة سنوات الخدمة. ان اعلى نسبة لام الظهر وجدت عند العاملين في المخازن (٣٠٪) والذين هم بوزن اعلى من الطبيعي (٣١.٣٪). ٧٠٪ من العاملين الذين يشكون من الام الظهر كانت شكاواهم الم في اسفل الظهر. توصي الدراسة وجوب تدريب العاملين على اسلوب العمل الصحيح واخضاع العاملين للفحص الطبي الدوري لضمان بقاء الفرد يتمتع باللياقة الصحية.

SUMMARY :

A cross-sectional study was conducted among 1122 textile workers at Mousal City to study the prevalence rate (PR) of backpain (BP). The over all PR of BP was 16.5%. The RP of BP was found to increase with age and years of employment. High PR of BP was found among those working in the storage department (30.5%) and among overweight workers (31.3%). According to the site of maximum BP, low BP represented the highest percentage (75.7%). The study recommends training program and periodic medical examination.

INTRODUCTION :

Backpain (BP) is one of the most common and costly problems (1). It is not a new problem; it affected the Egyptians 5000

years age (2).

It was one of the major concerns of Bernardino Ramazini (3). According to several authors (4-6), there are many factors at the work place that are important in the occurrence of BP, such as lifting and bending which are the two most common risk factors in industry, and also there are individual risk factors such as age, sex, muscle strength, physical fitness etc. Since there is no previous Iraqi literature that shows the prevalence rate (PR) of BP among textile workers, this study was conducted.

MATERIAL AND METHODS :

There were 1665 workers in a governmental textile industries in Mousal City during the period of the study (Aug.-Sept. 1991). Only 1122 workers responded (67.4%) to the

study. A questionnaire was adopted to get general and specific information required for the study. Each worker was interviewed in private; weight and height measurement were done for all. The scale of weight was standardized by 5 kg., while a standard scale of height was made and the workers were measured without shoes. BP was considered positive only if the workers confirmed that the diagnosis was made through clinical and radiological examination and was treated by medication.

RESULTS :

Out of 1122 workers studied, 195 workers reported BP giving PR 16.5%. The mean age of workers was 37 ± 11 years and for those with BP was 43 ± 13 years. The RP of BP increased with age and as the years of employment increased (Table 1). The study also showed that the highest PR of BP was among the over weight group and among those working in the storage department (Table 1). No significant differences in the

Table 1. Prevalence rate (PR) of backpain (BP) among workers in Mousal textile industry by different variables.

	Male			Female			Total PR of
Variables	Total	BP		Total	BP		BP
		No	PR		No	PR	
Age (years)							
- 19	254	8	3.1	61	3	4.9	3.5
30 - 39	282	39	13.8	37	7	18.3	14.4
40 - 49	352	86	24.4	19	7	36.1	25.1
50+	112	33	29.4	5	2	40.0	29.9
Total	1000	166	16.0	122	19	15.6	16.5
Service (years)							
- 5	291	13	4.4	32	1	3.1	4.3
5 - 9	61	14	22.9	39	5	12.8	19.0
10 - 14	85	10	11.7	35	5	14.5	12.5
15+	563	129	23.2	16	8	50.0	23.7
Weight (wt)							
Under wt.	442	70	16.0	49	7	14.3	15.7
Normal wt	504	80	15.6	63	8	12.5	15.5
Over wt	54	16	28.8	10	4	40.0	31.3
Department							
Administration	39	4	10.2	21	5	23.7	15.0
Textile	420	57	13.5	38	6	15.8	13.8
Control	36	5	13.9	26	5	19.2	16.1
Spinning	202	29	14.3	14	1	7.1	13.9
Complement	107	22	20.5	16	1	6.2	18.7
Engineering	175	43	24.3	5	0		
Storage	21	6	28.5	2			

PR of BP found between male and female workers. Concerning the site of pain, the study showed that the highest percentage (75.7%) represented those who had low backpain, while the lowest percentage (8.1%) was among workers who had upper pain.

DISCUSSION :

Among 1122 workers in Mousal textile industries, the PR of BP was 16.5%. No significant difference was found between males and females workers ($p > 0.05$). The PR of BP increased as age progressed for both males and females which could be related to ageing process and work activities. This result was similar to the studies of Leigh (8) and Faiza (9), but not to the studies of Daniel (10) and Gibson (11). Also the PR of BP increase as the years of employment increased. This may be due to age progression and the tasks that the Job involves; these results are similar to those reported by Faiza (9). The study shows that the highest PR of BP is among over weight group (male 28.8% and female 40.0%). This may be due to the fact that obese workers have lesser muscle strength and so are more prone to BP. The results of weight in this study is consistent with those reported by Leigh (8), Sheeiz (12) and Faiza (9). The study reveals that the highest PR of BP (male 28.5% and female 50%) was among those who work in storage department, while the lowest PR of BP of male (19.2%) was among those who work in administration department and female (zero %) among those who work in engineering department. This may be due to the nature of activities in these departments,

which included lifting weight, bending and manning as the most frequent activities in storage department. This explanation is accepted by Klein (12). Lower backpain was more frequent (75.7%) than upper backpain (8.1%) which could be due to the nature of their Jobs or incorrect procedure of lifting or design of the job. These results of site of BP is consistent with Faizas (9) study while Rossigonal (13) found that lumbar pain was ten times as frequent as cervical pain.

In conclusion, there is an association between the BP and the contributory factors as age, years of employment, type of Job and over weight. So we recommend to train the workers to do the job correctly, an advise for the necessity of periodic medical examination to ensure fitness of workers to their Job.

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