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# PREVALENCE OF SHOULDER PAIN IN CASHERS WITHIN INCREASING AGE

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**ABSTRACT** **Background:** Shoulder pain is a very prevalent musculoskeletal disorder. Age related changes was considered the risk factors. Various other risk factors of shoulder pain like obesity, and diabetes have been considered in literature. Smoking and Diabetes has also been considered as an important risk factor. The purpose of the present study was to find out the Prevalence of shoulder pain in cashers within increasing age groups. **Methodology:** A cross-sectional study design was adopted for the study. A questionnaire in local language was designed to obtain information from subjects between 30-70 years of age. Information regarding current pain, hand dominance, smoking and occupation of subjects was recorded. History of diabetes was also obtained. **Results:** Out of 100 subjects who participated in the study reported shoulder pain. The prevalence is higher in middle age between 36 to 59 years old men. The types of pain experienced by the subjects were dull aching pain (32%), which is maximum in the groups. The intensity of pain experienced by the subjects was moderate (34%) which is maximum in the groups. The subject's duration of pain was indicated as follows: few hours (30%), which is maximum in the groups. **Conclusion:** The prevalence of shoulder pain is association with shoulder pain was seen with age. The shoulder pain is significantly associated with smoking, obesity, and diabetes.

**KEYWORDS :** Shoulder pain, Diabetes, Smoking, obesity

## INTRODUCTION:

Shoulder pain is a common clinical symptom and a notable cause of work disability and health care costs[1]. In general populations, the prevalence of shoulder pain during the preceding 30 days ranges between 18% and 31%[2]. Shoulder structures are liable to traumas in accidental injuries such as falls. Moreover, the rotator cuff tendons undergo degenerative changes with age, predisposing to tendinosis and associated conditions. Shoulder pain may also reflect shoulder joint disorders such as adhesive capsulitis, synovitis, glenohumeral instability[3], as well as, particularly in aging people, acromioclavicular and glenohumeral osteoarthritis.

Shoulder pain may be caused or aggravated by a range of environmental and individual factors. Physical load factors at work have shown an association with both shoulder pain and disorders[4-6]. A few studies suggest a link between shoulder disorders and metabolic factors, such as obesity[7,8] and diabetes mellitus[8]. Previous studies, however, included mostly selected populations and limited information about metabolic factors. Moreover, inconsistent findings have been reported regarding the role of smoking and physical exercise[8]. The metabolic syndrome, an increasing health problem in industrialised countries, involves central obesity and insulin resistance, and increases the risk of cardiovascular disease[9]. Previous studies have also shown an association between CRP and upper extremity osteoarthritis[10,11]. However, we are not aware of studies on the relations of CRP, the metabolic syndrome, and carotid IMT with shoulder pain and rotator cuff tendinitis. We hypothesised that lifestyle factors, metabolic factors and carotid IMT are associated with shoulder pain and rotator cuff tendinitis.

After adjustment for age, education and occupational physical load factors, current smoking was associated with unilateral shoulder pain in men. Currently smoking men who had smoked for more than 20 pack-years were at highest risk of unilateral shoulder pain. Physical activity was not significantly associated with shoulder pain in either gender. Shoulder pain was associated with body mass index, waist circumference and waist-to-hip ratio in both women and men. The association between waist circumference and shoulder pain did not change after further adjustment for height. The associations were stronger for unilateral shoulder pain in men and for bilateral shoulder pain in women. Metabolic syndrome and type 2 diabetes mellitus were associated with unilateral shoulder pain in men. High CRP was associated with bilateral shoulder pain in women. Alcohol consumption was not related to shoulder joint pain in either gender. To test this hypothesis, we carried out a cross-sectional health survey in the prevalence of shoulder pain in cashers within increasing age.

## AIMS:

To assess Prevalence of shoulder pain in cashers within increasing age groups

## Objective:

· To determine the predictiveness of personal factors for the onset of shoulder pain in cashers within increasing age groups.
· To determine the predictiveness of occupational factors for the onset of shoulder pain in cashers within increasing age groups.

## Methodology:

This cross-sectional study was conducted in the urban area. The age denominated sample domains between — 20 to 35 years-old men; 36 to 59 years-old men; and 60-year-old and older men — were first defined with a minimum number of individuals per sample. Therefore, the sample size for each group was at least 50 individuals (50 only bankers and 50 non bankers) totally 100 participants.

The variable “shoulder pain” was assessed using the Nordic questionnaire. Shoulder pain was defined as a pain located at a restricted area in or around the shoulder complex. In the interview, individuals were asked: “Have you had any pain or discomfort in the shoulder area in the past year?”. Individual factors included age, marital status, education, and income. Smokers were those who reported smoking daily (at least one cigarette per day) or occasionally (less than one cigarette per day) or former smokers who had stopped smoking for at least six months prior to the interview. Morbidities and health problems were assessed by self-report of the presence in the last 12 months. The level of physical activity was verified by the International Physical Activity Questionnaire (IPAQ).

## RESULTS:

**Table types of pain, intensity of pain, duration of pain among cashers**

| Types of pain | Intensity of pain | Duration of pain |
|---|---|---|
| Mostly discomfort (19%) | Moderate (34%) | Few hours (30%) |
| Dull aching pain (32%) | Low (26%) | Few days (28%) |
| Spasms (19%) | Uncomfortable (17%) | Few days (28%) |
| Sharp pain (19%) | High (19%) and | Unpredictable (25%) |
| Swelling (11%). | Severe (4%) | Continuous (17%) |

Out of 100 subjects who participated in the study reported shoulder pain.

The types of pain experienced by the subjects were mostly discomfort (19%), dull aching pain (32%), spasms (19%), sharp pain (19%) and swelling (11%).

The intensity of pain experienced by the subjects was moderate (34%), low (26%), uncomfortable (17%), high (19%) and severe (4%).

The subjects' duration of pain was indicated as follows: few hours

(30%), few days (28%), unpredictable (25%) and continuous (17%).

## DISCUSSION:

In the present 100 subjects who participated in the study reported maximum shoulder pain between age group of 36 to 59 years old men. A questionnaire in local language was designed to obtain information from subjects between 30-70 years of age. Information on sociodemographic factors, lifestyle factors and work-related physical load factors was obtained with interviews. Information regarding current pain, hand dominance, smoking and occupation of subjects was recorded. History of diabetes was also obtained. The subjects in complained of Shoulder Pain slightly more frequently at the 36-59 years, a large proportion of whom were supermarket cashiers. Most of their reasons for leaving the job were related to health problems, it is possible that workers who find their job strenuous look for another job or stop working.

The types of pain experienced by the subjects were mostly discomfort (19%), dull aching pain (32%), spasms (19%), sharp pain (19%) and swelling (11%). The annual prevalence of shoulder trouble (ache, pain, discomfort) was 41% in a group of workers highly exposed to pushing and pulling tasks.[12]

The intensity of pain experienced by the subjects was moderate (34%), low (26%), uncomfortable (17%), high (19%) and severe (4%). For mild or severe shoulder pain (eight days or more) the annual prevalence among Finnish forestry workers was 26%, and the annual incidence 14%.[13.]

The subjects' duration of pain was indicated as follows: few hours (30%), few days (28%), unpredictable (25%) and continuous (17%). Prevalence (presence of symptoms, irrespective of duration, in the last 12 months) reached 69% in a group of sewing machine operators, with annual incidence about 34%.[14] The prevalence of pain and discomfort within the past 12 months was also very high (61%) in a group of slaughterhouse workers in Denmark.[15]

One reason is that a risk factor may have specific effects on the duration of the disease, and these may affect the relation between incidence and prevalence. If it is the case for age (which is plausible) it might explain that age is associated here with prevalence at baseline, but not with incidence. In our study, incidence was not higher among workers with a long job duration, but it was particularly high among men on the job only a short time. Similar results have been observed for prevalence in the fish processing industry.[16]

Shoulder Joint Pain in univariable analyses education, BMI, waist circumference, waist-to-hip ratio, metabolic syndrome, diabetes and physical load factors were associated with shoulder joint pain in men, while smoking were associated only in men.

## Limitation:

The limitation of the present study is its cross-sectional nature. Both gender should be assess with age groups.

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