

Comparison of cervicogenic headache between housewives and working women

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Objective: To find the frequency of cervicogenic headache in working women and housewives and to find any difference in both groups.

Methodology: This comparative cross sectional study was carried out in six month time in Lahore, Pakistan. Females of age 25-35 were included in study. Exclusion criteria were any neck surgery, tumor, previous trauma/accident and any systemic illness. We interviewed 455 women selected by Non-random, purposive sampling.

Results: The frequency of cervicogenic

headache was higher in working women in relation to housewives. Out of 354 housewives, 115(32.4%) had cervicogenic headache and out of 101 working women, 43(42.5%) had cervicogenic headache. Posture had a large part in the origin of this headache.

Conclusion: The frequency of cervicogenic headache in working women was higher than housewives. (Rawal Med J 202;45:77-79).

Keywords: Headache, cervicogenic headache, pain.

INTRODUCTION

Headache which comes as a result of any neck problem or pathology of cervical area is termed cervicogenic headache. Cervical region is a part of spine located right near the base of the skull. Pain starts from the neck region and moves towards upper parts which includes oculofrontal and temporal areas. Cervicogenic headache can increase by movement of neck. Applying overpressure on the same side of upper part of the neck or same side cervical area can prove as a trigger which can increase headache.¹

This headache is a type of pain in which symptoms arises in the soft tissues of cervical spine or cervical vertebrae which moves towards head. It is a type of referred pain from the cervical area.² The prevalence of this type of pain is different in relation with the population in which it is observed. Different types of diagnostic criteria can give different results. A study showed that the frequency of this type of headache was 2.5% in general population.³

Patients having such pain had shown decline in the quality of their life, and cervicogenic headache showed the maximum decline in physical capacities as compared to other headache groups.⁴ Another study from Norway, in which 1838 people were interviewed, prevalence of this type of headache

came out as 4.1%.⁵ Other studies showed that women had more neck pain than men.^{6,7}

A Pilot study compared posture, strength, mobility among patients with severe headaches to asymptomatic patients.⁸ A study showed that the prevalence of neck headache or cervical headache in a sample collected randomly was 17.8%.⁹ The diagnostic criteria includes headache starting unilaterally, posteriorly emerging, slowly moving to the frontal area and pain occurring in arm starting from neck, a feeling of discomfort is also common.¹⁰ Previously many researches had been conducted about cervicogenic headache all over the world but there were a few researches conducted in Pakistan. The rationale of this study was to find the reason and cause of this type of headache so that better care could be provided to the patients.

METHODOLOGY

In this study, working women were included from teaching hospitals and offices. For housewives, three housing societies of Lahore were included and data were collected from these. The study was conducted for 6 months. A total of 455 women were enrolled. Out of these, 354 women were housewives and 101 were working women. Females of age 25-

35 were included in study. Exclusion criteria were any neck surgery, tumor, previous trauma/accident and any systemic illness. Purposive sampling technique was used.

All women were requested to fill the questionnaire. An Informed consent forms were signed by all participants. Ethical issues were considered and maintained throughout the study. Participants did not get any harm and their privacy was protected. SPSS version 19 was used for data entry and data analysis. Frequencies of cervicogenic headache in both groups of women were determined.

RESULTS

Out of 455 subjects, 101 were working women whereas 354 were house wives. Frequency of cervicogenic headache in housewives is 32.4%. Frequency of cervicogenic headache in working women is 42.5% (Table 1). There was statistically significant association between status of work and cervicogenic headache.

Table 1. Comparison of cervicogenic headache in working women and housewives.

Cervicogenic headache Present		Group		Total	p-value
		Working women	House wives		
Yes	Count	43	115	158	0.040
	%age	42.6%	32.5%	34.7%	
No	Count	58	239	297	
	%age	57.4%	52.5%	65.3%	
Total	Count	101	354	455	
	%age	100%	100%	100%	

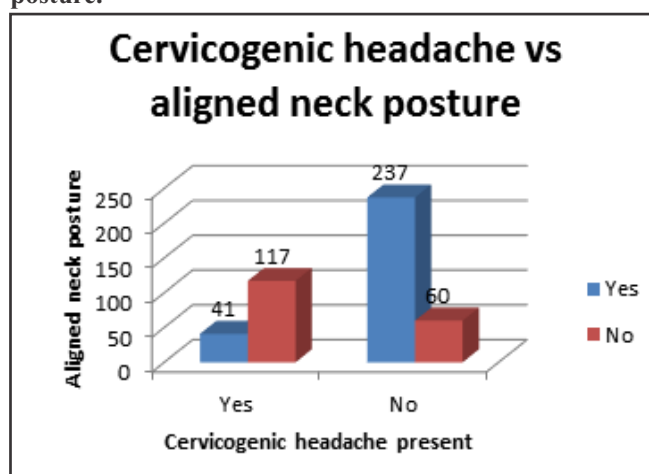
Table 2. Cervicogenic headache and age.

Cervicogenic headache Present		Age				Total	p-value
		25-27 years	28-30 years	31-33 years	34-35 years		
Yes	Count	35	45	42	36	158	<0.001
	%age	59.3%	41.3%	26.9%	27.5%	34.7%	
No	Count	24	64	114	95	297	
	%age	40.7%	58.7%	73.1%	72.5%	65.3%	
Total	Count	59	109	156	131	455	
	%age	100%	100%	100%	100%	100%	

Table 3. Cervicogenic headache and posture during work.

Cervicogenic headache Present		Posture during work			Total
		Mostly sitting	Mostly standing	Sitting + standing	
Yes	Count	21	46	91	158
	%age	29.6%	60.5%	29.5%	34.7%
No	Count	50	30	217	297
	%age	70.4%	39.5%	70.5%	65.3%
Total	Count	71	76	308	455
	%age	100%	100%	100%	100%

Fig. Cervicogenic headache and neck aligned in ideal posture.



The headache was more frequent in 28-30 age group and there is statistically significant association between age group and headache ($p < 0.001$) (Table 2). There was an association between posture and neck pain ($p < 0.001$) (Table 3). There was strong association between cervicogenic headache and neck aligned in ideal posture during work ($p < 0.001$) (Figure).

DISCUSSION

In this study, 455 women were interviewed in 6 months in age group 25-35. The required criteria for the confirmation of diagnosis of this headache were kept in mind and participants were screened according to those criteria. Some factors which were thought of being the aggravating and exacerbating like posture and body alignment were also checked. Our study revealed that the rate of cervicogenic headache was high in working women in

comparison with housewives. Ideal neck posture was very important. Participants who did not take care of posture during work were more prone to have cervical issues.

Cervicogenic headache was more frequent in 28-30 age and there was statistically significant association of age group and neck pain. There was an association between posture and cervicogenic headache. There was strong association between cervicogenic headache and aligned ideal posture of neck during work. Women who work with aligned neck in ideal posture had low frequency and proportion of cervicogenic headache. Pain was more frequent in participants working in hectic working environment. There was statistically significant association between cervicogenic headache and working environment

CONCLUSION

The proportion of cervicogenic headache in working women was higher than housewives. Women who work with aligned neck in ideal posture had low frequency and proportion of cervicogenic headache. Pain was more frequent in participants working in hectic working environment.

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