

OCCUPATIONAL HEALTH PROBLEMS OF HAIRDRESSERS OF TEHRAN

Nassiri, P., Golbabai, F. and Mahmoudi, M.

Department of Occupational Health, School of Public Health, Tehran University of Medical Sciences

Abstract — A randomized cross sectional epidemiologic study about the occupational health problems of hairdressers was conducted in Tehran in 1988. The sample selected for survey consisted of 200 women and 398 men. Study findings indicated that the working hours were often irregular and overtime. Evaluation of working conditions showed that the female hairdressers were more exposed to noise than male. The prevalence of the varicose veins and osteoarthritis are higher than the skin and respiratory diseases.

Acta Medica Iranica 34 (1 & 2): 14-16; 1996

Key words: hairdressers, Health problems.

INTRODUCTION

The population at risk for occupationally associated diseases in hairdressers is acutally high. Although the work in this profession is considered light, it impose a significant static load since the worker must remain in a more or less fixed position for long periods. This may favour the development of varicose veins. Hairdressers usually work in a standing position in working environments which vary considerably for their size, layout, microclimate, lighting, noise and conditions of hygiene. The hours of work are often irregular and overtime, which may result in nervous fatigue (1).

The occupational diseases reported in this profession are skin diseases, respiratory disorders, gynecologic problems, osteoarthritis and varicose veins. (2-12) This study was undertaken in order to investigate the above mentioned problems in the hairdressers working in Tehran.

MATERIALS AND METHODS

The subjects consisted of 200 women and 398 men who were selected randomly among workers working in different parts of Tehran in 1988. A pre- tested questionnaire was used included questions about individual characteristics, work schedule, current medical symptoms, etc. The questionnaire was administrated by the authors after a literature review (7,12) and also in consultation with a physician. Although the subject didn't get used to such investigations, the majority of the workers especially the male responded to the questionnaire and participated in the study with

benevolence. On the other hand some of the women refused to cooperate and they were replaced by others who satisfied our criterium.

RESULTS

The geographic distribution of hairdressers in Tehran is shown in Table 1.

The mean age is 35.11 ± 9.7 years for women and 39.35 ± 11.46 years for men. The mean and standard deviation of job history is 11.97 ± 8.45 years for female hairdressers and 23.72 ± 16.15 years for male hairdressers. 43.83% of female have a job history of 10 to 15 years, while 92.78% of male have a job history of more than 25 years.

Table 2. Summarizes the level of education of hairdressers. The women working in this profession are totally more educated than the men.

Working Conditions and the Hygienic Problems

Noise is considered as a physical factor measured in the workplace. The sound pressure level is higher where the female hairdressers work. Since the exposure is generally intermittent, there is not any risk of auditory effect but it has a subjective effect. Sixteen percent of the salons have not any system of ventilation. Illumination of the salons seems to be sufficient in 90 percent of the cases.

percentage distribution of occupational disorders of male and female hairdressers are shown in table 3.

Skin diseases were studied. 22.24% of the studied group had different types of skin disorders. The osteoarthritic disorders and the varicose veins have been investigated. The prevalence of foot and legs aches are very high among the studied group, and 55.6% of the hairdressers have been affected by these disorders. Table 3 shows that 83 workers (13.87%) reported only respiratory disorders. The accidents ascribed to the occupation were burn, electric shock and fire. In this respect burns were reported more frequently than the other cases with a frequency of 31.51% among female and 48.48% among male hairdressers.

DISCUSSION

The aim of this study was to evaluate the occupational health problems related to the profession of hairdressers in Tehran. The surveyed group consisted of 598 workers of which 200 were women and 398 were men. It was found out that the female hairdressers mostly work in the west of Tehran (32%) while the majority of the male hairdressers are employed in the south (41.95%). The workplaces of the women are larger than the salons where the men work, and study showed that 97.14% of the male hairdressers work in very small rooms. The period of working in this profession is longer among the men with 92.78% of the male hairdressers having more than 25 years of experience and 45.83% of the female have only 10 to 15 years of working experience.

Shift work is not common in this profession. The hours of work are often irregular and overtime. 3.5% of the women and 2.76% of the men work six days per week and 12 hours a day. It may be due to financial problems. The hairdressers have rarely university education and the great percentage of them have finished primary school. That is why the hygienic principles are not totally considered in the workplace. The female hairdressers are more exposed to noise than the male, representing 29.23% vs 8.77%.

Although the literature review indicates the high prevalence of skin disorders, (1,2,8) the study points out

that the frequency of painful osteoarthritis is very high. 133 workers suffered from dermatitis, 213 workers suffer from varicose veins and 517 had osteoarthritic disorders. Among the work related disorders, the respiratory troubles were rarely encountered. The psychologic disorders are also surveyed. The results indicate that depression and nervous fatigue among women were more frequent than the men.

Table 1. Geographic Distribution of Hairdressers in Tehran

	Female		Male		Total	
	n	%	n	%	n	%
North	25	12.5	35	8.79	60	10.03
South	53	26.5	167	41.95	220	36.78
East	58	29	74	18.59	132	22.07
West	64	32	122	30.65	186	31.10
Total	200	100	398	100	596	100

Table 2. Education Level Distribution of Hairdressers

	Female		Male		Total	
	n	%	n	%	n	%
Illiterate	1	0.50	75	18.84	76	12.70
Primary	65	32.50	183	45.97	248	41.47
Secondary:						
1st Cycle	46	23.00	70	17.58	116	19.40
2nd Cycle	86	43.00	69	17.37	155	25.92
University	2	1.00	1	0.02	3	0.5
Total	200	100	400	100	598	100

Table 3. Distribution of Occupational Disorders of Hairdressers

	Female		Male		Total		P
	n	%	n	%	n	%	
Skin	65	32.50	68	17.09	133	22.24	<0.05
Respiratory	28	14.00	55	13.82	83	13.88	NS
Osteoarthritis							
Lumbago	69	34.50	115	28.89	184	30.77	NS
Foot ache	105	52.50	228	57.29	333	55.69	NS
Veinosis	45	22.50	168	42.21	213	35.62	<0.05

REFERENCES

1. Lob M., Hairdressers, in Encyclopedia of Occupational Health and Safety, Third Edition, International Labour Organization, Vol.1, 989-991, 1983.
2. Adams R.M. Occupational Skin Disease. New York: Grune and Stratton Inc., 400-401, 1983.
3. Auirre A, Manzano D, Zababa R, Raton JA, Diaz Perez JL., Contact Allergy to Captan in a Hairdressers, Contact - Dermatitis, 31 (1): 46, 1994.
4. Blatter, BMI Zielhuis GA., Menstrual Disorders Due to Chemical Exposure Among hairdressers, Occup. Med. Oxf. 43 (2), 105-6; 1993.
5. Boffetta P., Andersen A., Lyng E., Barlow L., Pukkala E., Employment as hairdresser and Risk of ovarian Cancer and Hodgkin's Lymphomas Among Women, J. Occup. Med. 36: (1) 61-5; 1994.
6. Herrington L.J., Weiss NS., Koepsell TD., Daling JR., Taylor JW., Lyon JL., Swanson GM., Greenberg RS., Exposure to Hair Coloring Products and The Risk of Multiple Myeloma, A.J. Public Health. 84 (7): 1142-4; 1994.

Health problems of hairdressers

7. Kersemaeker WM, Roeleveld N, Zielhuis GA. Reproductive Disorders Due to Chemical Exposure Among Hairdressers. *Scand. J. Work, Environ. Health*. 21 (5): 325-34; 1995.
8. Larche Mochel M, Diagon J, Parant Ch, Daviaud M, Lazarini H.J. La Profession de Coiffeur. *Archives des Maladies Professionnelle Medecine du Travail et de Securite Sociale*, Masson, 49: 345-346, 1988.
9. Parra FM, Igea JM, Quire S, Ferrando Mc, martin JA, Losada E. occupational Astham in a Hairdresser Caused Persuiphate Salts *Allergy*. 47 (6): 565-60; 1992.
10. Schwaiblamir M, Bawe X, Fruhmann G. Bronchial Asthma in a Hair-dresser Caused by Hair Bleach. *Dtsch. Med. Wochenscher*. 18:695-7; 1990.
11. Dermatitis in Hairdressers. I. Contact Dermatitis. 39: (4): 217-21. 1994.