An Epidemiological Study of Hand Eczema

VI. A Follow-up of Hairdresser Trainees, with the Focus on Various Health Complaints

JAN-ØIVIND HOLM

Department of Dermatology, Ullevaal Hospital, University of Oslo, Norway

The aim of this follow up study was to show how career dropouts among young hairdressers are related to various health complaints. Questionnaires were sent to 286 hairdressers, who had been registered as trainces three to five years earlier. The forms were returned from 124 hairdressers, of whom 26 (21%) reported that they stopped working as hairdressers because of various health complaints. Eight (6.5%) left their job because of skin conditions. *Key words: contact dermatitis; epidemiology.*

Acta Derm Venereol (Stockh) 1994; Suppl. 187: 26--27.

J.-Ø. Holm, Department of Dermatology, Ullevaal Hospital, University of Oslo, N-0407 Oslo, Norway.

Dermatitis is one of the main occupational diseases in industrialized countries, and constitutes between 20 to 70 per cent of all registered work-related diseases (1). About 90% of the workrelated eczemas are localized to the hands, and hand dermatitis often carries a bad prognosis with permanent disability (2).

Several surveys confirm that most hairdressers sooner or later develop skin complaints. In one study (3) about 55% of young hairdressers had skin affection. In a recent study (4) of 246 trainees, 67 (27%) reported eczematous disease of the hands and/or forearms during apprenticeship. Of these, 40 had skin affection in the first year. One study (5) showed that 25% of the trainees abandoned their career; but, how many of these stopped because of skin complaints was uncertain.

The present investigation was undertaken in order to show the extent of career drop-outs among young hairdressers, and to what extent skin problems are reported as a cause of such drop-outs, compared to other health complaints.

MATERIAL AND METHODS

Study population-haidresser trainees

There are two schools situated in Oslo for training hairdressing apprentices, comprising 286 trainees. These comprised the basis for an investigative study (4) in 1988 and to a lesser extent in 1990. The mean age of the study sample at that time was 18 years; 93% were women.

Follow up- hairdresser trainees

The population of 286 trainees, defined as a cohort, was followed up by this questionnaire survey.

A search for the participiants' addresses was made through The national register of residents in Norway.

Questionnaires

The questionnaires (Table I) were sent out in April 1993. In accordance with the Norwegian law of registration of persons, reminding non-respondents was attempted only once. This was done June 1993.

Non-responders

Of a non-respondent group of 157 trainees, 32 were sampled (Fig. 1). By phone-call, the subjects were asked if they had resigned their job or not, and whether the resignation was caused by health complaints.

RESULTS

Questionnaires

124 trainces out of 286 responded to the primary inquiry (43%). Forty-six of these (37%) had finished in their career. Twenty-six (21%) had given up because of health complaints, some of whom had several complaints (Fig. 1). Muskulo-skeletal disease was by far the most common cause of career drop-outs (16%), followed by headache and fatigue. Eight trainees (6.5%) stopped because of skin affection; three of whom had other health complaints.

Twenty hairdressers including five full time housewives stopped because of non-medical reasons. Five hairdressers reported loss of job satisfaction as a reason for dropping their career.

Non-responders

Thirty-two persons were sampled from 157 non-responders (Fig. 1). Twenty-two were reached by telephoning. Nine trainees (41%) had finished; three of them because of musculo-skeletal complaints (14%) and six for non-medical reasons.

DISCUSSION

On the basis of the present data a descriptive analysis of how young hairdressers manage their careers can be given. The weak point in this study is the low response rate, which is mainly due to the lack of permission to make additional reminders. The survey of non-responders nevertheless confirms the broad outlines of the findings.

The outstanding feature of the present study is the high

Table I. Questionnaire investigation. The formulation of questions

- a. Name
- b. Adress

c. Do you still work as hairdresser? 🗌 yes 🗌 no

If "no", have you finished because of complaints from

skin
nose/throat
airways
muscles

- 🗌 head (pain, fatigue)
- d. Have you finished because of other reasons? If so; describe these:

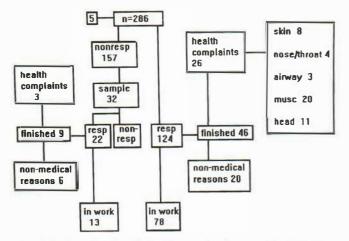


Fig. 1. Design of study with incidence of various health complaints.

incidence of musculo-skeletal complaints, compared with the few studies made on this topic (6,7). A Danish review (8) of health hazards during a ten-year period has four references on musculoskeletal problems, compared with 82 references for dermatology. It seems obvious that hairdressers have unsuitable work positions, based on a standing position with inappropriate rotations of the body.

The high incidence of headache and fatigue may reflect the heavy musculo-skeletal load in this work. There are no reported occurrences of central nervous system symptoms, related to work, among hairdressers (8).

Some complaints in our study were respiratory. Hairspray may disturb the tracheal and nasal mucociliar transport, thereby also affecting the lung function (9). The use of persulfates in hairdressing sevices is also reported as a health risk, both in precipitation of asthma, and cutaneous symptoms of eczema or urticaria (10,11).

REFERENCES

- Buxton PK. The British Occupational Hygiene Society Annual Conference 1986. Section II: Occupational Skin diseases. Pathological mechanisms of contact dermatitis. Extended abstracts of papers presented. Ann Occup Hyg 1987; 31: 95–96.
- 2. Menne T, Bachmann E. Permanent disability from skin diseases. Derm Beruf Umwelt 1979; 27: 37-42.
- Jarish R, Dechant E, Zajc J, et al. Toxische Kontaktdermatitis bei Friseurlehringen: Terapiestudie mit steroidfreien, pH-stabilisierten Salbengrundlagen. Wien Klin Wochenschr 1986: 98: 428–432.
- An epidemiological study of hand eczema. V. Prevalence among hairdresser trainees, compared with a general population of hairdressers. Acta Derm Venereol (Stockh) 1994; Suppl. 187: 23–25.
- Hornstein OP, Baurle G, Kienlein-Kletschka B. Prospektivstudie zur Bedeutung konstitutioneller parameter für die Ekzemgenese im Friseur-und Baugewerbe. Derm Beruf Umwelt 1985; 33: 43–49.
- Kumaki T, Kurosaki S, Yunoki H. An occupational health survey on beauticians in Japan. IV. Relationship of lumbago to body weight. The Journal of Nippon Medical School 1985; 52: 117–122.
- Heacock HJ, Rivers JK. Occupational Diseases of Hairdressers. Can J Public Health 1986; 77: 109–113.
- Dahl S. Helbredsrisici ved frisørarbejde. Copenhagen: Arbejdsmiljøfondet, 1990.
- Borum P, Holten A, Loekkegaard N. Depression of nasal mucociliary transport by an aerosol hair-spray. Scand J Respir Dis 1979; 60: 253–259.
- Fisher AA. The persulfates: A triple threat. Part I. Cutis 1985; 35: 520.
- 11. Fisher AA. The persulfates: A triple threat. Part II. Cutis 1985; 36: 25-27.