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# A study of occupational dermatitis in further education training hairdressing establishments in Scotland

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#### INTRODUCTION

EPIDERM and OPRA, to which dermatologists and occupational physicians report occupational skin disease, see an estimated annual average of 1835: 2213 cases respectively. Of these, contact dermatitis is the most frequently reported skin disease accounting for 80% of cases reported through each scheme. Hairdressing is the second highest risk occupation<sup>(1)</sup>.

Outwith the UK the picture is similar. In a New Zealand study<sup>(2)</sup> contact dermatitis accounts for two-thirds of all occupational skin disease, hairdressing being one of the principal industries affected. In the Netherlands the incidence of dermatitis in hairdressing is estimated between 10-20%<sup>(3)</sup>. The increased occurrence of contact dermatitis in apprentice hairdressers is recognised<sup>(4, 5, 6)</sup> associated with high risk procedures such as frequent wet working and chemical handling resulting in an estimated 14-20% of students dropping out of training in the first two years due to the condition<sup>(4,7,8)</sup>. Occupational dermatitis is an inflammatory reaction of the skin caused or made worse by exposure to allergens or irritants at work<sup>(1)</sup>. EPIDERM report skin contact with rubber, nickel, water, soaps, detergents, fragrances, cosmetics and chemicals as the main causative agents.

A limited awareness of legislative requirement under the Control of Substances Hazardous to Health Regulations 1994 (COSHH) was highlighted in a study of dermatitis in hairdressing salon employees in Yorkshire, determining the need for modules on COSHH and skin care to be incorporated into the hairdressing training syllabus<sup>(7)</sup>.

In October 1996, the Health and Safety Executive launched phase 2 of the "Good Health is Good Business" (GHGB) campaign focusing on occupational dermatitis as one of the key health risk topics.

This project was undertaken as part of phase 2 of the GHGB - Management of Health Risks Campaign targeted particularly at high risk industries.

#### **OBJECTIVES**

- 1 To determine the general health and safety content of hairdressing training courses in further education colleges.
- To establish awareness of employers' duties under COSHH and the management of health risks ie the preventative measures taken to avoid contact dermatitis.
- To ascertain the general understanding of student hairdressers re: health and safety matters within the salon.
- 4 To identify the prevalence of skin problems in hairdressing apprentices interviewed.

#### **METHOD**

Employment Nursing Advisers made visits to 20 further education colleges in Scotland currently running hairdressing courses.

They administered two structured questionnaires within each college hairdressing department.

#### Questionnaire 1 (Appendix 1)

Answered by one course senior lecturer or department health and safety representative.

#### Questionnaire 2 (Appendix 2)

Answered by ten apprentice hairdressers within each college. Students were selected at random from the end of their first year onwards. Colleges generally run SVQ level courses of one or two years duration with students attending on a full time/part time basis.

The total throughput in the hairdressing department of the 20 colleges visited in the 1996/97 college year was 1475 students.

The intended extension of this study to follow-up apprentices into future employment in hairdressing salons in conjunction with Local Authority Environmental Health Officers did not develop because of limited resource.

#### **RESULTS - QUESTIONNAIRE 1**

Twenty hairdressing training department staff were interviewed.

#### 1 HEALTH AND SAFETY CONTENT OF THE COURSE (CHART 1)

- All college hairdressing departments had an identified person responsible for health and safety. This role generally fell on the senior lecturer or designated member of staff given the title of 'Health and Safety Officer'.
- Ninety per cent of hairdressing departments had more than five employees and were therefore subject to the requirements of Regulation 3 of the Management of Health and Safety Regulations 1992 (MHSW) to carry out a suitable and sufficient written assessment of the health and safety risks to which employees are exposed at work.
- Seventy per cent had a written health and safety policy. Generally this was the college policy which did not address hazards and risks specific to the hairdressing department. In this respect policies were both unsuitable and insufficient. In the few departments with an acceptable health and safety policy this was reviewed 6-12 monthly.
- Sixty per cent of students were shown the policy and their understanding of it evaluated by written course assessment.

- All colleges informed students about accident reporting although two colleges did not keep an accident book. Six hairdressing departments failed to record accidents.
- Fifty-five per cent knew the principles of the Reporting of Injuries Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) but none had reported any or were aware of the requirement to report occupational dermatitis under the revised RIDDOR Regulations from April 1996.
- Eighty-five per cent monitored sickness absence and felt they would be aware of skin problems arising although students were not asked formally.

## 2 MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS 1992 (MHSW) (CHARTS 2 AND 3) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 1994 (COSHH)

- All but one respondent said they carried out risk assessments required under the above Regulations.
- Although 90-95% carried out risk assessments which included all hazardous chemicals/ products there was limited distinction between manufacturers' instruction sheets on product application and data information relating to substances hazardous to health. Shortfalls in trainers' knowledge and understanding of requirements under this legislation was evident. This has implications regarding training standards.
- Currently 75-80% of colleges give training to students followed by an evaluation on COSHH.
- Sixty per cent of colleges undertook health surveillance by regular questioning of students about skin problems and frequent skin inspections.
- With few exceptions major problems existed in obtaining COSHH information sheets from manufacturers and suppliers, often resulting in substances being used prior to the availability of the data. Ninety per cent claimed they had reviewed the information regularly.
- Only 30% of colleges had a written skin care policy.
- In 40-45% information was given informally within the salon related to careful hand drying and use of emollient/barrier creams. A further 15% said this included information on avoidance of skin contact with products and substances.
- In 4% of colleges there was uncertainty as to whether barrier creams were still in use.

## 3 PERSONAL PROTECTIVE EQUIPMENT AT WORK REGULATIONS 1992 (PPE) (CHART 4)

- The majority of colleges train and supervise students on the use of PPE, and provide some form of PPE considered suitable for the purpose.
- Generally this was supply of protective overalls/disposable aprons and gloves. In many cases, protective gloves were provided in the initial 'kit' supplied to new apprentices, to be replaced as required by the student thereafter.
- Few colleges provided eye or respiratory protection for use when mixing chemical hairdressing applications.
- Thirty-five per cent offered students after work moisturising creams and 60% pre-work barrier creams.

## 4 MEDICAL SUITABILITY OF STUDENTS FOR HAIRDRESSING WORK (CHART 5)

- Approximately 55% carry out pre-entry health screening via inquiry at interview or a
  general question about health status on the application form. Assessment of this
  information and decisions taken about medical suitability were generally assigned to
  head of section or senior lecturer in most colleges. In a minority this function is
  undertaken by the college guidance counsellor, safety officer and in one case the
  college nurse.
- Seventy-five to eighty per cent however stated that students were asked informally during the course about pre-existing skin, respiratory problems and allergies.
- Fewer than half asked about medication related to the above.

#### **RESULTS - QUESTIONNAIRE 2**

#### 1 HEALTH AND SAFETY CONTENT OF THE COURSE (CHART 6)

- Of the 200 students interviewed, 75% had sight but limited understanding of the health and safety policy. Forty per cent were unsure of where to locate it for consultation.
- However, 62% were able to identify the individual responsible for health and safety within the department.
- Approximately 70-80% said they knew of the existence of an accident reporting system within the college and how to use it.
- Knowledge of RIDDOR was scant with only 11.5% students able to state the full title of the regulations and their responsibilities for reporting under them.

#### 2 CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 1994 (COSHH) (CHART 7)

- Of the 200 students interviewed 67.5% claimed awareness of the practical precautions required to protect themselves based on a common sense approach rather than theoretical knowledge.
- Over half admitted limited or no knowledge of COSHH referring solely to the information on the manufacturers' instructions on product use for guidance.
- Twenty-eight per cent reported having health surveillance of their skin by a member of hairdressing department staff although these respondents were mostly those with pre-existing dermatitis.
- When asked about precautions taken to protect their skin over 90% gave avoiding skin contact mainly through the use of gloves as the main preventative measure.
- Approximately 60-75% reported thorough hand drying and the use of barrier and after work creams as additional measures.

## 3 PERSONAL PROTECTIVE EQUIPMENT AT WORK REGULATIONS 1992 (PPE) (CHART 8)

- Over 81% of apprentices stated they had received training in the use of PPE which focused mainly on wearing of protective gloves and apron.
- Seventy-four per cent had concerns about the provision of suitable gloves and had experienced problems related to durability, limited sizes provided and poor functional dexterity as a result of poor fit.
- Seventy-five per cent of students used after work moisturising creams on a regular basis.
- Most used barrier creams although many associated their main use being to protect the hairline of clients during procedures such as perming.

### 4 MEDICAL SUITABILITY OF STUDENTS FOR HAIRDRESSING WORK (CHART 9)

- Twenty per cent of students were identified with pre-existing skin problems and allergies indicating the need for pre-entry health screening by a 'competent' person to establish medical suitability for employment prior to acceptance.
- A total of 30% of students presented with significant skin symptoms and a further 3% with wheeze since starting the hairdressing course.

#### **DISCUSSION**

The results of this survey are consistent with previous studies<sup>(4,7)</sup> identifying clearly limited and often incorrect application of the relevant health and safety legislation which would have been likely to assist in radically reducing the prevalence of occupational dermatitis among apprentice hairdressers within Further Education (FE) hairdressing establishments. Of the 20 colleges visited four hairdressing departments had particularly good health and safety standards, however the study identified a general failure of colleges visited, to comply with current legislation applicable to the industry.

The adoption of the college health and safety policy as a blanket approach to health and safety throughout many departments resulted in a failure to carry out a suitable and sufficient assessment of hazards and risks pertaining to the individual department. In most colleges health and safety within the hairdressing department was delegated to the course leader or the senior lecturer assigned this role by management. Few had been given adequate information, instruction and training and therefore could not be considered 'competent' in these matters.

Limitations in knowledge of relevant health and safety legislation evident in the results of both questionnaire 1 and 2, particularly relating to RIDDOR, highlight clear deficits in standards and provision of training and consequently reflect in student long-term learning outcomes.

Similarly, limited understanding of COSHH was recognised, confusion existing between COSHH data information sheets and the manufacturers' information instructions for product use. Additionally there was a failure to reduce risk by substitution with a less harmful substance in 50% of hairdressing departments. The requirement of Regulation 5 of MHSW and Regulation 11 of COSHH to carry out routine health surveillance was met by 60% and a policy on skin care by 30%.

Apprentice hairdressers' responses to questions on health and safety within the salon were disappointing but not altogether surprising. Confusion existed between health and safety and general safety matters eg fire safety - much of which they were taught at an early stage of the course. Students who had skin-related symptoms had more awareness of COSHH but only 30% said that health surveillance of their skin had taken place during the course.

Ninety-seven per cent of trainees identified wearing of gloves as the main preventative measure against exposure to substances hazardous to the skin. This is of concern given the potential problems of irritant/allergic contact dermatitis associated with rubber<sup>(1)</sup>, starch dusting powders and latex allergy<sup>(9)</sup>. Many students raised concerns about size, quality and fit of PPE provided which had been addressed in some departments but not in most. In addition, many colleges were in breach of PPE Regulation 4 by supplying apprentices only with a 'starter kit' containing one or two pairs of gloves - thereafter individuals were expected to provide their own.

Of the 200 students interviewed 20% had pre-existing skin problems. Nineteen to twenty-three per cent had pre-existing respiratory problems, a history of allergy and were taking medication related to these conditions. A further 10% developed significant skin symptoms and 3% respiratory symptoms since commencing the course.

#### RECOMMENDATIONS

- There is a need to improve competency of training providers in hairdressing departments by increased provision of health and safety training in legislation relevant to the industry to allow health risks to be managed effectively.
- In an industry identified as high risk for contact dermatitis, pre-entry health screening procedures should be introduced and formalised to identify prospective apprentices with current or a history of skin/respiratory/allergy symptoms whose condition may be exacerbated by exposure to substances within the salon.
- A module on skin care should be introduced within the hairdressing training curriculum and a formal skin care policy implemented in all departments. The introduction of job rotation to reduce constant exposure of apprentices to high risk procedures such as wet work/shampooing should also be considered.
- The Workplace (Health, Safety and Welfare) Regulations 1992, Regulation 21 requires provision of sufficient facilities for washing and suitable means of drying the skin. The provision of facilities within hairdressing departments should be reviewed to eradicate current practice of hand drying with towels contaminated with hairdressing substances.
- The Personal Protective Equipment at Work Regulations 1992 require provision of protection suitable for the purpose. A variety of quality gloves in a selection of sizes should be provided for use in the salon. PPE should be provided on an on-going basis rather than the limited provision of gloves within the introductory 'kit' as happens at present in many colleges.
- Regulation 5 of MHSW and Regulation 11 of COSHH require the employer to ensure
  that employees exposed to substances hazardous to health are under suitable health
  surveillance in this case, in relation to the skin. Formalised health surveillance should
  be introduced in all hairdressing training departments and records kept and maintained
  as required under these Regulations.
- Currently, hair preparations are defined as cosmetic products within the meaning of Regulation 2(1) of the Cosmetic Products (Safety) Regulations 1989(d). These Regulations require the manufacturer, agent or supplier of the product to include in the cosmetic products' presentation correct labelling, instructions for use, disposal and any other information. Similarly, information must be supplied with substances or product under Section 6 of the Health and Safety at Work etc Act 1974 and Regulation 6 of COSHH. Hair preparations/cosmetics are also exempt from application of Regulation 3 of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP) However, the spirit of the CHIP legislation should be followed by manufacturers and suppliers who would otherwise be required to supply a product safety data sheet with 16 obligatory headings including hazards identification. If this were enforced hazards could be more readily identified.

A copy of this project report will be forwarded to the 20 colleges who participated in this study, the Hairdressers Training Board and the National Hairdressing Federation for information/comment and action.

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