



Skin Symptoms Among Bakery Workers: A Cross Sectional Survey



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Submission: 📅 May 02, 2018; Published: 📅 August 30, 2018

Abstract

Background: Occupational skin disease is common and bakery workers are at increased risk of hand dermatitis.

Aims: To explore the frequency of, and to identify risk factors for, skin symptoms in a small bakery.

Methods: A cross-sectional survey of workers in a small bakery in Srinagar, using a questionnaire regarding skin symptoms over the last 12 months.

Result: The overall response rate was 85% (40 women, 60 men). 60 percent of the workers reported one skin symptom.

Keywords: Bakery workers; Dermatitis; Occupational exposures

Introduction

Occupational skin disease is common [1]. UK Labour Force Survey estimates in 2007/2008 suggested that 16 000 people who had worked in the last 12 months had 'skin problems' caused or made worse by work [2]. Bakers and confectioners are at increased risk of hand dermatitis. A Swedish retrospective cohort study found that the relative risk of self-reported hand eczema for male bakers, as compared to population controls, was 3.5 (95% CI 2.8-4.5) and 2.8 (95% CI 2.2-3.6) for female bakers [3]. UK data from The Health and Occupation Reporting (THOR) network, based on reports to the EPIDERM surveillance scheme, suggest an estimated annual incidence of contact dermatitis among bakers and confectioners of 31.9 to 36/100 000 workers [4-6] and a previous UK survey found that 9% of bakers and flour mill workers had work-related skin symptoms [7]. The objective of the study was to identify the skin symptoms in bakers of third world as much of the work has been done in west.

Material and Methods

A cross sectional survey of the workers works in different bakeries was carried out. Complete clinical examination followed by dermatological examination was carried out. The data was collected as per predesigned proforma.

The One or more of the five symptoms were noted:

- A. 'Redness and swelling of your hands or fingers'
- B. 'Cracking of skin on hands or fingers'
- C. 'Small blisters/bubbles/vesicles on hands or fingers'
- D. 'Flaking or scaling of skin on hands or fingers', and
- E. 'Itching of hands or fingers, with cracks or splints in the skin'. The data was analyzed by descriptive statistics.

Result and Discussion

A total of 100 workers were analyzed of which at least 60 reported some dermatological symptom (Table 1). The main risk factors for occupational skin disease are prolonged wet work, work with irritants and atopy. Hand dermatitis among bakers can start early in training: one German cohort study⁸ found 29% of apprentice bakers suffered from hand dermatitis within 6 months of commencing training. Poor knowledge of skin care may contribute to hand dermatitis among bakers and so educational interventions may be of benefit in this occupational group [8].

Table 1.

Symptom	Frequency	Percentage
'redness and swelling of hands	32	32.00%
'cracking of skin on hands or fingers'	23	23.00%
'small blisters/bubbles/vesicles on hands or fingers'	19	19.00%
flaking or scaling of skin on hands or fingers', and	17	17.00%
itching of hands or fingers, with cracks or splints in the skin'	29	29.00%

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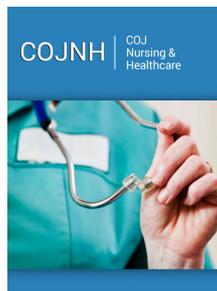
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