

# Romanian Questionnaire to Assess the Prevalence of Occupational Hand Eczema among Healthcare Providers

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## ABSTRACT

Occupational skin diseases have an unknown prevalence in Romania, although they are considered the most frequent occupational diseases reported in Western European countries. Self-reported hand eczema among healthcare providers by questionnaire aims to estimate the prevalence of work-related hand eczema and associated risk factors in hospitals and outpatient units in Romania. The aim of this study is to discuss and to validate a questionnaire for surveying work-related skin diseases and exposure among healthcare providers.

**Keywords:** hand eczema, healthcare professionals, questionnaire

Occupational skin diseases should be a priority for public health because they represent up to 30% of occupational diseases.<sup>1</sup> The recognition of occupational skin diseases is important for improving prevention and patient management, as their economic and social impact on each individual and the society is significant. Occupational hand eczema among healthcare providers has a great impact on their quality of life and, consequently, on their professional activity.

The purpose of this study is to develop a standardized questionnaire that can be used as a tool for self-reporting, diagnosing and monitoring the prevalence of hand dermatitis among healthcare providers in Romania.

QUESTIONNAIRE

Year of birth \_\_\_\_\_ Gender  M  F

Hospital  Outpatient Unit

Workplace Department \_\_\_\_\_

What is your current occupation? \_\_\_\_\_  
 What is your major activity at work? \_\_\_\_\_  
 When did you start it? \_\_\_\_\_

Nurse  Healthcare provider   
 Physician  Other

Do you have other medical problems?  
 No  Yes \_\_\_\_\_

Have you ever suffered from hand eczema?  
 Yes  No

Has it been diagnosed by a physician (general practitioner, dermatologist, allergologist)?  
 Yes  No

When did you last have eczema on your hands?  
 I have it currently  Within the past 3 months but not at present  
 Within the last 6 months  More than 12 months ago

Have you received medication for hand eczema?  
 No  I do not remember  
 Yes, in the past \_\_\_\_\_  
 Yes, I am currently under medication \_\_\_\_\_

Have you observed itchy rashes or other skin lesions at the workplace after contact with specific substances?  
 Yes  No  I do not know  
 Please mention the type and name of incriminated substances \_\_\_\_\_

Have you observed itchy rashes or other skin lesions during holidays/weekends?  
 Yes  Yes, sometimes  No  I do not know

Have skin problems affected your daily activities in your occupation?  
 No  Sometimes  Often  
 Yes  Rarely  I do not know

Did you ever have skin problems during childhood?  
 Yes  No  I do not know

Do you use protective gloves at work, in general?  
 No  Natural latex  Rubber latex  
 Polyethylene  Vinyl  Cotton  
 Nitrile  Neoprene  Others.....

Do you use protective gloves daily?  
 Yes  No

How often do you change your protective gloves? How many pairs do you use per working day?  
 \_\_\_\_\_

How many hours per week do you work in your main job (on average)?  
 \_\_\_\_\_

How many times do you wash your hands at work?  
 0-5 times  6-10 times  11-20 times  > 20 times

How long do you work in wet environment per day?  
 < 30 minutes  30 minutes – 2 hours  > 2 hours

Have you ever had symptoms of nasal allergy, asthma or other allergic problems (itchy wheals, pruritus)?  
 Yes  No Please mention \_\_\_\_\_

Were the allergies diagnosed by a specialist?  
 Yes  No Please give details \_\_\_\_\_

Has anyone in your family been diagnosed with an allergy?  
 No  I do not know  Yes \_\_\_\_\_

Do you smoke? For how long and how many cigarettes/ day?  
 No  Yes \_\_\_\_\_

Please describe what you see when you have hand eczema and grade the severity from 0 to 5

	Tip of the digits	Digits	Palms	Dorsal aspect of the hand	Wrist
Erythema					
Dissemination					
Papules					
Vesicles					
Edema					
Fissures					
Pruritus/Pain					

FIGURE 1. The proposed self-reported questionnaire

The questionnaire was compiled after a validated Italian work-related questionnaire, which was translated to Romanian, and its target group is represented by healthcare professionals from different medical fields. It is a type of self-report of hand eczema/dermatitis to estimate the prevalence of the disease in the target group. The questionnaire is simple, short (three pages), easy to understand and to complete, it requires “yes” or “no” answers to specific questions, it is anonymous and focused on the clinical aspects related to direct work exposure (Figure 1). Details regarding contact with work-related aggravating factors are also assessed: contact with chemical agents (detergents, disinfectants, soap, liquid soap, shampoo, and other personal hygiene products or skin cleansers), use of latex or other types of gloves (plastic, cotton, natural or synthetic rubber). Other relevant exposures, such as the frequency of hand washing, are also surveyed. The medical history of the surveyed employees is also relevant based on the atopic or allergic background of each individual, the presence of comorbidities, chronic treatments or other exposures such as UV radiation.<sup>2-4</sup>

Based on the results of the study, early dermatological interventions and specific education regarding personal skin protection can be initiated. Moreover, the study will enable the quantification of allergens and/or irritant agents and their confirmation by patch testing.

Screening for predisposing factors (especially atopic or genetic predisposition) can be evaluated, and in case of susceptible individuals career counseling and targeted prevention strategies can be provided.

The questionnaire allows the identification of subjects who are susceptible to develop occupational skin diseases,

the recognition of work-related risk factors, and it should represent the first step in the elaboration of preventive measures concerning specific occupations and risk profiles.

Underestimation of the prevalence of occupational hand eczema can be expected from self-reporting due to numerous factors: lack of understanding of all questions, fear to provide honest answers that can affect daily activity, unwillingness to acknowledge the existence of symptoms, lack of compliance or knowledge.

This is the first self-reported questionnaire in Romania that tries to estimate the prevalence of irritant and allergic contact dermatitis of the hands among employees in the specific sector of healthcare services.

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