

The prevalence of psoriasis among elderly individuals: more questions than answers

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Abstract

Knowledge of epidemiological data of psoriasis among elderly people is limited. Herein the prevalence of psoriasis among non-permanently hospitalized, elderly (70-89 year old) individuals was assessed by a face-to-face interview using a structured questionnaire adapted from an earlier telephone survey elsewhere. 450 individuals 70-89 years old consented to contribute. Psoriasis was found in 15/450 individuals [life-long prevalence: 3.33%; (95% confidence intervals: 1.99-5.47%)]; 1/450 individuals have ever required systemic treatment (0.2% [0.01-1.4%]). This prevalence is about ten times higher than corresponding results of the aforementioned telephone survey with the same questionnaire. In conclusion this study: i) Provides the first estimation of psoriasis prevalence in Greece, albeit focused in a particular age group and demonstrates a relatively high life-long prevalence, however with minimal morbidity among older people; ii) Underscores the need for studies to evaluate the impact of proxy effects (e.g. telephone information) in assessing skin morbidity of older probands.

Introduction

Skin diseases are a quite common health problem with a high need for treatment among adults worldwide.¹⁻⁴ Epidemiological studies of dermatological entities in elderly people are limited although the burden of skin related complaints and disorders increases significantly as a function of age to become a considerable source of disability for the oldest.⁴⁻⁹

Psoriasis, as a consequence of its chronicity and lack of definitive cure, is worldwide one of the most prevalent immune-mediated skin disease in adults.¹⁰⁻¹² The severity and course of psoriasis, a papulosquamous inflammatory disease with variable clinical morphology, depends on both genetic and environmental factors.¹³ Direct morbidity of psoriasis is moderate, however the disease negatively impacts

health-related quality of life in a substantial degree.¹³⁻¹⁵ Psoriasis is not curable, yet data on the burden of psoriasis in elderly people are scanty and controversial.¹¹ Herein we report the results of a survey on the prevalence of psoriasis in non-permanently hospitalized, elderly (70-89 year old) individuals.

Materials and Methods

The study was performed by the method of the face-to-face interview with a structured questionnaire in a KAPI unit located in Ioannina, an urban community in Greece. KAPI is an *Open Care Community Center for Older People* which in Greece represents a nationwide network of multidisciplinary centers, providing social and primary health services to older members of the local community, together with recreational and group activities on a volunteer basis.¹⁶ After permission from the Municipal Authorities and following oral consent all individuals, that personally contacted the KAPI medical service between March 01 and April 30, 2010 were interviewed for the presence (active disease) or personal history of psoriasis using a structured questionnaire adapted according to that used previously by Ferrándiz et al. in a telephone psoriasis survey in Spain.¹⁷ For the probands, main reasons for attending the medical service of KAPI were to renew prescriptions of routine medications and/or to carry out simple periodic examinations, like blood pressure measurements. The files of all contacted individuals were additionally reviewed for past prescriptions ascribed to the treatment of psoriasis. SPSS 17.0 (Chicago, IL, USA) was employed to calculate core demographic data and prevalence rates with 95% confidence intervals.

Results

A total of 628 individuals attended the medical service of KAPI during the survey period and were asked to participate to this study. From the 601 individuals (96%), who consented to participate, 450 (75%) aged between 70-89 years (mean/median age: 78/77 years respectively). Sixty-three percent (63%) of the probands were females, roughly reflecting gender composition of the Greek population at this age group. Psoriasis was identified in 15/450 individuals (prevalence: 3.33%; [95% confidence intervals (95% CI): 1.99-5.47%]; Table 1). Psoriasis tended to be more frequent among men. The life-long prevalence of psoriasis episodes requiring systemic treatment was quite low (1/450 individuals or about 0.2% [95% CI: 0.01-1.4%]): Only one patient, though

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presently in remission, reported recurrent moderate-to-severe disease flairs in the past that needed systemic treatment (PUVA, methotrexate and retinoids on different occasions). To the rest of the patients (14/15) psoriasis was adequately controlled throughout their lifetime with topical medications.

Discussion

This is the first study that appraises the prevalence of psoriasis in Greece, albeit focused in an age group with limited and nevertheless controversial reported prevalence data in the literature.^{10,11} To date, some surveys have measured the highest age-specific prevalence of psoriasis in older individuals,^{18,19} as expected for a chronic disease with onset throughout life and almost negligible disease-specific excess mortality.¹⁹ Yet other studies found leveling off or even drastically declining rates of psoriasis prevalence for individuals beyond the age of 70 years compared to younger age classes.^{17,21-25} Thus, in contrast to the relatively high prevalence measured herein, a nation-wide telephone survey in Spain applying essentially the same structured questionnaire recorded only 0.33% age-specific prevalence in persons >70 years old. This was only a quarter of the average psoriasis prevalence measured in the whole target population of this latter study or just one seventh of the highest prevalence rate that was found for age

Table 1. Prevalence of psoriasis among elderly (70-89 years old), non-permanently hospitalized individuals

Probands Gender	Individuals with psoriasis	Individuals without psoriasis	Total
Female	6	278 (2.11% [0.86-4.64])*	284
Male	9	157 (5.73% [2.90-10.68])	166
Total	15 (3.33% [1.99-5.47])	435	450

*Parentheses: Gender-specific and total prevalence of psoriasis in % [95% confidence intervals].

subpopulation 30-40 years old.¹⁷ Telephone surveys answered by proxies is a reliable and generally valuable source of information about health conditions of older probands.²⁶ However, the accuracy of information acquired by proxies – excluded herein by interviewing all probands – varies significantly according to the health area assessed by the telephone survey.^{27,28} This could at least partly explain the – despite divergent ground populations – unexpected high discrepancy between the estimations of psoriasis prevalence in the elderly found with the same questionnaire in the present face-to-face interview and the former telephone survey study.¹⁷ Furthermore, this observation underscores the difficulties in measuring skin-related morbidity of older probands by using proxies sources, and calls for research focusing on the evaluation of the quality of proxy informations in the area of geriatric dermatology.

Also a General Practice Research Database - based study from the United Kingdom,²¹ reports a moderately decreasing lifetime prevalence of psoriasis for individuals >70 years old. The authors attributed this finding either to an attenuating clinical burden of the disease with age leading to diagnostic gaps or to excess cumulative mortality of psoriatics. However, the recently reported constellation of decreasing discharge rates for psoriasis patients despite increasing admission numbers of patients with psoriasis history as a function of age,²⁹ in connection to the fact that no more than 5% of all psoriasis patients will present with disease-onset after the age of 70,³⁰ favors the former of the aforementioned explanations. A third explanation for a decreasing prevalence of psoriasis in cross-sectional studies as a function of age is that of increasing incidence of the disease as a function of calendar years. Actually a recent study demonstrated increasing age-specific prevalence rates of the disease in cohorts of younger generations.²⁰ Studies focusing on trends in the macro-epidemiological characteristics of psoriasis are required in order to resolve this question.

Finally, our present survey permits, to the best of our knowledge for the first time in the

literature, an approximate estimation of the prevalence of psoriasis in a Greek population. With only one exception,¹⁷ all relevant studies from other geographical regions, report age-specific prevalence rates of psoriasis in individuals >70 years old roughly equal^{18,21} to twice as high¹⁹ compared to the mean prevalence in the corresponding whole populations. Accordingly our current measurement for individuals 70-89 years old (3.3%) predicts a mean prevalence of psoriasis for the Greek population of about 1.5-3.0%, which is comparable to that reported from other European regions.¹⁰⁻¹²

The main limitations of the present study are the relatively small size of the survey population and the inclusion of elderly individuals with adequate general, mental and physical performance, thus excluding chronically ill, hospitalized persons. On the contrary, measuring the prevalence of skin disorders by the self-reporting questionnaire approach seems not to bias the results of this survey because studies applying this methodology lead to essentially the same estimates of prevalence of skin diseases in the population as studies applying the patients examination by a physician' approach.^{1,7} Morbidity related to the aged skin, including skin cancer, is an emerging health problem in the aging population of many societies. The aforementioned difficulties in attaining reliable data on skin morbidity of older people could be partly compensated with the report of small-scale, targeted epidemiological surveys, like the present one. With the present report the need for focused gerontological research in the controversial issue of psoriasis prevalence and burden in the elderly is emphasized.

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