



Investigation of dietary supplements prevalence as complementary therapy: Comparison between hospitalized psoriasis patients and non-psoriasis patients, correlation with disease severity and quality of life



Hadis Yousefzadeh^a, Mahmoud Mahmoudi^a, Mahnaz Banihashemi^b, Maryam Rastin^a, Farahzad Jabbari Azad^{c,*}

^a Immunology Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

^b Cutaneous Leishmaniasis Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

^c Allergy Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO

Keywords:

Psoriasis
Complementary medicine
Dietary supplements
Self-medication
Multivitamin

ABSTRACT

Objectives: Psoriasis patients are often displeased with traditional medical treatments and they may self-prescribe dietary supplements as an alternative or complementary treatments. We aimed to investigate the prevalence of self-medication of dietary supplements among psoriasis and non-psoriasis cases and its impact on disease severity and quality of life.

Design and setting: This case-control study evaluated 252 records of psoriasis patients and 245 non-psoriasis cases. Dietary supplementation over last 30 days and characteristics, including age, age at onset of disease, comorbidities, smoking and education were recorded. Psoriasis area and severity index (PASI) and dermatology quality of life index (DLQI) were calculated. P value less than 0.05 was considered as significant level.

Results: This study consisted 138 psoriasis (females; 54) and 138 non-psoriasis cases (females; 50), aged between 21 and 91 years. Among psoriasis patients, 72% reported using at least one of dietary supplements, which was different from non-psoriasis cases (25.36%, $P = 0.01$). Multivitamin/mineral supplements (MVM) were the most frequent used dietary supplements (26.81%) and the most common reasons for the consumption of these supplements were to maintain and improve health. The consumption of folic acid (21.73%), omega-3 fatty acids or fish oil (10.14%), herbs (12.31%) and vitamin E (1.44%) had the most frequencies after MVM. No significant differences in PASI and DLQI were found among patients with consumption of different supplements ($P > 0.05$). There was non-significant and negative correlation between education and use of supplements ($P = 0.21$, $r = -0.02$).

Conclusions: Self-medicating of MVM over last 30 days was prevalent among studied psoriasis patients. They took dietary supplements in order to improve and maintain their health.

1. Introduction

Psoriasis vulgaris is an immune-mediated inflammatory disease that has an important influence on patient's health-related quality of life (HRQoL).¹ The worldwide prevalence of chronic plaque psoriasis has been estimated at 0.1–3%.² Topical therapies as the first-line treatments and systemic therapies for psoriasis patients who do not respond to treatments or have extensive psoriasis are included.^{3,4} Today, despite the progress in psoriasis treatment, it is still expensive and access is limited. It resulted in approximately \$2 billion in health care costs in the United States.⁵ In addition to cost, the efficacy of the therapies and barriers to access are the reasons that most patients seek the

complementary treatments. Stern et al. reported that only 50% of psoriasis patients were highly satisfied with their current treatment and 25% were clearly unsatisfied and were exploring the other treatments.⁶ Recently the use of self-medication, which includes consumption of dietary supplements, has been increased. The United States Food and Drug Administration (FDA) defines a dietary supplement as “a product taken by mouth that contains a dietary ingredient intended to supplement the diet”.⁷ According to the categorization of supplements under foods and their marketing without prior FDA approval, the efficacy and safety of any given dietary supplement do not usually need to be shown proceeding to being market.⁸ The top reasons for using these supplements include improving or maximizing health and compensating for

* Corresponding author.

E-mail address: jabbarif@mums.ac.ir (F.J. Azad).

<http://dx.doi.org/10.1016/j.ctim.2017.06.005>

Received 5 October 2016; Received in revised form 4 February 2017; Accepted 20 June 2017

Available online 23 June 2017

0965-2299/© 2017 Elsevier Ltd. All rights reserved.

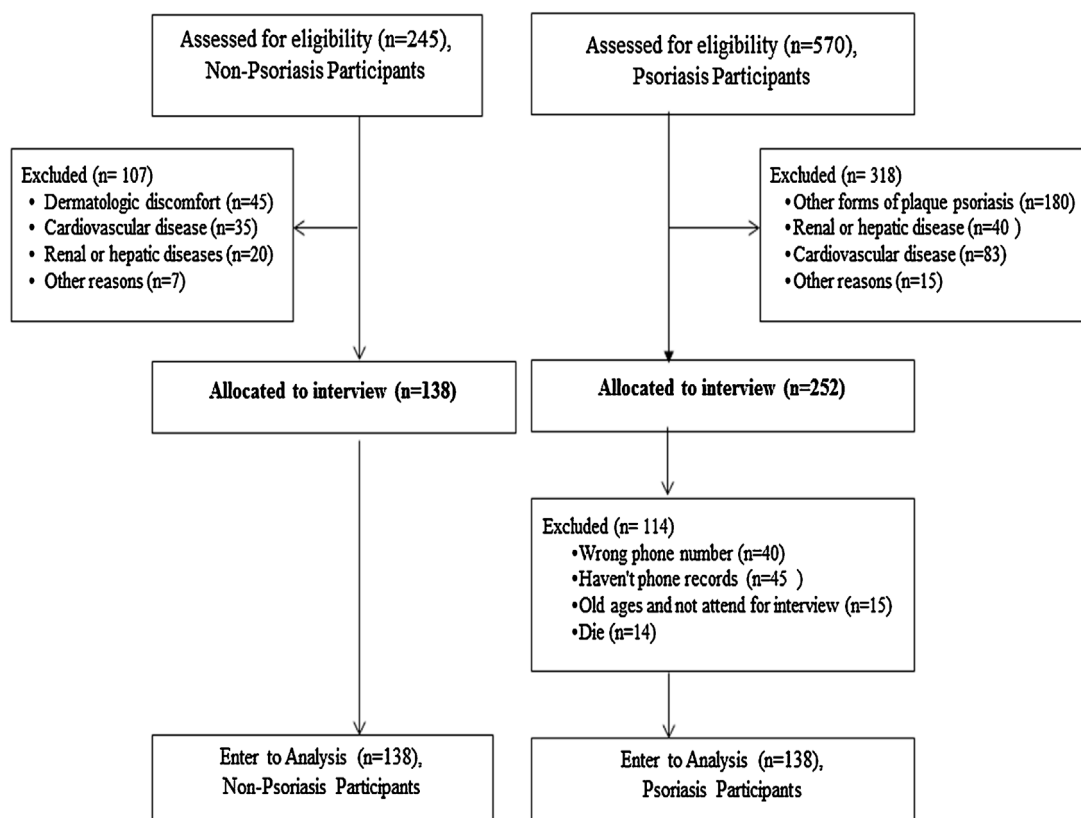


Fig. 1. Diagram flow chart of studied participants.

an unhealthy lifestyle and patients desire for their disease self-care. Overall, the prevalence rate of self-medicating with dietary supplements as the complementary and alternative medicine (CAM) has been estimated at around 50% among psoriasis patients.⁹ There is limited available information on the psoriasis patient's adherence to self-medicating with dietary supplements and its effect on the clinical improvement of lesions and HRQoL. In this survey, we were the first to investigate the prevalence of self-medicating with dietary supplements as a CAM therapy among psoriasis patients and compare this frequency with non-psoriasis individuals and its impact on psoriasis clinical improvement and on dermatology quality of life.

2. Aim

2.1. General objectives

To determine the prevalence of CAM usage among psoriasis and non-psoriasis individuals, in related Hospitals of Mashhad University of Medical Sciences (MUMS), and its impact on disease severity.

2.2. Specific objectives

- (1) To determine the prevalence of dietary supplements usage among psoriasis and non-psoriasis participants in MUMS related hospitals.
- (2) To describe the socio-demographic background of dietary supplements users versus non-users in terms of age, gender, body mass index (BMI), education, dermatology quality of life (DLQI), smoking and co-morbidities
- (3) To determine the indication and reasons of CAM among psoriasis cases
- (4) To determine the relationship between CAM users and non-CAM users of psoriasis cases respect to age, age onset of disease, gender, education, PASI and DLQI

3. Method

3.1. Studied participants enrollment

This case-control study was carried out in Mashhad University of Medical Sciences (MUMS), Mashhad, Iran. Psoriasis cases were selected from the recorded data of psoriasis patients hospitalized in our Dermatology Departments of Ghaem Hospital and Imam Reza Hospital, MUMS, Khorasan Razavi state, from January 2005 to January 2016. This point should be noted that these two centers are the biggest medical centers in Northeast of Iran and have the highest dermatologic admission of patients to these related clinics. Therefore, studied psoriasis patients can be considered as representative of general psoriasis patients in our study area.

The definitive diagnosis of plaque-type psoriasis was performed by biopsy at the time of hospital admission. First, we researched ten years of archived phone records of the hospitalized psoriasis patients in the Medical Document Departments, ensuring that all patient data was kept confidential. Therefore, we find 570 files related to hospitalized psoriasis patients during the mentioned period. We used as the ICD-10 definition of psoriasis vulgaris and patients with the other forms of psoriasis were excluded. We considered the age cut-off points on 20 years to certify that participants had complete data themselves and to limit the study inferences to parents. Psoriasis cases with other forms of plaque and patients were suffering from other diseases including anemia, thrombocytopenia, leukemia, active infection (e.g., tuberculosis, septicemia), peptic ulcer disease, renal or hepatic disease, cardiovascular disease, or alcoholism were excluded. Then, we found 252 recorded of plaque-type psoriasis. Among these cases, we were able to access the records of 138 psoriasis patients with respect to their gender and age. The remaining patients could not be included due to death, advanced age, lack of response to calls, changes of address, and wrong phone numbers (Fig. 1). According to verbal interview, we have called all psoriasis patients and set an appointment for a dermatologic visit in

Download English Version:

<https://daneshyari.com/en/article/5565207>

Download Persian Version:

<https://daneshyari.com/article/5565207>

[Daneshyari.com](https://daneshyari.com)