## Journal of Dermatological Science

Contents lists available at ScienceDirect

journal homepage: www.jdsjournal.com

## Characterization of socioeconomic status of Japanese patients with atopic dermatitis showing poor medical adherence and reasons for drug discontinuation

Hiroyuki Murota<sup>a,\*</sup>, Satoshi Takeuchi<sup>b</sup>, Makoto Sugaya<sup>c</sup>, Miki Tanioka<sup>d</sup>, Daisuke Onozuka<sup>e</sup>, Akihito Hagihara<sup>e</sup>, Hidehisa Saeki<sup>f</sup>, Shinichi Imafuku<sup>g</sup>, Masatoshi Abe<sup>h</sup>, Yoichi Shintani<sup>i</sup>, Sakae Kaneko<sup>j</sup>, Koji Masuda<sup>k</sup>, Takaaki Hiragun<sup>l</sup>, Naoko Inomata<sup>m</sup>, Yuki Kitami<sup>n</sup>, Yuichiro Tsunemi<sup>o</sup>, Shinya Abe<sup>p</sup>, Miwa Kobayashi<sup>q</sup>, Donald E. Morisky<sup>r</sup>, Masutaka Furue<sup>s</sup>, Norihito Katoh<sup>k</sup>

<sup>a</sup> Department of Dermatology, Graduate School of Medicine, Osaka University, 2-2 Yamadaoka, Suita, Osaka 565-0871, Japan

<sup>b</sup> Department of Dermatology, Federation of National Public Service Personnel Mutual Aid Associations, Hamanomachi Hospital, 3-3-1 Nagahama, Chuo-ku, Fukuoka 810-8539, Japan

<sup>c</sup> Department of Dermatology, Faculty of Medicine, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8654, Japan

<sup>d</sup> Tanioka Dermatology Clinic, Higashihama-Minami-cho 662, Fushimi-ku, Kyoto 612-8213, Japan

<sup>e</sup> Department of Health Care Administration and Management, Kyushu University Graduate School of Medical Sciences, Maidashi 3-1-1, Higashi-ku, Fukuoka 812-8582, Japan

<sup>f</sup> Department of Dermatology, Nippon Medical School, 1-1-5 Sendagi, Bunkyo-ku, Tokyo 113-8602, Japan

<sup>g</sup> Department of Dermatology, Faculty of Medicine, Fukuoka University, 7-45-1 Nanakuma, Jonan-ku, Fukuoka 814-0180, Japan

<sup>h</sup> Kojinkai Sapporo Skin Clinic, 1-1 Minami 3, Nishi 2, Chuo-ku, Sapporo, Hokkaido 060-0063, Japan

<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, 1 Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya 467-8601, Japan

<sup>j</sup> Department of Dermatology, Shimane University Faculty of Medicine, 89-1 Enya-cho, Izumo, Shimane 693-8501, Japan

<sup>k</sup> Department of Dermatology, Kyoto Prefectural University of Medicine Graduate School of Medical Science, 465 Kajii-cho, Kawaramachi-Hirokoji, Kamigyoku, Kyoto 602-8566, Japan

<sup>1</sup>Department of Dermatology, Integrated Health Sciences, Institute of Biomedical and Health Sciences, Hiroshima University, 1-2-3 Kasumi, Minami-ku, Hiroshima 734-8551, Japan

<sup>m</sup> Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, 3-9 Fukuura, Kanazawa-ku, Yokohama, Kanagawa 236-0004, Japan

<sup>n</sup> Department of Dermatology, Showa University School of Medicine, 1-5-8 Hatanodai, Shinagawa-ku, Tokyo 142-8555, Japan

<sup>o</sup> Department of Dermatology, Tokyo Women's Medical University, 8-1 Kawada-cho, Shinjuku-ku, Tokyo 162-8666, Japan

<sup>P</sup> Department of Dermatology, Kanazawa Medical University, 1-1 Daigaku, Uchinada, Kahoku, Ishikawa 920-0293, Japan

- <sup>a</sup> Department of Dermatology, University of Occupational and Environmental Health, 1-1 Iseigaoka, Yahata-nishi-ku, Kitakyushu, Fukuoka 807-8555, Japan
- r Department of Community Health Sciences, UCLA Fielding School of Public Health, 650 Charles E. Young Drive South, Los Angeles, CA, USA
- <sup>s</sup> Department of Dermatology, Kyushu University Graduate School of Medical Sciences, Maidashi 3-1-1, Higashi-ku, Fukuoka 812-8582, Japan

#### ARTICLE INFO

Article history: Received 8 March 2015 Received in revised form 1 May 2015 Accepted 25 May 2015

Keywords: Atopic dermatitis Adherence Morisky Medication Adherence Scale-8 (MMAS-8) Treatment satisfaction

### ABSTRACT

*Background:* Patients' high adherence to medication is indispensable for the management of skin diseases including atopic dermatitis. We previously showed poor medication adherence in Japanese dermatological patients.

*Objective:* This study was conducted to determine the level of adherence to oral or topical medication in Japanese patients with atopic dermatitis, attempting to characterize the socioeconomic status of those patients with poor adherence.

*Methods:* A web questionnaire survey on demographic data as well as adherence level was conducted on patients registered in the monitoring system. Adherence level was assessed with Morisky Medication Adherence Scale-8 (MMAS-8). Among a total of 3096 respondents with dermatological disorders, data of 1327 subjects with atopic dermatitis were extracted and analyzed.

*Results:* More than 80% of subjects felt that both oral and topical medications were safe and efficacious, while less than 60% of them were satisfied with their treatment. Levels of adherence to oral and topical

\* Corresponding author. Fax: +81 6 6879 3039.

E-mail address: h-murota@derma.med.osaka-u.ac.jp (H. Murota).

http://dx.doi.org/10.1016/j.jdermsci.2015.05.010

0923-1811/ © 2015 The Authors. Published by Elsevier Ireland Ltd on behalf of Japanese Society for Investigative Dermatology. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).







#### H. Murota et al./Journal of Dermatological Science 79 (2015) 279-287

treatments were evaluated with MMAS-8, giving scores of 4.6 and 4.2, respectively. Demographic factors such as gender, marital status, state of employment, alcohol consumption, frequency of hospital visits, and experience of drug effectiveness had a significant impact on the degree of adherence to treatment. *Conclusion:* Medication adherence level in Japanese subjects with atopic dermatitis was relatively low compared with that of other chronic diseases. Our survey has characterized patients with poor adherence, who are good targets for interventions to maximize potentially limited healthcare resources. © 2015 The Authors. Published by Elsevier Ireland Ltd on behalf of Japanese Society for Investigative Dermatology. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/ licenses/by-nc-nd/4.0/).

#### 1. Introduction

In the management of skin diseases, not only the prescription of appropriate drugs by clinicians but also the enhancement of patient adherence to medication is important. Recent studies highlighted poor adherence to medication in patients with chronic inflammatory diseases, such as hypertension, diabetes, and inflammatory bowel diseases [1–3]. A low level of motivation to adhere to medication has also been reported in patients with atopic dermatitis [4], psoriasis [5], urticaria [6], and acne [7].

Previously, we assessed the adherence to oral and topical medications using a translated Japanese version of Morisky Medication Adherence Scale-8 (MMAS-8) in 3096 Japanese subjects with skin diseases including atopic dermatitis, urticaria, psoriasis, and tinea [8]. In that study, adherence level was classified as high, medium, or low according to the MMAS-8 score [8]. We found that the overall high, medium, and low adherence rates were 9.5%, 24.2%, and 66.3% for oral medication, and 6.9%, 17.7%, and 75.5% for topical medication, indicating poor adherence to medication in patients with skin diseases. In the current study,

#### Table 1

Demographic data of study subjects with atopic dermatitis (n = 1327).

Characteristics			п	(%)
Age, mean (SD) [min-max], years		41.3 (11.1) [18-85]		
Gender	Male		559	42.1
	Female		768	57.9
Marital state	Married		597	45
	Unmarried		730	55
Annual income	$\geq 6$ million yen		411	37.1
	<6 million yen		696	62.9
Employment	Employed		877	69.4
	Unemployed		387	30.6
Education	University graduate		670	50.6
	Not university graduate		653	49.4
Smoking	Smoker		227	17.2
	Non-smoker		1094	82.8
Alcohol	≥Once a month		773	58.5
	<once a="" month<="" td=""><td></td><td>548</td><td>41.5</td></once>		548	41.5
Frequency of hospital visits	≥Once a half year		1226	92.4
	<once a="" half="" or="" td="" unkown<="" year=""><td></td><td>101</td><td>7.6</td></once>		101	7.6
Main healthcare institution	University hospital		58	4.4
	Municipal hospital Private clinic or other		216 1044	16.4 79.2
Oral medication	Experience of drug effectiveness	Yes No	720 199	78.3 21.7
	Experience of adverse events	Yes	163	17.7
		No	756	82.3
Topical medication	Experience of drug effectiveness	Yes	1158	89.6
	Function of advance events	No Yes	134 247	10.4 19.1
	Experience of adverse events	No	1045	80.9
Overall satisfaction to treatment	> Cational		749	56.4
	≥Satisfied <satisfied< td=""><td></td><td>578</td><td>56.4 43.6</td></satisfied<>		578	56.4 43.6
Adherence, mean (SD) [min-max]	Oral medication	4.6 (2.0) [0-8]		
Adherence, mean (SD) [mm-max]	Topical medication	4.8 (2.0) [0-8]		
Cronbach's Alpha of adherance measure	Oral medication	0.712		
	Topical medication	0.706		

Download English Version:

# https://daneshyari.com/en/article/6074226

Download Persian Version:

https://daneshyari.com/article/6074226

Daneshyari.com