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# Arabic language skin-related stigmatization instruments: Translation and validation process

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## Abstract

**Background.** Skin diseases are frequently the reason for social rejection. Therefore, the assessment of stigmatization level in patients suffering from dermatoses plays a crucial role in providing proper health service.

**Objectives.** The aim of this study was to create and validate Arabic language versions of stigmatization instruments – the 6-item Stigmatization Scale and the Feelings of Stigmatization Questionnaire.

**Material and methods.** Development of the Arabic language versions was done with international standards of forward-back translations. The validation was performed on 39 psoriatic individuals. The group included 11 females and 28 males. The subjects were asked to fill out both questionnaires: the 6-item Stigmatization Scale and the Feelings of Stigmatization Questionnaire (Arabic language versions) at the time of examination and 7 days after enrollment for reassessment to evaluate test-retest reliability. During the first visit the patients additionally filled out an already existing Arabic version of Dermatology Life Quality Index (DLQI), which was used as a reference questionnaire.

**Results.** The results concerning the integrity of instruments were very good, and the Cronbach's  $\alpha$  coefficient for both scales was 0.89. The reproducibility level assessed with interclass correlation coefficient (ICC) stood at 0.91 for the 6-item Stigmatization Scale and 0.92 for the Feelings of Stigmatization Questionnaire. There was a strong correlation between total score of the 6-item Stigmatization Scale and DLQI. Significant negative moderate correlation was documented between the Feelings of Stigmatization Questionnaire and DLQI. Moreover, both stigmatization instruments correlated significantly with each other.

**Conclusions.** The developed Arabic language versions of the abovementioned stigmatization instruments can be successfully used in daily clinical practice as well as in clinical research.

**Key words:** quality of life, stigmatization, skin, 6-item Stigmatization Scale, Feelings of Stigmatization Questionnaire

## Introduction

Medical dictionaries define stigmatization as an assignment of negative perceptions to an individual because of a perceived difference from the population at large. This may occur on the basis of physical appearance (including race or sex), of mental or physical illness, or of various other qualities.<sup>1</sup> The medical field recognizes a number of health problems, the sufferers of which are stigmatized, and certain skin diseases are among them. Along with the stigma faced by the individual, associative stigma can impact the family and friends of that person.<sup>2-4</sup>

Skin conditions are frequently the reason of social rejection and might result in a negative influence on the personal and social life of patients. Skin plays an important role in establishing interpersonal relationships, and thus cutaneous disorders, which have significant impact on physical appearance, influence other people's attitudes.<sup>5</sup> Visible skin changes may arouse fear, disgust, aversion, or even intolerance, and other people may be afraid of the possible contagious character of the disease. Having in mind the great impact of the stigmatization process on one's life, measuring its level is necessary to provide proper service to the patients. This underlines the importance of proper stigmatization assessment in patients suffering from various dermatoses. Numerous instruments for assessing the stigmatization experience exist in the form of questionnaires. Our previous search in the English literature found 14 instruments used by different researchers for different skin conditions and we classified them into 2 main groups: dermatology-specific and disease-specific stigmatization instruments.<sup>6</sup> Psoriasis appeared to be most commonly studied dermatologic condition where stigmatization has been assessed.<sup>7</sup> To the best of our knowledge, there is no single skin-related stigmatization instrument available in the Arabic language. Therefore, the aim the current study was to create and validate the Arabic language version of 2 commonly used questionnaires to assess stigmatization in all dermatology patients (6-item Stigmatization Scale<sup>8</sup>) and especially in psoriatic individuals (Feelings of Stigmatization Questionnaire<sup>9</sup>).

## Methods

The study was conducted in the Department of Dermatology of Sheikh Khalifa Medical City (SKMC), General Hospital in Abu Dhabi, UAE, and supervised by experts from the Wroclaw Medical University, Poland. The approvals from The Institutional Review Board/Research Ethics Committee (IRB/REC) of SKMC(REC-29.01.2017 [RS-473]) and Ethical Committee of Wroclaw Medical University (KB-604/2016) were obtained prior to commencement of any study procedure.

## Translation

The translation of the questionnaires was a multi-stage process based on a reverse translation and involved several independent translators. At the first stage the original questionnaires (English language ones) were given to 2 independent translators: consultant dermatologist and consultant psychiatrist. They translated them from English into Arabic (Version 1 and Version 2). The results were compared, slight differences were found and a bilingual expert helped with the editing (Version 3). After that, Version 3 was given to a 3<sup>rd</sup> translator (consultant dermatologist) who was not familiar with the original questionnaires. He performed a reverse translation from the already translated Arabic version into English. The back translation of a 6-item Stigmatization Scale was sent to Prof. Dr. Andrea Evers, who created the original questionnaire, for her comments. Prof. Dr. Mohammad Jafferany from Association for Psychoneurocutaneous Medicine of North America (APMNA) served as a consultant of the back translation of Feelings of Stigmatization Questionnaire. Some minor differences were found, discussed and corrected accordingly. The final versions (Version 4) of the Arabic language of both questionnaires were approved based on comments by dermatology experts and linguistic consultations. The aim of the translation was not only to render it in grammatically correct Arabic language, but to make the questions understandable for people outside the medical field. All translators mentioned above were of Arabic origin, fluent in both Arabic and English with long experience in the medical field (dermatologist or psychiatrist). Version 4, treated as a final one, was used for the validation process.

## Validation

Validation was based on 39 Arabic psoriatic patients. The group included 11 females and 28 males. The mean age of the patients was assessed as  $36.3 \pm 12.2$  years. The current mean psoriasis intensity evaluated with Psoriasis Area and Severity Index (PASI) was  $3.6 \pm 5.2$  points (range 0–24.5 points).

Patients were asked to fill both questionnaires: 6-item Stigmatization Scale and Feelings of Stigmatization Questionnaire (Arabic language versions) at the time of examination and 7 days after enrollment for reassessment to evaluate test-retest reliability. During the first visit the patients additionally filled already existing Arabic version of Dermatology Life Quality Index (DLQI), which was used as a reference questionnaire. The DLQI was selected as it was the first questionnaire to assess quality of life in dermatologic patients and is currently the most commonly used instrument among dermatologic subjects. Moreover, DLQI is available in various validated language versions.

Statistical analyses were performed using STATISTICA v. 12 software (StatSoft Inc., Tulsa, USA). Internal

consistency was evaluated with Cronbach’s  $\alpha$  coefficient. Coefficient scores above 0.7 indicate high internal consistency. Correlations of individual components and the total score of the questionnaires were calculated with Spearman’s rank correlation test. Spearman’s correlation coefficient ( $\rho$ ) was interpreted as follows:  $\rho = 0-0.1$  – no correlation;  $\rho = 0.11-0.29$  – weak correlation;  $\rho = 0.3-0.49$  – moderate correlation;  $\rho = 0.5-0.69$  – strong correlation, and  $\rho > 0.7$  – very strong correlation.<sup>10</sup>

Differences between 1<sup>st</sup> and 2<sup>nd</sup> assessment were verified with Wilcoxon signed-rank test. Interclass correlation coefficient (ICC) was used to assess test-retest reliability. ICC  $<0.4$  indicated poor reliability, ICC  $>0.4$  or/and ICC  $<0.75$  – fair to high reliability, and ICC  $\geq 0.75$  – excellent reliability.<sup>11</sup>

The correlation between both stigmatization questionnaires and DLQI was calculated also with Spearman’s rank correlation test. The p-values for all statistical analyses were considered significant if  $p < 0.05$ .

## Results

### Internal consistency

The evaluation of internal consistency showed that the different items of both questionnaires are inter-related with one another. Cronbach’s  $\alpha$  coefficient for 6-item Stigmatization Scale was calculated as 0.89 and for Feelings of Stigmatization Questionnaire was also 0.89. The results described above indicated a strong internal consistency of Arabic language versions of both studied instruments.

### Convergent validity

All single questions of the 6-item Stigmatization Scale significantly strongly correlated with the total score of the questionnaire (Table 1). Most questions included in Feelings of Stigmatization Questionnaire correlated with the total score as well (Table 2). Twenty out of 33 questions revealed a strong and very strong significant correlation with the total score. Of note, 7 questions (i.e., Q9, Q20, Q22, Q29, Q31, Q34, and Q40) exhibited no significant correlation with the total score. Based on the overall analysis, one may conclude that 6-item Stigmatization Scale demonstrated very good convergent validity; the convergent validity of Feelings of Stigmatization Questionnaire may also be considered as satisfactory.

### Test-retest comparison

The reproducibility of both instruments was high. The ICC between scores obtained at the 1<sup>st</sup> and 2<sup>nd</sup> visit were 0.91 and 0.92 for 6-item Stigmatization Scale and Feelings of Stigmatization Questionnaire, respectively.

**Table 1.** Correlation of each item (Q) score with total score of 6-item Stigmatization Questionnaire

Correlations	N	$\rho$	p-value
Q1 and total score	39	0.79	$<0.0001$
Q2 and total score	39	0.80	$<0.0001$
Q3 and total score	39	0.71	$<0.0001$
Q4 and total score	39	0.79	$<0.0001$
Q5 and total score	39	0.66	$<0.0001$
Q6 and total score	39	0.55	$<0.001$

**Table 2.** Correlation of each item (Q) score with total score of Feelings of Stigmatization Questionnaire

Correlations	N	$\rho$	p-value
Q1 and total score	39	0.53	$<0.001$
Q2 and total score	39	0.78	$<0.0001$
Q3 and total score	39	0.59	$<0.0001$
Q4 and total score	39	0.73	$<0.0001$
Q5 and total score	39	0.70	$<0.0001$
Q6 and total score	39	0.57	$<0.01$
Q7 and total score	39	0.72	$<0.0001$
Q8 and total score	39	0.76	$<0.0001$
Q9 and total score	39	0.14	0.39
Q10 and total score	39	0.67	$<0.0001$
Q11 and total score	39	0.39	0.01
Q12 and total score	39	0.35	0.03
Q13 and total score	39	0.53	$<0.001$
Q14 and total score	39	0.46	0.003
Q15 and total score	39	0.72	$<0.0001$
Q16 and total score	39	-0.24	0.13
Q17 and total score	39	-0.31	0.05
Q18 and total score	39	0.54	$<0.001$
Q19 and total score	39	0.62	$<0.0001$
Q20 and total score	39	0.43	0.007
Q21 and total score	39	0.55	$<0.001$
Q22 and total score	39	0.71	$<0.0001$
Q23 and total score	39	-0.13	0.41
Q24 and total score	39	0.72	$<0.0001$
Q25 and total score	39	-0.11	0.48
Q26 and total score	39	0.63	$<0.0001$
Q27 and total score	39	0.08	0.63
Q28 and total score	39	0.63	$<0.0001$
Q29 and total score	39	0.47	0.002
Q30 and total score	39	0.73	$<0.0001$
Q31 and total score	39	0.49	0.002
Q32 and total score	39	0.74	$<0.0001$
Q33 and total score	39	-0.11	0.49

There were no significant differences between separate questions and the total scores in conducted assessments for both scales (Table 3, 4).

**Table 3.** Reproducibility of results obtained with 6-item Stigmatization Scale

Questions	1 <sup>st</sup> assessment [points]	2 <sup>nd</sup> assessment [points]	p-value
Q1	0.69 ±0.83	0.62 ±0.81	0.53
Q2	1.0 ±0.92	0.87 ±0.83	0.27
Q3	0.74 ±0.85	0.69 ±0.73	0.61
Q4	1.18 ±0.94	1.18 ±0.94	0.85
Q5	0.46 ±0.82	0.44 ±0.75	0.78
Q6	0.62 ±0.85	0.64 ±0.78	0.81
Total score	4.69 ±4.16	4.36 ±3.82	0.32

**Table 4.** Reproducibility of results obtained with Feelings of Stigmatization Questionnaire

Questions	1 <sup>st</sup> assessment [points]	2 <sup>nd</sup> assessment [points]	p-value
Q1	3.41 ±1.60	3.67 ±1.53	0.14
Q2	3.56 ±1.82	3.59 ±1.74	0.86
Q3	3.90 ±1.73	3.79 ±1.24	0.52
Q4	3.41 ±1.60	3.44 ±1.43	0.98
Q5	3.10 ±1.64	3.23 ±1.61	0.50
Q6	3.90 ±1.47	3.72 ±1.36	0.32
Q7	3.13 ±1.75	3.46 ±1.50	0.10
Q8	2.56 ±1.89	3.00 ±1.78	0.09
Q9	2.18 ±1.60	2.15 ±1.74	0.90
Q10	3.41 ±1.79	3.36 ±1.58	0.85
Q11	3.05 ±1.62	2.77 ±1.66	0.49
Q12	2.90 ±1.85	2.85 ±1.83	0.74
Q13	3.38 ±1.43	3.38 ±1.39	0.90
Q14	3.62 ±1.39	3.67 ±1.46	0.82
Q15	2.49 ±1.65	2.87 ±1.64	0.18
Q16	2.54 ±1.79	2.51 ±1.67	0.88
Q17	2.49 ±1.78	2.28 ±1.72	0.32
Q18	3.51 ±1.55	3.18 ±1.57	0.24
Q19	4.03 ±1.27	3.79 ±1.13	0.09
Q20	2.26 ±1.67	2.10 ±1.39	0.38
Q21	2.18 ±1.65	2.00 ±1.43	0.50
Q22	3.31 ±1.58	3.10 ±1.59	0.23
Q23	2.97 ±1.66	2.62 ±1.79	0.25
Q24	3.33 ±1.56	3.36 ±1.48	0.86
Q25	1.90 ±1.60	2.33 ±1.30	0.05
Q26	3.05 ±1.49	3.10 ±1.50	0.80
Q27	0.49 ±1.10	0.64 ±1.11	0.33
Q28	3.21 ±1.54	3.10 ±1.50	0.54
Q29	3.08 ±1.36	2.95 ±1.41	0.94
Q30	3.62 ±1.44	3.54 ±1.45	0.84
Q31	2.82 ±1.97	3.28 ±1.72	0.10
Q32	3.85 ±1.41	3.90 ±1.12	0.78
Q33	0.95 ±1.38	1.13 ±1.47	0.57
Total score	97.59 ±24.53	98.05 ±26.88	0.83

## Correlation with Dermatology Life Quality Index

There was a strong correlation between the total score of 6-item Stigmatization Scale and DLQI ( $\rho = 0.54$ ,  $p < 0.001$ ) (Fig. 1a). A significant negative moderate correlation was documented between the Feelings of Stigmatization Questionnaire and DLQI ( $\rho = -0.49$ ,  $p = 0.001$ ) (Fig. 1b). This illustrates that both newly created Arabic versions of stigmatization instruments showed highly satisfactory correlations with the quality of life assessment. Moreover, both stigmatization instruments correlated significantly with each other ( $\rho = -0.42$ ,  $p = 0.007$ ) (Fig. 2).

## Access to instruments

All above results clearly suggest that the Arabic versions of the 6-item Stigmatization Scale and Feelings of Stigmatization Questionnaire fulfilled the criteria for high standard instruments and may be used in clinical practice. They are presented as Appendixes 1, 2 and are available in the electronic version on request directly from Dr. Dimitre Dimitrov (chibi90@yahoo.com).

## Discussion

Arabs inhabit the 22 Arab states within the Arab League but can also be found in the global diaspora.<sup>12</sup> They have their own customs, language, art, literature, music, media, cuisine, society, etc.<sup>13</sup>

The enormous emotional burden of patient with skin diseases is well recognized. In fact, the visibility of skin lesions plays an important role in this burden and that was indicated in numerous publications including our previous research.<sup>7</sup> The attitude to individuals with skin diseases can vary widely in different countries and cultures and in certain areas; the fear of stigmatization due to skin disorders can be devastating.<sup>2,4</sup> As mentioned above, our previous research found that psoriasis is the most common skin disease, where the stigmatization experience was studied.<sup>7</sup> We performed an extensive search online in the available English-language literature and could not find any reports about stigmatization experience in dermatological patients among the Arabic population. Most of the research about stigmatization in the medical field in Arabic countries was related to mental health.<sup>14,15</sup> We previously clearly confirmed that the visibility of the skin lesions is a key factor for stigmatization experience and, as we have already emphasized, proper stigmatization assessment in dermatological patients would contribute to the entire, complete understanding of their suffering and would facilitate the holistic therapeutic approach.<sup>6</sup> Therefore, the creation of Arabic-language instruments to assess skin-related stigmatization level was crucial for daily clinical practice and for the future research in this field.

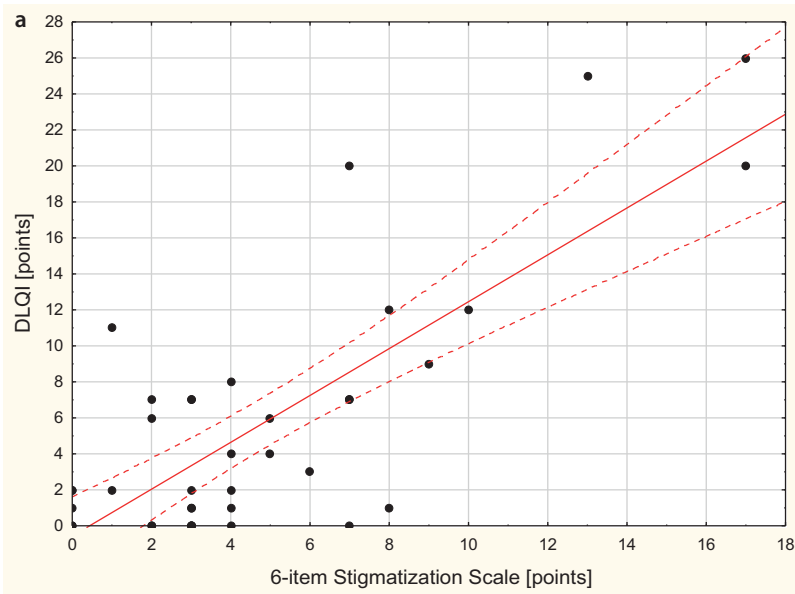


Fig. 1. Correlation between Arabic versions of stigmatization instruments (6-item Stigmatization Scale (a), Feelings of Stigmatization questionnaire (b)) and Dermatology Life Quality Index (DLQI)

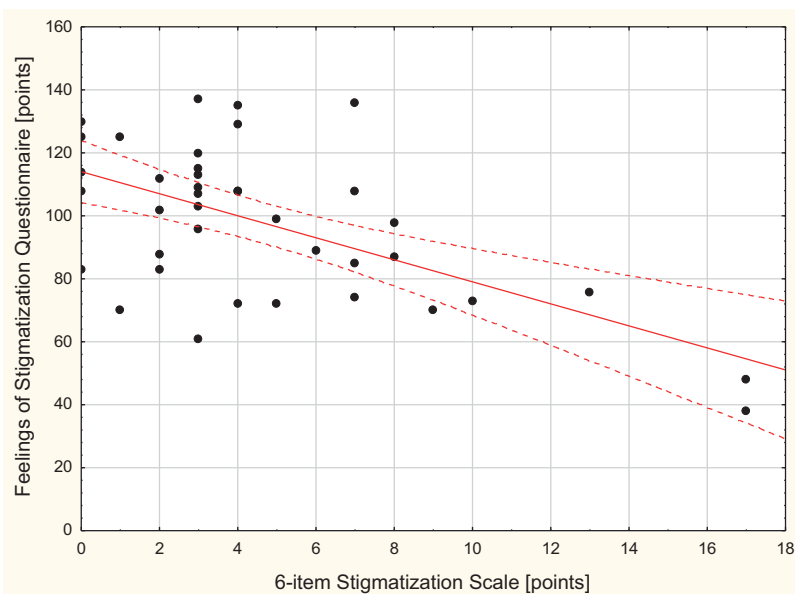
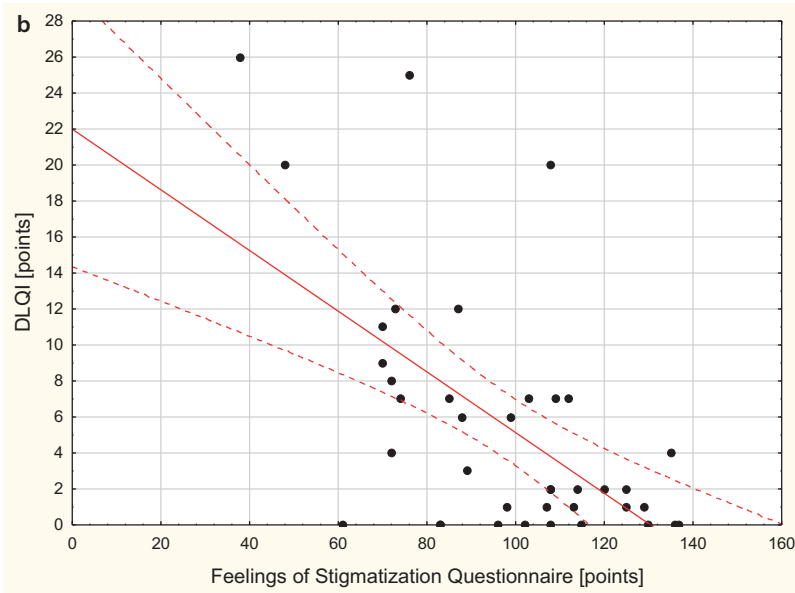


Fig. 2. Correlation between Arabic versions of 6-item Stigmatization Scale and Feelings of Stigmatization Questionnaire



Our current results showed better internal consistency of Arabic versions of both instruments in comparison with, for instance, the results of validated Polish language versions, where the Cronbach's  $\alpha$  coefficient for the 6-item Stigmatization Scale was calculated as 0.84 and for the Feelings of Stigmatization Questionnaire as 0.86.<sup>16</sup> Both Arabic versions showed 0.89 Cronbach's  $\alpha$  coefficient. The ICC between scores obtained at 1<sup>st</sup> and 2<sup>nd</sup> visit were also higher: The results obtained in the Polish language versions were 0.82 and 0.73 for the 6-item Stigmatization Scale and Feelings of Stigmatization Questionnaire, respectively. The Arabic version showed ICC of 0.91 for the 6-item Stigmatization Scale and of 0.92 for the Feelings of Stigmatization Questionnaire. These results were obtained after enrolling the majority of patients with mild disease. We are aware of the fact that this could be considered as a limitation of the study. Another example in regard to the above-mentioned parameters is the Polish-language version of the Family Dermatology Life Quality Index (FDLQI). The authors found that Cronbach's  $\alpha$  coefficient was 0.84 and reproducibility level, established with ICC, was calculated at 0.69.<sup>17</sup> All the data presented above clearly suggests a high international standard of the Arabic-language versions of both the 6-item Stigmatization Scale and the Feeling of Stigmatization Questionnaire. We believe that the availability of those questionnaires in the Arabic language will contribute to the service provided to dermatology patients and will stimulate further research on the stigmatization in patients of Arabic origin suffering from various dermatoses.

## References

1. Miller-Keane BF. *Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*. 7<sup>th</sup> ed. Philadelphia, PA: Saunders; 2003:1676.
2. Ibekwe PU, Ogunbiyi AO, Ogun OG, George AO. Social stigmatization of two sisters with lamellar ichthyosis in Ibadan, Nigeria. *Int J Dermatol*. 2012;51(1):67–68.
3. Masnari O, Landolt MA, Roessler J, et al. Self- and parent-perceived stigmatization in children and adolescents with congenital or acquired facial differences. *J Plast Reconstr Aesthet Surg*. 2012; 65(12):1664–1670.
4. Kassi M, Kassi M, Afghan AK, Rehman R, Kasi PM. Marring leishmaniasis: The stigmatization and the impact of cutaneous leishmaniasis in Pakistan and Afghanistan. *PLoS Negl Trop Dis*. 2008;2(10):e259.
5. Lawrence JW, Rosenberg L, Rimmer RB, Thoms BD, Fauerbach JA. Perceived stigmatization and social comfort: Validating the constructs and their measurement among pediatric burn survivors. *Rehabil Psychol*. 2010;55(4):360–371.
6. Dimitrov D, Szepietowski JC. Instruments to assess stigmatization in dermatology. *Postepy Hig Med Dosw (Online)*. 2017;71:901–905.
7. Dimitrov D, Szepietowski JC. Stigmatization in dermatology with a special focus on psoriatic patients. *Postepy Hig Med Dosw (Online)*. 2017;71:1115–1122.
8. Lu Y, Duller P, van der Valk PGM, Evers AWM. Helplessness as predictor of perceived stigmatization in patients with psoriasis and atopic dermatitis. *Dermatol Psychosom*. 2003;4:146–150.
9. Ginsburg IH, Link BG. Feelings of stigmatization in patients with psoriasis. *J Am Acad Dermatol*. 1989;20(1):53–63.
10. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI): A simple practical measure for routine clinical use. *Clin Exp Dermatol*. 1994; 19(3):210–216.
11. Zaki R, Bulgiba A, Nordin N, Ismail NA. Systematic review of statistical methods used to test for reliability of medical instruments measuring continuous variables. *Iran J Basic Med Sci*. 2013;16(6):803–807.
12. Frishkopf M. *Music and Media in the Arab World*. Cairo, Egypt: The American University of Cairo Press; 2010.
13. El-Shamy HM. *Folk Traditions of Arab World: A Guide of Motif Classification*. Bloomington, IN: Indiana University Press; 1995.
14. Dardas LA, Simmons LA. The stigma of mental illness in Arab families: A concept analysis. *J Psychiatr Ment Health Nurs*. 2015;22(9):668–679.
15. Zolezzi M, Alamri M, Shaar S, Rainkie D. Stigma associated with mental illness and its treatment in the Arab culture: A systematic review. *Int J Soc Psych*. 2018;64(6):597–609. doi:10.1177/0020764018789200
16. Hrehorów E, Szepietowski J, Reich A, Evers AW, Ginsburg IH. Instruments for stigmatization evaluation in patients suffering from psoriasis: Polish language versions. *Dermatol Klin*. 2006;8:253–258.
17. Marciniak J, Reich A, Szepietowski J. The Family Dermatology Life Quality Index – formulation and validation of the Polish version. *Forum Dermatologicum*. 2016;2:24–28.

## Appendix 1. Arabic Version of 6 items Stigmatization Scale

### النسخة العربية لاستبيان العناصر الست لوصمة المرض

السؤال	دائما	غالباً جداً	أحياناً	مطلقاً
1- أشعر بعدم جاذبتي لدى الآخرين بسبب مرضي الجلدي				
2- اعتقد ان كثير من الناس يطيلون النظر إلى مرضي الجلدي				
3- يشعرون الآخرين بعدم الراحة عند لمسي بسبب مرضي الجلدي				
4- يعتقد الناس ان مرضي الجلدي هو مرض معدي				
5- يتجنبني الناس بسبب مرضي الجلدي				
6- أحياناً يعلق بعض الأشخاص تعليقات مزعجة عن مرضي الجلدي				

## Appendix 2. Arabic Version of Feelings of Stigmatization Questionnaire

## النسخة العربية لاستبيان الشعور بوصمة المرض

لا اوافق بشدة	لا اوافق	غير متأكد و لكن لا اوافق	غير متأكد و لكن قد اوافق	اوافق	اوافق بشدة	
						1 احيانا اتجنب اللقاءات الإجتماعية بسبب الصدفية
						2 طلبت من الاشخاص المقربين لي الاحتفاظ سرا بحقيقة اصابتي بالصدفية
						3 يعتقد الكثير من الناس ان الصدفية علامة لضعف الشخصية
						4 كثيرا ما اعتقد ان الناس يعتبرون ان مرضى الصدفية اشخاصا غير نظيفين
						5 اصابتي بمرض الصدفية تجعلني اشعر اني مختلف عن الآخرين
						6 بعض الأحيان أعتقد أن أفراد أسرتي يشعرون أنني أضعف منهم بسبب اصابتي بالصدفية ( التي لم تصبهم )
						7 اذا شعرت بأن رب العمل قد يكون متحيزا ضد احد بسبب الصدفية , فسوف لا اتقدم بطلب لهذه الوظيفة
						8 عندما تشدد الاعراض الجلدية للصدفية لدي استحي ان اقوم باي علاقة حميمية
						9 اذا أصيب أحد أبنائي بالصدفية أعتقد أنه أو أنها قد يعيش اقد تعيش بنفس جودة الحياة كما لو لم يصب بها
						10 اعمل ما في وسعي حتى لا يعلم افراد عائلتي الذين لا يشاركوني نفس السكن عن اصابتي بالصدفية
						11 لا يؤثر في اذا اعطاني احد افراد عائلتي الممكنة الكهربائية لازالة القشر المتساقط من جلدي بسبب الصدفية
						12 نادرا ما اشعر بضرورة اخفاء حقيقة اصابتي بالصدفية
						13 عندما يعلم الاخرين باصابتك بالصدفية يبدأون في البحث عن خلل في شخصيتك
						14 ان مرضى الصدفية قد يعاملون كمرضى الجذام
						15 عند زيادة حدة حالة الصدفية اشعر بعدم جذابيتي و اني غير مرغوب جسديا و جنسيا
						16 لم اشعر مطلقا بالحرج او الخجل بسبب اصابتي بالصدفية
						17 اذا اصيب احد اطفالي بالصدفية , فسوف لا اشعر بالذنب
						18 من المحتمل ان يقوم صاحب العمل بتمرير الوظيفة لاحد اخر اذا عرف بان الشخص لديه تاريخ مرضي للاصابة بالصدفية
						19 لا يرغب الناس في صداقتي عندما يعرفون باصابتي بالصدفية
						20 اعتقد ان كثيرا من الاشخاص المقربين لي لم يلاحظوا اني اعاني من الصدفية
						21 يعتقد كثير من المصابين بالصدفية انهم اصبحوا " نظيفين" عندما تتحسن الصدفية



## النسخة العربية لاستبيان الشعور بوصمة المرض

لا اوافق بشدة	لا اوافق	غير متأكد و لكن لا اوافق	غير متأكد و لكن قد اوافق	اوافق	اوافق بشدة	
						22 شعرت بالايذاء مما قاله لي الناس بسبب اصابتي بالصدفية
						23 عند تعرفي بشخص ما, فأنتني اخبره عن اصابتي بالصدفية
						24 يشعرنني بعض الناس كما لو كانت الصدفية نتيجة لارتكابي خطأ ما
						25 يعتقد معظم الناس أن مريض الصدفية مستقر عاطفيا كأى شخص عادي
						26 في بعض الاحيان اشعر بعدم نظافتي كما لو كان هناك شىء اعمق من اصابتي بالصدفية
						27 عندما تتحسن الصدفية بعد العلاج المكثف , اشعر بالرضا عن نفسي
						28 يتجنبني كثير من الناس و يبتعدون عني خوفا من ان الاعراض الجلدية للصدفية قد تكون معدية
						29 يعتقد كثير من المصابين بالصدفية انهم غير نظيفين نتيجة استخدام كثير من الدهانات و الادوية الموضعية
						30 احيانا اشعر اني منبوذ بسبب اصابتي بالصدفية
						31 اذا لاحظ احد الطفح الجلدي لدي و سألتني عنه , لا ابلغه انه بسبب الصدفية
						32 بسبب اصابتي بالصدفية لن اتقدم لطلب وظيفة او اتدرب لوظيفة تستدعي التعامل مع الجمهور
						33 اذا اصيب احد ابنائى بالصدفية , فأنتني اعتقد انه يمكنه تطوير امكانياته كما لو لم يكن لديه صدفية