Psoriasis-related stigma and its intersection with intergroup bias in medical students

To the Editor: Skin disease shares a common attribute with socially devalued conditions or statuses, an association with stigma and discrimination.[1] Stigma denotes the marking of someone as less worthy due to a specific health condition or other perceived difference such as race, gender, social status, or group membership.[2] It manifests in negative emotions, attitudes, and behaviors toward holders of stigmatized statuses (enacted stigma), but it can also be internalized by those affected by adopting negative attitudes (self-stigma) or expectations of bias on part of others if the stigmatized condition becomes known (anticipated stigma).[1] Stigma is a major barrier to provision-of-care and health-seeking behaviors across a range of health and social conditions globally.[1-3] When someone is marked with multiple stigmatized conditions (stigma intersectionality), an overlapping of biases and adverse outcomes occurs.[3]

Psoriasis-related stigma has been well documented among lay persons, but only 1 study examined it in medical students, indicating fewer stigmatizing attitudes.[4] Although processes related to intergroup biases that may produce significant health care disparities have been widely examined,[2] to our knowledge, no research to date has addressed whether being affected by psoriasis and belonging to an ethnically different, socially disadvantaged group (ie, an immigrant minority) might lead to a doubling of the stigma effect. Thus, we conducted a study to investigate the intersection of psoriasis stigma with intergroup bias in medical students.

Preclinical medical students (N = 290; mean age, 20.17 ± 2.3 y) of Italian nationality attending the Medical School of the University of Bologna participated in the study. In a crossover design, participants read 2 clinical vignettes (adopted from Epocrates [San Mateo, CA] online materials) and filled out a paper-and-pencil questionnaire. Vignettes were matched in word length and described a patient with psoriasis and a patient affected by a less visible condition (ie, gastrointestinal disease [GID]). For each condition, the patient was presented as an Italian (ingroup) or a Middle Eastern immigrant (outgroup).

Participants indicated from a list the emotion that best described their experience of taking care of the patient described in the vignette. Then, they reported their willingness to take care of the patient (caretaking disposition) or avoid this responsibility (caretaking avoidance), as well as their attribution of disease origin. Finally, participants reported whether they believed the patient would likely hide the illness from others for fear it could illicit negative judgments and attitudes (anticipated stigma endorsement). All items used in the study were adopted from Pescosolido and Martin.[5]

Compassion and curiosity were the most reported emotions across conditions. However, the percentage of reported disgust and pity, emotions typically associated with stigma, was twice as high for the patient with psoriasis versus the patient with GID (Fig 1, *A*) and for the outgroup versus ingroup patient with psoriasis (Fig 1, *B* and *C*). Less caring disposition, more caretaking avoidance, and endorsement of anticipated stigma were found for the patient with psoriasis compared to the patient with GID (Table I). Stigma intersectionality was confirmed only for the psoriasis condition: significant differences were reported between the ingroup versus outgroup patient for caretaking avoidance and anticipated stigma endorsement, and a trend to significance was found for attributions of disease origin to personal responsibility (Tables II and III). Unlike previous evidence,[4] our findings indicate the presence of psoriasis-related stigma among preclinical medical students. In a novel way, we further tested its intersection with intergroup bias and found that having psoriasis and belonging to a socially devalued group resulted in an enhanced stigma effect.

These findings can be of import to both graduate and continuous medical education, the goal of which is to unveil the nature of bias so that health care professionals may perform to the highest standards of (e)quality of care. By incorporating these issues into clinical vignettes, educators can address and reduce psoriasis-related biases, thus helping improve clinical reasoning among emerging and established clinicians.

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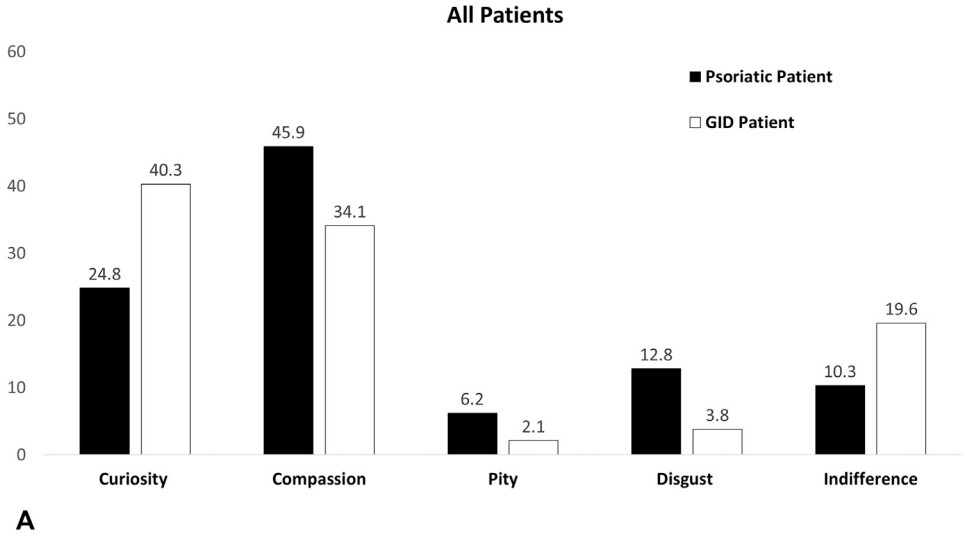

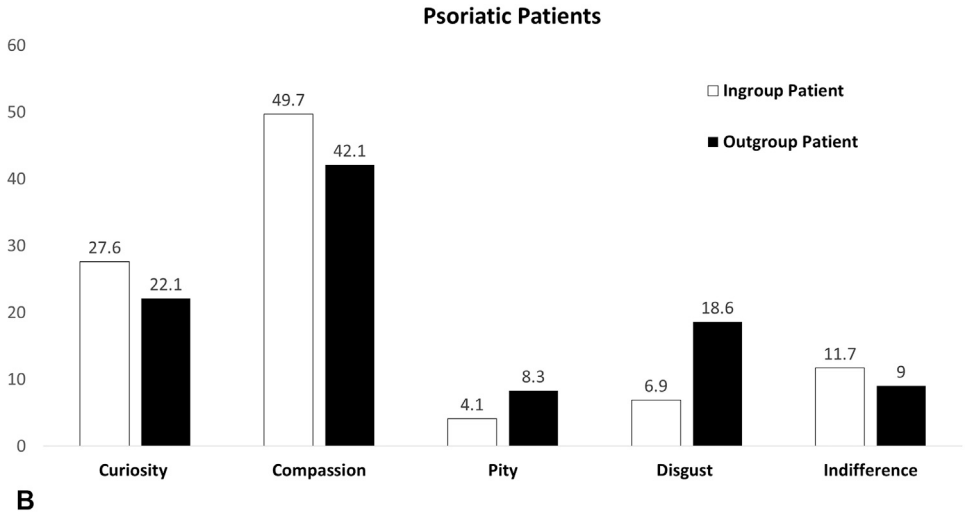

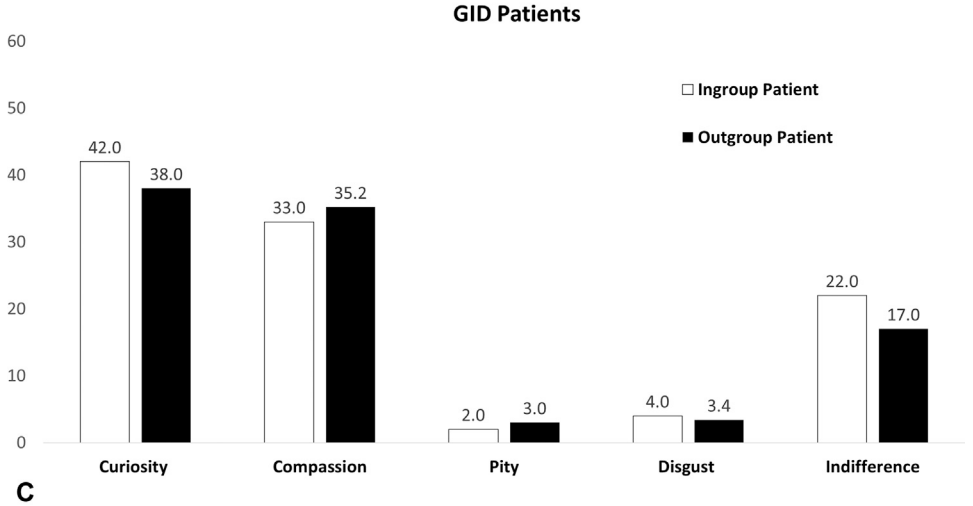

Fig 1. **A**, Reported emotions (as percentages) elicited by the vignette describing a patient with psoriasis versus a patient with GID. Chi-square test significance levels, $P < .001$. **B**, Reported emotions (as percentages) elicited by the vignette describing an ingroup versus an outgroup patient with psoriasis. Chi-square test significance levels, $P = .016$. **C**, Reported emotions (as percentages) elicited by the vignette describing an ingroup versus an outgroup patient with GID. Chi-square test significance levels, $P = .301$. *GID*, Gastrointestinal disease.

Table I. A patient with psoriasis versus a patient with GID*

Measures	Patient with psoriasis, mean (SD)	Patient with GID, mean (SD)	$t_{(289)}$	*P*
Caretaking disposition	2.8 (0.8)	3.1 (0.8)	−4.463	<.0001
Caretaking avoidance	4.0 (1.5)	3.3 (1.5)	7.288	<.0001
Disease origin attribution				
Genetic factors	3.2 (0.9)	2.9 (0.7)	4.901	<.0001
Personal responsibility	2.3 (0.8)	2.8 (0.8)	−6.942	<.0001
Chance	2.1 (1.0)	2.0 (0.9)	1.409	.160
Anticipated stigma endorsement	11.6 (2.2)	10.2 (2.6)	7.696	<.0001

GID, Gastrointestinal disease; *SD*, standard deviation.
*Mean (SD) scores obtained by medical students on stigma-related variables for a patient with psoriasis and a patient with GID.

Table II. An ingroup versus an outgroup patient with psoriasis*

Measures	Ingroup patient with psoriasis, mean (SD)	Outgroup patient with psoriasis, mean (SD)	$t_{(288)}$	*P*
Caretaking disposition	2.9 (0.9)	2.8 (0.9)	0.721	.471
Caretaking avoidance	3.7 (1.5)	4.2 (1.5)	−2.046	.042
Disease origin attribution				
Genetic factors	3.3 (0.8)	3.1 (0.9)	1.726	.085
Personal responsibility	2.2 (0.8)	2.5 (0.9)	−1.907	.057
Chance	2.3 (1.1)	2.0 (0.9)	1.830	.068
Anticipated stigma endorsement	12.3 (2.1)	11 (2.1)	4.954	<.0001

GID, Gastrointestinal disease; *SD*, standard deviation.
*Mean (SD) scores obtained by medical students on stigma-related variables for an ingroup and an outgroup patient with psoriasis.

Table III. An ingroup versus an outgroup patient with GID*

Measures	Ingroup patient with GID, mean (SD)	Outgroup patient with GID, mean (SD)	$t_{(288)}$	*P*
Caretaking disposition	3.1 (0.8)	3.0 (0.8)	−0.627	.531
Caretaking avoidance	3.3 (1.3)	3.2 (1.1)	−1.017	.311
Disease origin attribution				
Genetic factors	2.9 (0.7)	2.9 (0.8)	0.818	.414
Personal responsibility	2.8 (0.8)	2.7 (0.8)	−1.063	.289
Chance	2.0 (0.9)	2.1 (1.0)	0.712	.477
Anticipated stigma endorsement	10.3 (2.5)	10.2 (2.7)	−0.402	.688

GID, Gastrointestinal disease; *SD*, standard deviation.
*Mean (SD) scores obtained by medical students on stigma-related variables for an ingroup and an outgroup patient with GID.

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Color Doppler ultrasonographic evaluation of management of papulopustular rosacea

To the Editor: Rosacea is a chronic inflammatory disorder that commonly affects the face and presents several phenotypes; however, to date, there are still gaps in the understanding of rosacea pathophysiology.[1] Particularly, in papulopustular rosacea lesions (PPR), topical ivermectin and metronidazole