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RESEARCH

Affiliate stigma among family caregivers of people with mental disorders: results from a national survey in Italy

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Abstract

Purpose Affiliate stigma—the internalization of public stigma by family caregivers of people with mental disorders—has been associated with emotional distress, burden, and reduced well-being. However, evidence from European contexts remains limited, and no national studies have been conducted in Italy. This study aimed to (1) assess levels of affiliate stigma among Italian family caregivers and (2) identify sociodemographic, relational, and psychological determinants of stigma.

Methods A cross-sectional online survey was conducted in Italy among 508 caregivers of people with mental disorders recruited through national and regional family associations. Measures included the Affiliate Stigma Scale (ASS), the Involvement Evaluation Questionnaire (IEQ), the Manchester Short Assessment of Quality of Life (MANSA), and the Three-Item Loneliness Scale (TILS). Multivariate linear regression was used to identify determinants of affiliate stigma.

Results Caregivers reported moderate levels of affiliate stigma, with the affective dimension scoring highest. The multivariate model explained 27.2% of the variance in ASS total scores. Higher affiliate stigma was independently associated with female sex ($\beta = 0.331$, $p = 0.004$), non-acceptance of diagnosis by the relative ($\beta = 0.251$, $p = 0.011$), psychotic disorder diagnosis ($\beta = 0.233$, $p = 0.011$), absence of contact in the last four weeks ($\beta = 0.391$, $p < 0.001$), loneliness ($\beta = 0.263$, $p < 0.001$), psychological distress ($\beta = 0.196$, $p < 0.001$), and caregiver burden ($\beta = 0.149$, $p = 0.002$).

Conclusion Affiliate stigma is a significant component of the caregiving experience in Italy and is associated with a range of emotional, relational, and caregiving-related factors. Findings underscore the need for stigma-informed, family-centred interventions that address caregivers' psychological well-being, social connectedness, and support needs. Longitudinal studies are needed to clarify temporal relationships and inform targeted strategies within community mental health services.

Keywords Affiliate stigma · Caregivers · Mental disorders · Loneliness · Psychological distress · Caregiver burden · Italy

Introduction

Stigma related to mental disorders is a pervasive phenomenon that adversely affects individuals with mental disorders, their families, and the wider community. Conceptual frameworks describe stigma as a socio-cultural process involving labelling, stereotyping, separation, status loss, and discrimination, all of which are embedded within power imbalances [1]. Public and structural stigma persist across health and social care systems, shaping access to care, treatment quality, and recovery trajectories [2–4]. Consequently, increasing attention has been directed not only toward stigma experienced by service users but also toward the stigma affecting their relatives [5].

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Family members of people with mental disorders may experience *courtesy stigma*—the stigma directed at individuals by virtue of their association with a stigmatized person—or *affiliate stigma*, which refers to the internalization of such stigma [6]. Whereas courtesy stigma concerns external prejudicial attitudes and behaviours, affiliate stigma captures the self-directed consequences of stigma: when caregivers accept and internalize negative societal stereotypes, leading to feelings of shame, guilt, self-blame, and the need to conceal the illness. Affiliate stigma can increase psychological distress, reinforce social withdrawal, and compromise caregivers' quality of life, well-being, and caregiving abilities [7, 8]. This process aligns with theoretical models of self-stigma, which emphasize the internal transition from public stereotypes to personal devaluation [9].

A substantial body of research has documented the impact of affiliate stigma across diagnostic groups and cultural settings. Systematic reviews and meta-analyses show that higher affiliate stigma is consistently associated with greater caregiver burden, depression and anxiety, reduced health-related quality of life, and impaired family functioning [10, 11]. Studies involving caregivers of people with severe mental disorders, neurodevelopmental disorders, dementia, and childhood psychiatric conditions have consistently replicated these associations [6, 8, 12].

Emerging evidence has also examined how affiliate stigma interacts with psychosocial variables. Caregiver burden and perceived social support have been shown to mediate the relationship between affiliate stigma and caregivers' mental health outcomes, suggesting complex pathways through which stigma influences well-being [13, 14]. Additionally, studies from both high-income and low- and middle-income countries have highlighted strong associations between affiliate stigma and emotional distress, lower quality of life, and increased loneliness or social isolation [15–17].

Despite a growing body of research, several important gaps remain. First, most studies on affiliate stigma have been conducted in Asian countries [6, 10], with relatively limited evidence from European settings, where research has more often focused on stigma by association or related constructs rather than affiliate stigma per se [13, 18], and virtually no large-scale investigations from Italy. In the Italian mental health system—shaped by deinstitutionalization and a strong emphasis on community-based care—families play a central role in support, advocacy, and informal caregiving [19, 20]. Understanding how affiliate stigma affects family caregivers of people with mental disorders in a context of community-based care where families play a central role is therefore essential. Second, most empirical research has relied on cross-sectional convenience samples recruited from hospitals or specialized services [8, 10, 15, 21], limiting generalizability to caregivers in community networks or family associations, who may differ in burden, support, coping resources, and stigma exposure [13, 22, 23].

Third, although prior work has documented associations between affiliate stigma and caregiver burden, depression, and quality of life [10, 12, 24], fewer studies have explored other psychosocial domains such as loneliness, social connectedness, and broader aspects of well-being. Given the increasing recognition of loneliness as a key public health determinant [25–27], examining its relationship with affiliate stigma is particularly timely.

This study addresses these gaps by reporting findings from a national survey of family members of people with mental disorders in Italy, recruited through family associations across the country. Its objectives were: (1) to describe levels of affiliate stigma in this population and (2) to examine associations between affiliate stigma, caregiver characteristics, and key psychosocial variables—namely, caregiver burden, perceived quality of life, and loneliness. By focusing on caregivers involved in family associations, this study provides new evidence for the Italian context and offers empirically grounded elements to inform support strategies and stigma-reduction initiatives within community mental health services.

Methods

Study design and participant recruitment

This observational study used a cross-sectional design. This paper follows the STROBE checklist for reporting cross-sectional studies (see Supplementary file: STROBE Statement— checklist). The target population comprised adult family caregivers of individuals with mental disorders. Participants were recruited through some national and regional family associations, including "Fondazione Progetto Itaca", "Famiglie in Rete", and "Associazione Italiana Tutela Salute Mentale" (AITSaM). The family associations involved in the study are well-established organizations with broad geographical coverage and a significant role in advocacy and support for families of people with mental disorders in Italy. They were recruited based on prior collaborative relationships with the research group developed in previous research projects, which supported feasibility and effective dissemination of the survey. Eligible participants were required to be at least 18 years old, without a diagnosis of a mental disorder, and engaged in continuous caregiving for a relative with a mental disorder for a minimum of six months. Participation was voluntary and anonymous.

Individuals could decline or withdraw from the survey without consequences. No incentives were offered.

Data collection procedures

Before initiating data collection, the research team conducted several briefing meetings with representatives of the participating associations to present the study objectives and assess the feasibility of administering the instruments. The schedule for collecting caregivers' socio-demographic information and clinical characteristics of family members with mental disorders was discussed and jointly defined by family association representatives and the research team.

Association representatives informed their members about the rationale and aims of the study through in-person and online meetings, as well as via information posted on association websites and social media platforms, email communications, newsletters, and other informal channels.

Data collection took place between July 3 and July 31, 2025. Data were collected using an online LimeSurvey questionnaire, which included study information, informed consent, and all assessment instruments. The survey link was disseminated through the participating associations using the channels described above. Because recruitment relied on broad dissemination through multiple communication channels rather than direct invitations to a defined sampling frame, the number of caregivers who were exposed to the survey invitation could not be determined; consequently, a response rate could not be calculated.

The study protocol was approved by the Ethics Committee for Research of the University of Trento (Protocol No. 2025-042; approval date: July 2, 2025).

Measures

Information on caregivers and family members with mental disorders

A self-administered ad hoc questionnaire collected sociodemographic data on caregivers (age, gender, education, marital status, geographical region, population size of the residential area, living situation), characteristics of the caregiving relationship (relationship status, cohabitation, frequency of contact), caregivers' membership in family associations (duration, role, participation in activities), and characteristics of family members with mental disorders (gender, age, illness duration, diagnosis, hospital admissions, type of care received). Caregivers were also asked whether their relative accepted the psychiatric diagnosis that had been communicated to them ("*Does your relative with a mental disorder accept the diagnosis that has been communicated to him/her*?"). This item captured the caregiver's perception of diagnostic acceptance or rejection and, indirectly, treatment engagement. It did not assess clinical insight, awareness of illness, or underlying psychological mechanisms, and should be interpreted as an observable caregiver-reported indicator relevant to engagement with care.

Affiliate Stigma Scale (ASS)

Affiliate stigma was assessed using the Italian version of the Affiliate Stigma Scale (ASS) [6], which was translated and adapted for this study. The Italian version was developed through a forward–backward translation procedure involving bilingual researchers. The translated version was subsequently reviewed by the research team and family caregivers to assess clarity, comprehensibility, and cultural relevance before its use in the survey. The 22-item instrument measures caregivers' internalized stigma across three domains: cognitive (7 items), affective (7 items), and behavioural (8 items). Items are rated on a 4-point Likert scale ranging from 1 ("strongly disagree") to 4 ("strongly agree"), with higher scores indicating greater internalized stigma. The original scale demonstrated strong psychometric properties, including high internal consistency ($\alpha = 0.87–0.94$) and a stable factor structure. The ASS has been translated and validated in multiple languages [12, 16, 28–30], with studies consistently confirming its reliability, structural validity, and cross-cultural applicability. A formal psychometric validation of the Italian version of the ASS is currently in preparation and will examine its factorial structure and other measurement properties in the Italian context. Internal consistency in the present sample was excellent (Cronbach's $\alpha = 0.927$).

Involvement Evaluation Questionnaire (IEQ)

Caregiver burden was assessed using the Italian validated version of the Involvement Evaluation Questionnaire (IEQ-EU) [31]. The IEQ-EU measures the practical, emotional, and supervisory aspects of caregiving over a four-month period. The scale assesses four domains: tension, urging, worry, and supervision. Items are rated from 0 ("never") to 4 ("very often"), with higher scores indicating greater burden. The Italian version of the IEQ-EU has demonstrated good psychometric properties, with Cronbach's α values ranging from 0.68 to 0.86 for subscales and from 0.88 to 0.92 for the total score, as well as robust cross-cultural validity in studies of caregivers of people with severe mental disorders. In the present sample, Cronbach's α was 0.909.

The IEQ-EU also includes the General Health Questionnaire-12 (GHQ-12), used to assess caregivers' psychological distress. GHQ-12 items are rated on a 4-point scale, ranging from 1 ("less than usual/never") to 4 ("much more than usual/always"). For statistical analyses, responses were recoded using the standard bimodal scoring method (0-0-1-1), resulting in a total score ranging from 0 to 12, with higher scores indicating greater psychological distress. In the present sample, Cronbach's α was 0.864.

Manchester Short Assessment of Quality of Life (MANSA)

Quality of life was measured using the Italian translation of the Manchester Short Assessment of Quality of Life (MANSA) [32], a brief instrument widely used to asses subjective quality of life in people with mental disorders and their caregivers across international settings. The MANSA comprises 12 items assessing subjective satisfaction across life domains (rated 1–7 from "very dissatisfied" to "very satisfied") and 4 additional objective items concerning employment, living situation, social relationships, and activities. The total mean score is calculated on the 12 subjective items, with higher scores indicating a better quality of life. The original MANSA has demonstrated satisfactory psychometric properties, including good internal consistency and construct validity [33]. Although a formal psychometric validation of the Italian version has not yet been published, the MANSA has been used in previous Italian psychiatric research studies [34, 35] supporting its feasibility and acceptability in Italian context. In the present sample, Cronbach's α was 0.864.

Three-item loneliness scale

Perceived loneliness was assessed using the Three-Item Loneliness Scale from the UCLA Loneliness Scale [36]. The scale measures three aspects of perceived social isolation—lack of companionship, feelings of isolation, and feeling left out—using a 3-point format (1 = "hardly ever," 2 = "some of the time," 3 = "often"). Total scores range from 3 to 9, with higher scores indicating greater loneliness. The scale has shown acceptable internal consistency (α ≈ 0.70–0.85) and strong correlations with the full UCLA Loneliness Scale [36]. Although an Italian adaptation of the UCLA Loneliness Scale has been used in previous studies [37], a formal psychometric validation of the Italian version of the Three-Item Loneliness Scale has not yet been published. In the present sample, Cronbach's α was 0.820.

Statistical analyses

Descriptive statistics summarized sample characteristics. Categorical variables were reported as frequencies and percentages, while continuous variables were reported as means and standard deviations. Item-level responses and total scale scores were calculated for each instrument.

Group comparisons across demographic and clinical subgroups were performed using t-tests (for two groups) or one-way analysis of variance (ANOVA) (for more than two groups). Univariate linear regression models were estimated for the total ASS score as the dependent variable and each of a series of sociodemographic and clinical characteristics as the independent variables. All candidate variables were first examined using univariate linear regression; only results are reported in Supplementary Table 10 S. Subsequently, variables significantly associated with the ASS total score (unadjusted Beta, $p < 0.05$) were entered into a multivariate linear regression model to estimate adjusted associations with the affiliate stigma total score. Given the exploratory nature of the study and the number of candidate variables examined, a pragmatic variable-reduction strategy was adopted to obtain a parsimonious and interpretable multivariable model. Prior to fitting the multivariable regression model, multicollinearity was evaluated by calculating Variance Inflation Factors (VIFs) for all predictors. Interaction effects between sex and the other predictors were not formally tested. Although the ASS includes three correlated subscales, the total score was used in the regression analyses because it demonstrates the highest reliability and is the most widely used summary indicator in epidemiological studies of affiliate stigma. Analyses were performed using Stata 18 for Windows.

Results

Characteristics of caregivers

The socio-demographic characteristics of participants are presented in Table 1.

The sample consisted of 508 family caregivers, with a mean age of 59.8 years (SD 11.4); most were women (83.2%) and were married or cohabiting (69.5%). Regarding education, 41.3% had a high school diploma, 36.4% held a university degree, and 10.8% had a postgraduate qualification. Participants were predominantly from Northern Italy (North-East 38.8%; North-West 37.8%). In terms of residence, 44.5% lived in medium-sized cities (<250,000 inhabitants) and 26% in large or very large urban areas. Most caregivers (83.3%) lived with a partner and/or children.

Most participants were parents of individuals with mental disorders (66.3%), followed by adult children (15.9%),

Table 1 Socio-demographic characteristics of the caregivers ($n=508$)

	n	%
Age, mean (SD)	59.8	11.4
Gender (7 missing)		
Female	417	83.2
Education		
Lower secondary / vocational qualification	58	11.4
Upper secondary school	210	41.3
University degree	185	36.4
Postgraduate degree	55	10.8
Marital status		
Single	41	8.1
Married/cohabiting	353	69.5
Separated/divorced	79	15.6
Widowed	35	6.9
Geographical region		
North-West	192	37.8
North-East	197	38.8
Centre	38	7.5
South and islands	81	16.0
Population size of the residential area		
Rural area	9	1.8
<5,000 inhabitants	66	13.0
<10,000 inhabitants	75	14.8
<250,000 inhabitants	226	44.5
>250,000 inhabitants	57	11.2
>1 million inhabitants	75	14.8
Living situation		
Alone	56	11.0
With partner and/or children	423	83.3
With parents and/or siblings	13	2.6
With other relatives	4	0.8
With acquaintances or friends	5	1.0
Other	7	1.4

siblings (9.8%), and partners (4.5%). More than 60% declared to cohabitate with the relative with a mental disorder. In the past four weeks, 52.1% had spent time with their relatives every day, 17.6% on some days, and 30.3% did not spend any time with them at all. Regarding time spent together, 39.4% reported more than 32 h per week (Table 2).

Most caregivers (63.6%) reported being members of a family association. Among them, 43.2% had been affiliated for 1–4 years, while smaller proportions had participated for 5–9 years (19.6%), 10–14 years (15.2%), or more than 15 years (12.1%). The majority (59.4%) identified as ordinary members, with fewer holding active roles. Overall, 78.9% reported participation in association activities, with mutual-help groups being the most common (68.1%), followed by psychoeducational programmes (13.5%) and individual or group psychotherapy (16.7%) (Table 3).

Table 2 Characteristics of the caregiving relationship ($n=508$)

	n	%
Relationship status		
Parent	337	66.3
Child	81	15.9
Sibling	50	9.8
Other relative	15	3.0
Partner	23	4.5
Neighbour	1	0.2
Colleague	1	0.2
Cohabitation with the relative with mental disorder	314	61.8
Days spent together with relatives with mental disorders (last 4 weeks) (49 missing)		
Never	139	30.3
Some days	81	17.6
Every day	239	52.1
Weekly contact time (hours) (49 missing)		
<1	62	13.5
1–4	80	17.4
5–8	51	11.1
9–16	43	9.4
17–32	42	9.2
>32	181	39.4

Table 3 Caregivers' membership in family associations and participation in association-based activities ($n=508$)

	n	%
Member of a family association		
No	185	36.4
Yes	323	63.6
Membership duration (185 NA, 1 missing)		
<1 year	32	9.9
1–4 years	139	43.2
5–9 years	63	19.6
10–14 years	49	15.2
≥15 years	39	12.1
Role within the association (185 NA)		
Ordinary member	192	59.4
Leadership/governance roles	74	22.9
Group facilitation/training roles	16	5.0
Volunteer/support roles	37	11.5
Multiple roles	4	1.2
Participation in support meetings		
No	107	21.1
Yes	401	78.9
Type of support		
Self-help family groups (107 NA)	273	68.1
Individual or group psychotherapy (107 NA)	67	16.7
Psychoeducational groups (107 NA)	54	13.5

Characteristics of family members with mental disorders

Family members with mental disorders averaged 34.9 years (SD = 15.9), with 59.2% male (Table 4). The mean illness

Table 4 Characteristics of family members with mental disorders ($n=508$)

	n	%
Age, mean (SD) (2 missing)	34.9	15.9
Male (6 missing)	297	59.2
Illness duration (years), mean (SD) (6 missing)	17.3	12.6
Type of diagnosis (44 NA)		
Psychotic disorders	174	37.5
Mood disorders	98	21.1
Personality disorders	91	19.6
Neurodevelopmental disorders	79	17.0
Eating and nutrition disorders	22	4.7
Accept the diagnosis (44 NA)	328	70.7
Past psychiatric hospitalisations	348	68.5
Type of hospitalisation (160 NA)		
Voluntary	185	53.2
Involuntary	99	28.4
Both	64	18.4
Currently receiving MH care	430	84.6
Reason for not receiving MH care (430 NA)		
Refusal of treatment	36	46.2
Difficult access to services	3	3.8
Don't know	39	50
Type of MH care received		
Public mental health services	326	64.2
Private specialists	131	25.8
General Practitioner	36	7.1
Social services	27	5.3

duration was 17.3 years (SD 12.6). The most frequent reported diagnoses included psychotic disorders (37.5%), mood disorders (21.1%), personality disorders (19.6%), and neurodevelopmental disorders (17.0%). Of all family members with mental disorders, 70.7% accepted their diagnosis. The majority (68.5%) had experienced psychiatric hospitalization, either voluntarily (53.2%) or involuntarily (28.4%). Most (84.6%) were receiving some form of mental health care, primarily through public community mental health centres (64.2%), private psychiatrists (25.8%), or general practitioners (7.1%).

Caregivers' affiliate stigma

The mean ASS total score was 2.1 (SD 0.5; range 1.0–3.8). Among subscales, the affective dimension showed the highest mean score (2.6; SD 0.6), followed by the cognitive (2.0; SD 0.5) and behavioural (1.7; SD 0.5) dimensions. Item-level frequencies are presented in Online Supplement Table 1S. Briefly, the most frequently endorsed affective items—those on which over 70% agreed or strongly agreed—included feeling emotionally strained (85.7%), sad (82.5%), very pressured (77.6%), and powerless (70.0%). Substantial proportions also reported being negatively affected (69.1%), embarrassed by the relative's behaviour (45.9%), reducing contact with friends or relatives (42.3%), and anticipating discrimination if seen with their relative (34.6%).

Caregivers' burden

The mean overall burden score (IEQ) was 2.0 (SD 0.7; range 1.0-4.8). Among subscales, worry showed the highest score (2.5; SD 0.9), followed by tension (2.0; SD 0.8) and emotional burden (2.0; SD 0.9). Supervision scores were lower (1.7; SD 0.9), though several supervision-related items remained elevated. Item-level frequencies are presented in Online Supplementary Table 2 S. Notably, more than 10% of caregivers endorsed the "(almost) always" category—indicating severe burden—for concerns about the relative's future (26.1%) and their own future (20.7%), changes in family relationships due to illness (18.1%), monitoring medication intake (18.1%), financial worries (15.0%), perceiving the disorder as a burden to themselves (13.7%), relatives insisting on doing things (12.0%), need to encourage self-care (10.9%), and health concerns (10.9%).

For psychological distress (GHQ-12), the mean score was 5.7 (SD 2.7; range 0–12). Using the standard cut-off (≥ 3), 78.3% of caregivers met criteria for clinically significant distress. Detailed item frequencies are provided in Online Supplementary Tables 3 S and 4 S.

Caregivers' quality of life

The mean overall life satisfaction score was 4.6 (SD 0.9; range, 1.3–7). Satisfaction across specific domains showed a mean score of 4.9 (SD 1.1; range 1–7), while health-related satisfaction averaged 4.2 (SD 1.2; range 1–7). For each item, response frequencies (dissatisfied/mixed/satisfied) were also calculated. Details are in the Online Supplementary Material, Table 5S. Briefly, the most critical domains ("dissatisfied" category) were sexual life (37.8%) and psychological well-being (30.8%), leisure time (28.6%), and financial situation (24.8%). Regarding items exploring social relationships, 78.4% reported having a close friend, and 73.1% to have met at least one friend in the previous week.

Caregivers' perception of loneliness

The mean loneliness score was 5.0 (SD = 1.8; range, 3–9). Notably, 38.9% scored in the "lonely" range (6–9), reporting frequent feelings of lacking companionships (some of the time: 46.2%; often: 18.5%), feeling left out (some of the time: 32.5%; often: 11.6%), and feeling isolated from others (some of the time: 33.3%; often: 15.0%). Details are

Table 5 Multivariate Linear Regression Model for ASS Total (only independent variables significantly associated at $p<0.05$ in the univariate linear regression models were included in the multivariate one; in bold significant adjusted associations)

Independent variable	Reference category	Adjusted β	*p*
Caregiver's sex	Male	0.331	0.004 (Female)
Caregiver's age	>70	0.150	0.238 (61–70)
		0.067	0.606 (51–60)
		0.117	0.442 (≤50)
Acceptance of diagnosis by relative with mental disorder	**Yes**	**0.251**	**0.011 (No)**
Diagnosis of psychosis in relatives with mental disorder	**No**	**0.233**	**0.011 (Yes)**
Current MH care provision on relative with mental disorder	Yes	0.222	0.086 (No)
Days spent together with relatives with mental disorders (last 4 weeks)	Every day	0.040	0.742 (Some days)
		0.391	**<0.001 (Never)**
Loneliness	—	**0.263**	**<0.001**
Psychological distress	—	**0.196**	**<0.001**
Family burden	—	**0.149**	**0.002**
Adjusted R-squared (%)			27.2%

S1

provided in the Online Supplementary Material, Table 6 S and 7 S.

Comparisons of mean affiliate stigma levels across groups defined by key characteristics

Exploratory comparisons of affiliate stigma across caregiver and patient subgroups are reported in the Supplementary Material (Table 8, and 9 S).

Unadjusted and adjusted associations of caregivers' and family members' characteristics with affiliate stigma

In univariate analyses, several sociodemographic, relational, and psychological variables were associated with affiliate stigma (details are reported in Supplementary Table 10 S). Variables significantly associated at $p<0.05$ were entered into the multivariate regression model (Table 5). All VIF values were below 2 (range: 1.03–1.14), indicating no evidence of problematic multicollinearity among the predictors included in the model.

A multivariate linear regression model including all variables significantly associated in univariate analyses identified female sex, non-acceptance of diagnosis, psychotic disorder, absence of contact, loneliness, psychological distress, and caregiver burden as independent correlates of affiliate stigma. The model explained 27.2% of the variance.

Discussion

This study represents one of the first investigations in Italy to systematically examine affiliate stigma among family caregivers of individuals with mental disorders and their sociodemographic, relational, and psychological correlates. The findings offer a comprehensive and nuanced picture that is broadly consistent with international evidence, while highlighting distinctive elements of the Italian caregiving context.

In this predominantly female sample with a mean age of approximately 60 years, the mean total score on the Affiliate Stigma Scale (ASS) indicated a moderate level of perceived stigma. The affective dimension showed the highest mean score, followed by the cognitive and behavioural dimensions. This pattern suggests that affiliate stigma is primarily expressed through internal emotional experiences, such as sadness, helplessness, shame, and guilt, rather than overt behavioural avoidance or cognitive distancing. This is consistent with the original conceptualization of the ASS [6], and previous cross-cultural findings indicating that emotional components are central to caregivers' internalized stigma processes [12, 38].

Socio-demographic and relational correlates

Regression analyses showed that affiliate stigma is associated with a combination of socio-demographic, relational, and psychological factors. The multivariate model explained 27.2% of the variance, a proportion that is meaningful in psychosocial research, although a substantial proportion of variance remains unexplained. This suggests that additional factors not captured in the present model, such coping strategies, resilience, family functioning, social support, personality characteristics, and illness-related variables, likely contribute to affiliate stigma.

Within this model, female gender, non-acceptance of the diagnosis, diagnosis of psychosis, absence of contact, loneliness, psychological distress, and caregiving burden emerged as independent correlates. Overall, these findings indicate that affiliate stigma is primarily shaped by emotional and relational processes, rather than demographic characteristics alone.

Female caregivers reported higher levels of affiliate stigma, consistent with previous literature. The sample was predominantly female, reflecting the well-documented gender imbalance in informal caregiving roles, which limits the

generalizability of the findings to male caregivers. Accordingly, the observed association between female sex and affiliate stigma should be interpreted with caution. Interaction effects between sex and other variables were not formally tested, and residual confounding cannot be excluded. Previous research suggests that women may experience somewhat higher levels of caregiver burden and emotional strain, although effect sizes are often modest and findings heterogeneous [39]. Beyond individual-level explanations, these results should also be interpreted in light of broader structural and societal conditions. In Italy, as in many other contexts, informal caregiving responsibilities remain unevenly distributed, with women disproportionately bearing the emotional and practical burden of care. This pattern is reinforced by limited formal support and by persistent expectations of female responsibility for family care. Within this context, women often assume a central role in the emotional management of illness within families, which may increase perceived responsibility and vulnerability to internalized stigma [8, 10, 40].

Caregivers of individuals with psychotic disorders also reported higher levels of affiliate stigma. This finding is consistent with extensive evidence showing that schizophrenia and related conditions elicit stronger public stigma than most other mental disorders, often linked to perceptions of dangerousness, unpredictability, and chronicity [41, 42]. Such societal representations may heighten caregivers' shame, fear of judgment, and tendencies toward self-labelling, thereby reinforcing avoidance and social withdrawal. Our results also align with studies indicating that caregivers of relatives with psychosis or bipolar disorder report higher affiliate stigma compared with those caring for individuals with depressive or anxiety disorders [10, 15, 43, 44]. Similar patterns have been observed in early psychosis, where higher levels of affiliate stigma are closely intertwined with self-stigma processes in both patients and family members [45].

Non-acceptance of the diagnosis by the relative emerged as one of the strongest variables associated with affiliate stigma. In this study, this variable referred to the caregiver's perception that the relative did not accept the diagnosis communicated to them. This construct may reflect different phenomena, including limited awareness of illness, disagreement with the diagnostic label, or rejection of the mental health condition. From a caregiving perspective, non-acceptance of diagnosis may also indicate reduced engagement with mental health services, including reluctance to seek specialist care or adhere to treatment, thereby increasing caregiving responsibility and stress. In this sense, the observed association between non-acceptance of diagnosis and affiliate stigma may partly reflect the additional challenges associated with caring for a person who does not acknowledge the need for treatment [46–48]. However, causality cannot be inferred. Non-acceptance of diagnosis may increase caregiver burden and facilitate internalized stigma, but it is also plausible that caregivers experiencing higher affiliate stigma may perceive or report greater diagnostic rejection as a coping response to the emotional burden of mental illness. Accordingly, a bidirectional relationship cannot be excluded.

A particularly notable finding is that the absence of contact in the previous four weeks was associated with higher affiliate stigma. While this result may appear broadly consistent with contact theory [49], such an interpretation should be made cautiously, as contact theory was originally developed in inter-group contexts and may not fully capture dynamics within caregiving relationships. In this context, absence of contact is more plausibly interpreted as an indicator of relational strain, caregiver burden, emotional exhaustion, or breakdown in family interaction, rather than reduced familiarity or exposure. Given that contact was measured only in terms of presence versus absence, no conclusions can be drawn about relational quality. It would therefore be speculative to assume that absence of contact reflects a lack of positive interactions. The direction of the association is also uncertain. While reduced contact may contribute to higher affiliate stigma through increased isolation and relational stress, it is equally plausible that caregivers experiencing higher levels of affiliate stigma withdraw from contact due to feelings of shame, emotional burden, or avoidance of stigmatizing interactions. Accordingly, absence of contact may represent a proxy indicator of relational crisis or internalized stigma.

Psychological correlates: loneliness, distress, and burden

Consistent with this relational pattern, psychological variables emerged as the strongest determinants of affiliate stigma in our study. Among them, perceived loneliness was the most influential factor. This finding is consistent with evidence linking higher stigma to social withdrawal, emotional isolation, and reduced participation in meaningful relationships among caregivers of people with mental disorders [21, 50]. Recent work also highlights loneliness as a central mediator between caregiver burden and psychological distress, suggesting that stigma may operate through pathways of social disconnection. In the Italian context, this mechanism may be particularly salient. Although caregiving often takes place within traditionally tight and supportive family networks, many caregivers—especially in regions with limited formal mental health resources—bear the bulk of responsibility alone. The combination of strong cultural expectations of family duty and uneven availability of structured support may paradoxically heighten caregivers' sense

of isolation, making loneliness a key psychological vulnerability through which affiliate stigma is intensified.

Psychological distress was also strongly associated with stigma. This relationship appears to be bidirectional: psychological distress may reinforce negative beliefs about illness and oneself, while internalized stigma has been consistently associated with increased anxiety, depressive symptoms, and demoralization [7, 22]. Prior studies have demonstrated that caregivers who internalize stigma report higher levels of depressive symptoms, lower self-esteem, and poorer coping abilities [22].

Caregiving burden, consistent with findings from studies conducted in different countries, was associated with affiliate stigma [38, 51, 52], underscoring the central role of family burden in the caregiving experience of severe mental illness [19]. High levels of responsibility, supervision, and worry may contribute to shame, self-blame, and emotional exhaustion, particularly when caregivers perceive insufficient service support or feel solely responsible for managing crisis situations. Evidence further suggests that caregiver burden may mediate the relationship between stigma and mental health outcomes [13, 22], highlighting the interplay between emotional strain and internalized stigma.

Overall, these findings suggest that affiliate stigma is a multidimensional construct influenced primarily by emotional distress, relational disruption, and caregiving burden, with additional contributions from diagnosis-related and contextual factors. The results highlight the central role of subjective and relational experiences in shaping caregivers' internalised stigma.

Strengths and limitations

This study has several strengths. It draws on a large national sample of caregivers recruited through multiple associations, offering a broad perspective on family experiences within the Italian mental health context. It uses a standardized and internationally recognized measure of affiliate stigma (ASS), adapted for Italy, allowing comparison with studies conducted in other countries. The study also assessed a wide range of psychosocial variables—loneliness, psychological distress, and caregiving burden—that are rarely examined simultaneously in relation to affiliate stigma. Finally, the project was co-produced with family associations, which contributed to the development of the questionnaire and the selection of the instrument, thereby enhancing the ecological validity and acceptability of the research.

However, several limitations should be acknowledged. First, the use of a convenience sample limits the generalizability of findings. In addition, recruitment through family associations without a defined sampling frame meant that the number of caregivers exposed to the invitation was unknown and a response rate could not be calculated. Second, data were collected through an online survey, which may have excluded individuals with limited digital literacy or restricted Internet access. Third, recruitment through family associations may have resulted in a sample that is not representative of all caregivers in Italy; association members often benefit from peer support and psychoeducational activities, which may mitigate stigma compared to more isolated caregivers. Fourth, caregivers not affiliated with associations were not included, potentially leading to an underestimation of stigma levels in the broader population. Fifth, information on the clinical characteristics of relatives (e.g., diagnosis, illness duration, treatment history) was caregiver-reported and not verified against clinical records, introducing possible misclassification or reporting bias. Sixth, the cross-sectional design prevents causal inference and cannot disentangle the temporal direction of associations between affiliate stigma and psychosocial factors. Finally, all measures relied on self-report, which may be influenced by social desirability bias, particularly for sensitive emotional and attitudinal constructs.

Recommendations and conclusions

This study highlights affiliate stigma as a multidimensional and clinically relevant experience among family caregivers of people with mental disorders in Italy. Affiliate stigma appears to be closely linked to emotional distress, loneliness, caregiving burden, and relational factors such as non-acceptance of diagnosis and absence of contact. These findings underscore the importance of considering caregivers not only as providers of care but also as individuals experiencing significant psychological and social burden.

From a clinical and service perspective, our results underscore the importance of integrating psychoeducational, psychosocial, and contact-based interventions that foster supportive environments for families. Structured family work, stigma-focused psychoeducation, peer-support groups, and programmes aimed at enhancing insight and communication within families may help reduce internalized stigma and improve well-being [38].

At a policy level, public stigma reduction campaigns and community-based narratives that highlight recovery and inclusion may indirectly reduce stigma by reshaping societal attitudes [53]. Since families remain a cornerstone of Italy's mental health system, supporting them is essential for strengthening community care.

Future research should adopt longitudinal and mixed-methods designs to clarify temporal relationships between affiliate stigma and its correlates, and to explore potential mediating mechanisms such as coping strategies, family

functioning, and resilience, thereby informing the development of targeted interventions within community mental health services.

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Data availability The datasets generated and analysed during the current study are not publicly available due to ethical and privacy considerations, but are available from the corresponding author upon reasonable request.

Declarations

Competing interests The authors declare no competing interests.

Ethics approval and consent to participate The study protocol was approved by the Ethics Committee for Research of the University of Trento (Protocol No. 2025-042; approval date: 2 July 2025). All participants received detailed study information and provided informed consent electronically before accessing the survey. Participation was voluntary and anonymous, and respondents could withdraw at any time without consequences.

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