LETTER TO THE EDITOR

Psychopathological comorbidity in patients with chronic pain and the need for greater collaboration between specialists.

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To the Editor,

Mental disorders and *chronic pain* are two leading causes of *disability* worldwide and often *co-occur*, although with considerable variance, due to inconsistent methods of assessing psychopathology (self-reports versus standardized interviews) (1). A deeper understanding of psychopathology in chronic pain (a putative predictor of poor prognosis) can thus improve treatment response and outcomes (2). Conversely, failing to detect psychopathology can lead to increase the risk of undertreatment and pain medication abuse (3). Mental disorders are now easily accessible to pharmacotherapy/psychotherapy, potentially decreasing the persistence of pain (4). Despite this evidence of comorbidity, psychopathology in chronic pain remains partially under-diagnosed/under-treated, suggesting poor collaboration between pain therapy and psychiatric services (5). In a recent survey exploring the prevalence of current psychiatric comorbidity in 172 chronic pain patients during their first consultation within the pain therapy service of the *Parma University Hospital* (Northern Italy) (6), we reported that one-fifth of our participants had a comorbid mental disorder currently diagnosed and treated by mental health professionals (particularly major depressive disorder), and another 7 patients were taken psychotropic drug exclusively to treat current psychopathology. This subgroup also had longer duration of pain, higher prevalences of unemployment and fixed-dose analgesia, and greater severity levels of current pain and interference with daily functioning (Table 1). Notably, approximately 52% of participants with no currently confirmed comorbid psychopathology exceeded at least one of the cut-off scores for the presence of a clinically relevant psychiatric syndrome. Correlation analyses further confirmed these statistically significant associations, also after checking for duration of chronic pain (Table 2).

Received: 8 October 2025 | Accepted: 8 November 2025

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Table 1. Sociodemographic and clinical features in the two subgroups.

Variables	PSY+ (n=31)	PSY- (n=141)	X^2/U	P
Gender (females)	22 (71.0%)	91 (64.5%)	.466	.495
Age at entry (in years)	46.8±9.37	47.5±10.50	1986	.427
Years of education	12.60±3.22	13.10±3.20	2006	.461
Civil status (single)	12 (38.7%)	26 (18.4%)	6.360	.118
Living status (alone)	9 (29.0%)	21 (14.9%)	4.840	.163
Unemployment	9 (29.0%)	17 (12.1%)	13.019	**.005**
Nationality (Italian)	30 (96.8%)	129 (91.5%)	1.020	.467
Duration of chronic pain (in months)	82.90±92.80	52.80±119.00	1448	**.003**
ICD-11 primary chronic pain	24 (77.4%)	127 (90.1%)	3.790	.091
Fixed-dose analgesic treatment	24 (77.4%)	72 (51.1%)	7.160	**.032**
BPI Pain items				
BPI-3: Worst pain in the last 24 hours	7.94±1.94	7.13±2.15	1713	.065
BPI-4: Least pain in the last 24 hours	5.00±2.57	4.49±2.36	1905	.261
BPI-5: Average pain in the last 24 hours	6.97±1.45	6.04±2.13	1587	**.015**
BPI-6: Current pain	6.77±1.87	5.60±2.61	1577	**.014**
Mean severity score	7.49±1.75	6.35±2.37	1556	**.012**
BPI-8: Percentage of pain relief in the last 24 hours	34.52±30.86	36.45±27.00	2026	.521
BPI Interference items				
BPI-9A: General activity	8.35±1.87	7.22±2.57	1602	**.018**
BPI-9B: Mood	7.35±3.05	6.98±2.96	1936	.314
BPI-9C: Walking ability	6.97±3.14	5.79±3.20	1661	**.036**
BPI-9D: Normal work (including housework)	7.90±2.65	7.13±2.77	1771	.094
BPI-9E: Social relationships	6.81±2.94	5.18±3.50	1582	**.015**
BPI-9F: Sleep	7.52±2.89	6.48±3.22	1734	.069
BPI-9G: Enjoyment of life	7.55±2.93	5.67±3.63	1502	**.006**
Mean activity interference score	7.74±1.97	6.71±2.35	1608	**.021**
Mean affective interference score	7.24±2.42	5.94±2.98	1640	**.030**
Mean interference score	7.49±1.75	6.35±2.37	1556	**.012**
MCMI-III (cut-off score of ≥ 75: *presence of disorder*)				
At least one cut-off score of ≥ 75	25 (80.6%)	73 (51.8%)	8.640	**.003**
			28.200	**.001**
A-Anxiety	9 (29.0%)	32 (22.7%)	[.749]	
H-Somatoform disorder	4 (12.9%)	21 (14.9%)	[.285]	
D-Dysthymic disorder	0 (0.0%)	4 (2.8%)	[-.948]	
T-Drug dependence	0 (0.0%)	1 (0.7%)	[-.470]	
SS-Thought disorder	1 (3.2%)	1 (0.7%)	[1.183]	
CC-Major depression	9 (29.0%)	5 (3.5%)	[4.699]	
PP-Delusional disorder	2 (6.5%)	9 (6.4%)	[.014]	
Absence of disorder	6 (19.4%)	68 (48.2%)	[2.939]	

Abbreviations: PSY+ = Participants with psychiatric comorbidity; PSY- = participants without psychiatric comorbidity; BPI = Brief Pain Inventory; MCMI-III = Millon Clinical Multiaxial Inventory. Frequencies (and percentages), mean (±standard deviation), Chi-square test (X^2) and Mann-Whitney test (U) values are reported. Adjusted standardized residuals are in square brackets. Statistically significant p values are bold. Bonferroni's corrected p values are reported.

Although lower than that observed in previous research (2-4), our prevalence of comorbid psychopathology suggests the importance of not overlooking and appropriately identifying and treating mental disorders in close collaboration with mental health professionals. Because it is associated with worse outcomes, appropriate treatment of this comorbidity can improve clinical and functional recovery in chronic

Table 2. Correlation analyses between psychiatric comorbidity and other statistically significant clinical parameters, also after controlling for duration of chronic pain.

Variables	ρ (p)	After controlling for duration of chronic pain ρ (p)
Unemployment	.182 (**.011**)	.187 (**.014**)
Fixed-dose analgesic treatment	.197 (**.009**)	.194 (**.010**)
BPI scores		
Mean severity score	.185 (**.015**)	.167 (**.028**)
Mean interference score	.189 (**.012**)	.165 (**.030**)
MCMI-III (cut-off score ≥ 75: *presence of disorder*)		
At least one cut-off score ≥ 75	.239 (**.002**)	.210 (**.006**)

Abbreviations: ρ = Spearman's rho coefficient; p = statistical significance; BPI = Brief Pain Inventory; MCMI-III = Millon Clinical Multiaxial Inventory, III edition. Statistically significant p values are in bold.

pain. Psychiatrists should also be made aware of this. Indeed, chronic pain is not a key component of clinical psychiatry and is not formally taught (7). Furthermore, many psychiatrists continue to mistakenly consider psychopathology in chronic pain as secondary to undiagnosed organic illnesses (8). Finally, pain clinicians are often reluctant to cede professional territory to mental health (9). These factors impede the involvement of mental health professionals in pain management and weaken constructive interdisciplinary cooperation. Our results also significantly highlight that a large proportion of participants without a confirmed psychiatric diagnosis currently suffer from severe psychopathology without receiving an appropriate psychiatric diagnosis/treatment. The stable inclusion of mental health operators in multidisciplinary chronic pain teams could fill this gap, promote more appropriate interventions, and improve pain outcomes by offering relevant psychopathological assessments, psychotherapy, and continuous clinical/pharmacological monitoring. Moreover, our findings support the idea that some patients with chronic pain and comorbid psychopathology may be treated pharmacologically only by general practitioners, without being diagnosed by specialists and without accessing mental healthcare services, with an increased risk of treatment inappropriateness. In conclusion, only a *minority* of individuals with chronic pain are likely treated and monitored for their current psychopathology. Because this comorbidity complicates pain treatment and outcomes, unmasking undetected mental disorders helps improve prognosis in chronic pain. The continued involvement of mental health professionals within *multidisciplinary* chronic pain teams is warranted, as is the development of specific processes/procedures that involve both psychiatric and chronic pain services.

Authors' Contribution: All authors wrote, read, and approved the final version of the manuscript.

Ethical Standard: In the cited study, all participants gave written informed consent for the inclusion in the research. Local ethical approvals were obtained for the study (AVEN Ethics Committee protocol no. 20841/2023). Finally, the investigation was conducted in accordance with the 1964 Declaration of Helsinki and its later amendments.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

Declaration on the Use of AI: None.

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