

# Effect of gender socialization on the presentation of depression among men

## A pilot study

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### Abstract

**Objective** To examine the association between men's conformity to masculine norms and depression.

**Design** Cross-sectional analysis.

**Setting** University family practice clinic in Vancouver, BC.

**Participants** Male patients, 19 years of age and older (N=97).

**Main outcome measures** The relationships among patients' scores on the Brief Symptom Inventory-18 depression subscale, Gotland Male Depression Scale, and Conformity to Masculine Norms Inventory, and whether or not patients were prompted to discuss emotional concerns with their physicians after completing these screening tests.

**Results** Conformity to masculine norms was significantly associated with depression as assessed by the male depression screen ( $P=.039$ ), but not with the screen that assessed typical depressive symptoms ( $P=.068$ ). Men, regardless of their degree of masculinity or distress, overwhelmingly did not disclose emotional concerns to their physicians, even if the content of their distress involved suicidal thoughts.

**Conclusion** Male depression screens might capture aspects of depression associated with masculine gender socialization that are not captured by typical measures of depression. Given the tendency of men to not disclose emotional distress to their family physicians, potentially high-risk cases could be missed without direct inquiry by clinicians.

#### EDITOR'S KEY POINTS

- Women are diagnosed with depression twice as often as men; regardless of their degree of masculinity or psychiatric distress, men overwhelmingly do not disclose emotional distress to their physicians.
- Masculine gender socialization, the process of learning socioculturally prescribed roles about gender-appropriate behaviour, might preclude typical acknowledgment or presentation of depressive symptoms.
- Men in this study with extreme conformity to masculine norms scored higher on the male-specific depression screen, which might be capturing aspects of depression associated with masculine gender socialization, than men with lower levels of conformity to masculine norms did. Scores on general measures of depression did not differ significantly among levels of masculine conformity.
- Clinicians need to be educated about male-specific symptoms of depression and should include male-specific assessment tools in their practice armamentarium to avoid missing potentially high-risk patients.

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# Effet de la socialisation spécifique à chaque sexe sur la façon dont se présente la dépression chez les hommes

## Une étude pilote

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### Résumé

**Objectif** Examiner l'association entre la dépression chez les hommes et la conformité aux normes masculines.

**Type d'étude** Analyse transversale.

**Contexte** Une clinique de médecine familiale universitaire de Vancouver, BC.

**Participants** Patients mâles âgés d'au moins 19 ans (n=97).

**Principaux paramètres à l'étude** La relation entre le score des patients au questionnaire de conformité aux normes masculines et les scores obtenus à l'échelle abrégée de dépression à 18 items (Brief Symptom Inventory-18) et à la Gotland Male Depression Scale, et déterminer si les patients étaient portés à discuter de leurs préoccupations émotionnelles avec leur médecin après avoir passé ces tests de dépistage.

**Résultats** Lorsque évaluée par un test de dépistage de dépression spécifique aux mâles, la dépression montrait une association significative avec la conformité aux normes masculines ( $P=,039$ ), mais non lorsque qu'elle était évaluée par les symptômes typiques de la dépression ( $P=,068$ ). Quel que soit leur degré de masculinité, la très grande majorité des hommes ne discutent pas de leurs préoccupations émotionnelles avec leur médecin, même quand leur détresse comprend des idées suicidaires.

**Conclusion** Les tests de dépistage de dépression spécifiques aux mâles pourraient déceler des aspects de la dépression en lien avec la socialisation masculine qui ne sont pas révélés par les tests de dépression habituels. Compte tenu que les hommes ne parlent pas facilement de leur détresse émotionnelle à leur médecin de famille, des cas à risque élevé pourraient éventuellement être ignorés sans un questionnement direct de la part du médecin.

### POINTS DE REPÈRE DU RÉDACTEUR

- On diagnostique la dépression 2 fois plus chez les femmes que chez les hommes; quel que soit leur degré de masculinité ou de détresse psychologique, les hommes hésitent à parler de leur détresse émotionnelle à leur médecins.
- La socialisation masculine, c'est-à-dire le processus d'apprentissage des comportements que le milieu socioculturel attribue à chacun des sexes, pourrait faire obstacle à la reconnaissance ou au mode de présentation typiques des symptômes dépressifs.
- Dans cette étude, les hommes qui avaient un niveau de conformité extrême aux normes masculines avaient, dans un dépistage de la dépression spécifique aux hommes, des scores plus élevés que ceux qui avaient un plus faible niveau de conformité à ces normes, ce qui pourrait révéler des aspects de la dépression associés à la socialisation masculine. Les scores obtenus aux mesures générales de la dépression ne différaient pas significativement entre les divers niveaux de conformité masculine.
- Les médecins ont besoin de formation sur les symptômes dépressifs spécifiques aux mâles et ils devraient inclure des outils d'évaluation spécifiques aux mâles dans leur arsenal clinique pour ne pas manquer des cas pouvant présenter un risque élevé.

Cet article a fait l'objet d'une révision par des pairs.  
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Historically, women have been diagnosed with depression twice as often as men.<sup>1</sup> Many theories have been offered to account for this difference,<sup>2</sup> in particular that men might exhibit depressive symptoms differently than women do. This has led to speculation about the possibility of a masculine-specific type of depression.<sup>3</sup>

Gender socialization might influence presentation of depression symptoms among men.<sup>4</sup> *Gender socialization* refers to the process of learning socioculturally prescribed roles about gender-appropriate behaviour (ie, how to behave like a man or woman). This process is generally influenced by families, peer groups, and schools.<sup>5</sup> Traditional masculine norms emphasize stoicism, independence, toughness, competition, and avoidance of anything feminine, including emotions.<sup>4</sup> It has been postulated that adherence to dominant masculine norms affects men's acknowledgment and presentation of affective distress. Some men might transform vulnerable emotional states into socially acceptable manifestations, such as irritability, anger, and substance abuse.<sup>6</sup>

We hypothesized that the more men adhered to masculine norms, the more likely they would be to exhibit symptoms consistent with "male depression," and the less likely they would be to disclose mental health difficulties to their physicians.

## METHODS

A cross-section of male participants (N=97) older than 19 years of age were recruited from the waiting area of a university family practice clinic in Vancouver, BC. Consecutive presenting patients were notified of the study by medical office staff, who then informed the primary investigator of potential participants. All recruitment was done by the primary investigator in the waiting room of the clinic. Those who consented to participate completed 3 assessment forms while waiting to see their physicians: 1) the Brief Symptom Inventory-18 (BSI-18),<sup>7</sup> an 18-item self-report inventory measuring psychiatric distress, which includes a subscale for typical depressive symptoms; 2) the Gotland Scale of Male Depression (GSMD),<sup>8</sup> a 13-item self-report inventory measuring symptoms of male depression; and 3) the Conformity to Masculine Norms Inventory (CMNI),<sup>9</sup> a 94-item self-report inventory that measures the degree to which men conform to masculine norms using a 4-point Likert scale. Possible total raw scores are converted to transformed scores, which can be categorized into 4 groups: extremely nonconforming (a score of <40), moderately nonconforming (40 to 50), moderately conforming (50 to 60), and extremely conforming (>60).

In addition, participants completed a demographic questionnaire that included a yes or no response to

questions about previous psychiatric treatment, current psychiatric treatment, previous suicide attempts, and current suicidal thoughts. Once the forms were completed, they were sealed in an envelope before the participants saw their physicians and they were returned to the primary investigator. Participants then met with their physicians for whatever concerns brought them to the clinic. After each visit, the physician completed a single-item (yes or no response) questionnaire to indicate if the patient spontaneously raised any emotional concerns. Emotional concerns could include any number of problems, such as anger, sadness, irritability, anxiety, substance use, and suicidal thoughts.

One-way ANOVA (analysis of variance) was used to examine whether men's scores on the GSMD and BSI-18 depression subscale differed among the 4 CMNI categories. Significance was set at  $P < .05$ .

This study received ethics approval from the University Of British Columbia Clinical Research Ethics Board.

## RESULTS

Most of the sample consisted of single, white, heterosexual men who were unemployed or earning less than \$50000 while completing undergraduate studies (**Table 1**). No significant differences were found with respect to the demographic variables and levels of masculine conformity.

A statistically significant difference among CMNI categories on the GSMD ( $F_{3,93} = 2.89$ ,  $P = .039$  [**Table 2**]) was detected. Post-hoc analysis indicated that men in the "extreme conformity" group scored significantly higher on the GSMD (male-specific depressive symptoms) than did men in the "moderate conformity" and "moderate nonconformity" groups ( $P = .039$ ). This finding suggests greater conformity to masculine norms is associated with a higher level of male-specific depressive symptoms. Differences among the CMNI categories on the BSI-18 depression subscale were not statistically significant ( $F_{3,93} = 2.45$ ,  $P = .068$ ), indicating that scores on a measure of typical depressive symptoms did not differ significantly among levels of masculine conformity.

Of the 97 participants, only 4 raised emotional concerns to their physicians. Another 4 indicated current suicidal thoughts on the confidential demographic questionnaire; however, none of these 4 men disclosed suicidal thoughts to his physician, despite seeing the physician immediately after completing the assessment forms.

## DISCUSSION

There has been long-standing speculation concerning the influence of gender socialization on the expression of depression in men. To our knowledge, our study is

**Table 1. Sample population demographics, by CMNI category: N = 97.**

CHARACTERISTIC	CMNI CATEGORY			
	EXTREME CONFORMITY (N=11)	MODERATE CONFORMITY (N=38)	MODERATE NONCONFORMITY (N=34)	EXTREME NONCONFORMITY (N=14)
Mean age, y	27.18	26.43	33.15	27.28
Ethnicity, n (%)*				
• Asian	1 (9)	14 (37)	10 (29)	0 (0)
• White	4 (36)	15 (39)	20 (59)	8 (57)
• Hispanic	1 (9)	1 (3)	1 (3)	2 (14)
• Middle Eastern	2 (18)	2 (5)	0 (0)	3 (21)
• South Asian	2 (18)	3 (8)	0 (0)	0 (0)
• Mixed	0 (0)	2 (5)	1 (3)	1 (7)
• Other	1 (9)	1 (3)	2 (6)	0 (0)
Marital status, n (%)				
• Single	9 (82)	30 (79)	20 (59)	8 (57)
• Married or CL	2 (18)	8 (21)	14 (41)	6 (43)
Sexual orientation, n (%)				
• Heterosexual	10 (91)	37 (97)	31 (91)	10 (71)
• Homosexual or bisexual	0 (0)	1 (3)	1 (3)	4 (29)
• No answer provided	1 (9)	0 (0)	2 (6)	0 (0)
Education, n (%)				
• High school	2 (18)	1 (3)	1 (3)	0 (0)
• Undergraduate	6 (55)	25 (66)	18 (53)	11 (79)
• Postgraduate	3 (27)	10 (26)	14 (41)	3 (21)
• No answer provided	0 (0)	2 (5)	1 (3)	0 (0)
Employment, n (%)				
• Employed	2 (18)	12 (32)	16 (47)	4 (29)
• Unemployed	9 (82)	26 (68)	17 (50)	9 (64)
• No answer provided	0 (0)	0 (0)	1 (3)	1 (7)
Income, n (%)				
• <\$50 000	10 (91)	24 (63)	23 (68)	9 (64)
• ≥\$50 000	1 (9)	8 (21)	10 (29)	4 (29)
• No answer provided	0 (0)	6 (16)	1 (3)	1 (7)

CL—common law, CMNI—Conformity to Masculine Norms Inventory.

\*Not all values add up to 100% owing to rounding.

the first to reveal the association between conformity to masculine norms and depressive symptoms characteristic of male depression in a primary care setting.

Our finding that conformity to masculine norms was significantly associated with the GSMD scores but not with the BSI-18 depression subscale scores suggests that the more men endorse behaviour associated with being “masculine,” the more likely they are to manifest their distress in so-called masculine ways. This conclusion was picked up by a scale that was devised to be sensitive to male-specific depression but was not identified by a more generic measure of depression. This finding also suggests that the GSMD

is better able to detect masculine depression than the BSI-18, which is consistent with the original intention of the GSMD.

At the time of the study, the GSMD was the only male depression screen. Limitations of this scale have been recognized, as it has been validated in only a few settings with select samples.<sup>10,11</sup> Therefore, Magovcevic and Addis<sup>12</sup> recently devised a Masculine Depression Scale; they divided their scale into internalizing and externalizing symptoms, with externalizing symptoms being more representative of male depression (eg, the display of aggression and irritability). They found a meaningful association between the CMNI categories

**Table 2. Mean scores on the GSMD and BSI-18 depression subscale across CMNI categories**

SCORES	CMNI CATEGORY			
	EXTREME CONFORMITY (N=13)	MODERATE CONFORMITY (N=31)	MODERATE NONCONFORMITY (N=43)	EXTREME NONCONFORMITY (N=10)
Mean GSMD score* (95% CI)	12.2 (5.9-18.5) <sup>†</sup>	6.1 (4.2-7.9)	6.5 (4.8-8.2)	7.4 (0.8-14.0)
Mean BSI-18 depression subscale score <sup>†</sup> (95% CI)	56.6 (46.3-67.0)	48.5 (45.7-51.2)	49.1 (46.4-51.9)	48.4 (44.4-52.4)

BSI—Brief Symptom Inventory, CI—confidence interval, CMNI—Conformity to Masculine Norms Inventory, GSMD—Gotland Scale of Male Depression.

\*Possible scores on the GSMD range from 0 to 39. A score of 13 or higher is suggestive of depression.

<sup>†</sup>Statistically significant difference ( $F_{3,93} = 2.89, P < .039$ ) between the extreme conformity category and other CMNI categories.

<sup>†</sup>The BSI consists of 18 items on a 4-point Likert scale, and can be divided into 3 subscales: depression, anxiety, and somatization. Possible raw scores on the BSI-18 depression subscale are converted to transformed scores and compared with established community samples; positive cases can be identified by a score of 63 or higher.

and the Masculine Depression Scale externalizing symptoms, thus supporting our results.

It is particularly alarming that men, regardless of their degree of masculinity or psychiatric distress, overwhelmingly do not disclose emotional distress to their physicians, even if the content of their distress involves suicidal thoughts. This is very concerning given that the rate of successful completion of suicide among men is 3 to 5 times greater than that of women.<sup>13</sup>

This study was performed in a unique clinical setting (university practice), and so the results might not be generalizable to other general family practice settings. Further research is required to test the robustness of our findings.

## Conclusion

Male depressive screens might be capturing aspects of depression associated with masculine gender socialization that are not captured by existing measures. With men masking their symptoms or expressing them atypically, clinicians might miss potentially high-risk patients. As clinicians, we need to not only educate ourselves about male symptoms of depression, but also include male-specific assessment tools in our practice armamentarium.

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### Contributors

**Dr Wide, Mok,** and **Ogrodniczuk** contributed to concept and design of the study; data gathering, analysis, and interpretation; and preparing the manuscript for submission. **Mr McKenna** drafted and revised the statistical analysis section of the manuscript.

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### Competing interests

None declared

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