



Femininity Contribution To Pain Experience: An Exploratory Cross-sectional Study Among Undergraduates

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Introduction

Pain is multidimensional in its nature, so its perception includes sensory, emotional, social, and symbolic aspects. Population-based studies and literature reviews have shown that pain is more prevalent in females. The terms "sex" and "gender" refer to two distinct but related factors. Sex encompasses a set of biological attributes, such as chromosomes, genetic expression, and anatomical aspects, and gender is related to a complex trait, being dependent on psychological, social, cultural, and political factors and defined as a sociocultural construction of roles, norms, behaviors, identities, and authority relations. Despite this distinction and relevance, in the analysis of sociodemographic data, most studies include only the "sex" variable. When investigating gender roles and their relationship to pressure pain, a significant correlation between masculinity-femininity and pain threshold was observed for men but not for female participants. In clinical pain, higher femininity seems to be associated with a greater number of areas with pain and a greater use of health services.

Objectives

This study aimed to investigate: (1) the prevalence of painful complaints in female undergraduate students, and (2) the association between femininity and painful complaints.

Methods

This is a cross-sectional study in two public dentistry universities in Recife, Pernambuco. The sample comprised 387 female undergraduate students between 21 and 24 years old. Data collected included socio-demographic characteristics, number of painful sites (McGill Pain questionnaire), pain intensity (VAS), and need to communicate pain. Femininity was assessed using the Traditional Femininity and Masculinity (TMF-s) scale, recently developed to identify central facets of self-attributed masculinity-femininity. Pearson's chi-square test and binary logistic regression were performed to analyze differences regarding the degree of femininity and pain characteristics.

Results

The results showed that the regions with the highest frequency of pain were head (56%), spine (50%), shoulder (43%) and face (35%). Participants with greater femininity score reported more painful body regions. Pain in more than three body sites and need to communicate pain were significantly associated with greater femininity. Although not statistically significant, the "very feminine" group had the higher scores for pain intensity ($p = 0.136$).

Conclusion

In conclusion, compared to participants with less femininity, higher feminine participants had higher frequencies of self-reported painful body regions. Back pain, pain in more than three sites and need to communicate pain were significantly associated with higher femininity. Cultural and psychosocial aspects related to pain experience and communication should be considered in the analysis of gender differences within a biological same-sex group.

Keywords: Femininity, Musculoskeletal Pain, Pain communication, Gender