

Systematic review of the relationship between health anxiety and sociodemographic variables in individuals with chronic illness

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Introduction

As part of a larger systematic literature review on Health Anxiety (HA) in chronic illness, we investigated the relationships between sociodemographic factors and HA. This will help identify vulnerable patients in need of intervention.

Methods

Total Articles retrieved from database search n=1660

Articles excluded based on exclusion criteria n=1354

Total Articles after exclusion process n=443

Articles excluded based on the same exclusion criteria n=215

Articles added after reference search n=29

Total articles included n=257

Total articles yielding sociodemographic correlations n=87

Exclusion Criteria:

- Case Studies
- Books or Chapters
- Editorials
- Qualitative Studies
- Review articles
- Paediatric populations
- Studies based on healthy population
- No health anxiety quantitative measure
- Not in English, French, or German
- Article or abstract is unavailable
- Irrelevant

Inclusion:

- Peer-reviewed article published between January 1996 to October 2014 (Cancer articles limited to 2011 to 2014)
- Written in English, French, or German
- Include an adult population
- Report Quantitative results on health anxiety-related constructs
- Include Individuals with a chronic illness

Databases:

PsychINFO, PubMed, CINAHL, SCOPUS, Web of Science,

Results

Sociodemographic Correlates of Health Anxiety

Sociodemographic variable	Positive Association (+)	Negative Association (-)	Nil (≠)
Age	[25] ¹ , [51] ¹ , [59] ¹ , [60] ¹ , [65] ¹ , [75] ¹ , [83] ¹ , [61] ²	[12] ¹ , [15] ¹ , [17] ¹ , [22] ¹ , [24] ¹ , [26] ¹ , [29] ¹ , [35] ¹ , [36] ¹ , [42] ¹ , [43] ¹ , [41] ¹ , [40] ¹ , [33] ¹ , [44] ¹ , [46] ¹ , [48] ¹ , [49] ¹ , [50] ¹ , [52] ¹ , [55] ¹ , [53] ¹ , [56] ¹ , [57] ¹ , [58] ¹ , [66] ¹ , [67] ¹ , [72] ¹ , [76] ¹ , [78] ¹ , [79] ¹ , [82] ¹ , [87] ¹ , [3] ² , [11] ² , [26] ² , [40] ² , [43] ² , [44] ² , [48] ² , [55] ² , [53] ² , [58] ² , [73] ² , [78] ² , [79] ² , [80] ² , [85] ² , [87] ² , [8] ²	[5] ¹ , [7] ¹ , [9] ¹ , [13] ¹ , [14] ¹ , [16] ¹ , [18] ¹ , [19] ¹ , [28] ¹ , [27] ¹ , [32] ¹ , [39] ¹ , [47] ¹ , [81] ¹ , [84] ¹ , [88] ¹ , [4] ² , [24] ² , [34] ² , [41] ² , [66] ² , [67] ² , [69] ²
Income		[7] ¹ , [35] ¹ , [36] ¹ , [37] ¹ , [45] ¹ , [54] ¹ , [54] ² , [70] ² , [71] ²	[47] ¹ , [49] ¹ , [55] ¹ , [58] ¹ , [24] ² , [34] ²
Gender (Female)	[1] ¹ , [10] ¹ , [12] ¹ , [38] ¹ , [27] ¹ , [28] ¹ , [35] ¹ , [38] ¹ , [44] ¹ , [49] ¹ , [54] ¹ , [60] ¹ , [66] ¹ , [2] ² , [4] ² , [29] ² , [30] ² , [54] ² , [66] ² , [69] ² , [8] ²	[23] ¹	[2] ¹ , [9] ¹ , [13] ¹ , [18] ¹ , [19] ¹ , [22] ¹ , [32] ¹ , [39] ¹ , [45] ¹ , [47] ¹ , [51] ¹ , [68] ¹ , [81] ¹ , [83] ¹ , [86] ¹ , [88] ¹ , [10] ² , [44] ² , [61] ² , [70] ²
Had children	[2] ¹ , [22] ¹ , [43] ¹ , [53] ¹ , [48] ²		[43] ¹ , [53] ² , [78] ²
Sexual orientation (heterosexual)	[35] ¹ , [36] ¹ , [37] ¹	[31] ¹	[19] ¹
Marital Status (Married)	[43] ¹ , [41] ¹ , [53] ¹ , [3] ² , [69] ²	[12] ¹ , [22] ¹ , [54] ¹ , [6] ²	[2] ¹ , [14] ¹ , [24] ¹ , [32] ¹ , [40] ¹ , [39] ¹ , [44] ¹ , [45] ¹ , [49] ¹ , [52] ¹ , [55] ¹ , [58] ¹ , [82] ¹ , [83] ¹ , [84] ¹ , [12] ² , [34] ² , [41] ² , [43] ² , [8] ²
Living alone		[2] ¹	[44] ¹ , [45] ¹
Education	[82] ¹ , [3] ²	[2] ¹ , [27] ¹ , [43] ¹ , [35] ¹ , [36] ¹ , [37] ¹ , [2] ² , [43] ²	[7] ¹ , [19] ¹ , [22] ¹ , [24] ¹ , [28] ¹ , [32] ¹ , [41] ¹ , [40] ¹ , [39] ¹ , [45] ¹ , [47] ¹ , [48] ¹ , [52] ¹ , [55] ¹ , [53] ¹ , [57] ¹ , [67] ¹ , [83] ¹ , [84] ¹ , [88] ¹ , [34] ² , [41] ² , [40] ² , [61] ² , [69] ² , [78] ² , [8] ²
Employed	[44] ¹ , [48] ¹ , [62] ¹ , [8] ²	[14] ¹ , [43] ¹ , [53] ¹ , [83] ¹	[22] ¹ , [24] ¹ , [45] ¹ , [52] ¹ , [84] ¹ , [34] ² , [43] ²
Ethnicity (non-white)	[58] ¹ , [64] ²	[34] ¹ , [36] ¹ , [37] ¹ , [66] ¹ , [45] ¹ , [63] ¹ , [71] ¹	[7] ¹ , [14] ¹ , [16] ¹ , [19] ¹ , [24] ¹ , [32] ¹ , [35] ¹ , [52] ¹ , [55] ¹ , [57] ¹ , [67] ¹ , [77] ¹ , [88] ¹ , [34] ² , [66] ² , [67] ²

¹Univariate analysis

²Multivariate analysis

Legend

Correlation Strength	Description
Strong Correlation	“Significant consistent finding (≥5 studies) in the same direction, and less than half of the selected studies reported no significant relationship [73].”
Moderate Correlation	“Significant association in the same direction (≥3 studies) with one or none in the opposing direction, and/or more than half of the selected studies reported no significant relationship [73].”
Weak or Mixed evidence for a Correlation	“Limited studies (≤2 studies) evaluated the relationship, two or more findings in the opposing direction or no clear conclusion were apparent [73].”

Discussion

- Majority of sociodemographic relations produced moderate to weak evidence, except for age and income.
- Sexual orientation findings appear to be disease specific. Heterosexual patients were found to have greater HA in three out of four studies regarding HIV. Whereas, one article found that homosexual patients have greater HA with prostate cancer.
- The relationship between HA and age may be disease specific. Four out of seven articles that found older age to be related to HA were studying Parkinson’s Disease and one of these seven articles found older age was associated with HA in regards to neurological disorders.

Conclusion

Individuals diagnosed with a chronic illnesses that are of younger age and have lower income may be vulnerable to HA and are in need of intervention.

Areas for Further Research

- Studies to further investigate the relationship between employment, living alone, sexual orientation, having children and income with larger sample sizes.
- Studies comparing HA predictors across multiple illnesses are needed.

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