Characteristics associated with non-diagnosed neuropathic pain in the United States

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METHODS

Descriptive Data

Demographic, socio-economic, and diagnostic information of respondents, n=24,206,788, was collected in a cross-sectional, epidemiologic, multi-center patient survey in the US for the diagnostic tool called painDETECT. The survey was fielded by 20 mall intercepts across the United States, totaling 20,182 respondents. All respondents were presented with a list of 19 conditions and asked whether they had any of them in the last 12 months. Sex, age, race/ethnicity, and region were assessed for all respondents. Sample weights incorporated age, sex, and race/ethnicity information.

A logistic regression was used to determine which factors were significant predictors of being non-diagnosed by any HCP. All respondents were divided into those who self-reported an HCP diagnosis of NPP (“diagnosed”) and those who did not self-report an HCP diagnosis of NPP (“non-diagnosed”). We chose not to adjust for multiple comparisons because findings in the study are intended to support important areas for future study rather than define asets as what is associated with a NPP diagnosis.

RESULTS

Descriptive Data

The NPP was screened positive for probable NPP (PDQ ≥ 19) in 1,722 (68.5%) of those, n=1,722 were diagnosed with NPP by a healthcare provider (HCP), for a prevalence of 10.7% for NPP in the US. The total adult US population was 318,932,046 (2010 Census) and N=24,206,788, so the prevalence represents about 6.3% of the adult population. Similarly, respondents who were diagnosed were significantly more likely to report a number of pain types, with the largest differences including single-related pain (p<.001; OR=2.2; 95% CI=1.6, 2.9; and surgical pain (p<.001; OR=2.5; 95% CI=2.0, 3.1).

CONCLUSIONS

While there is some consistency among our results which support our findings, the large number of comparisons makes it likely that some of these associations may be due to chance. The PDQ is a screening tool with moderate degree of sensitivity and specificity. As such, false-positives on the PDQ can also occur. The PDQ results were collected from a representative sample of respondents who were asked to complete a survey to assess their current condition. This may result in a nonresponse bias due to pain or possibly due to lack of access to care or general health. Respondents who screened positive for a condition and were not diagnosed more often had a higher number of years lived with pain, lower overall health, and lower functional ability. The results suggest that people who report chronic pain may not be adequately treated for their pain.

Finally, some of the diagnoses were collected from a representative sample of respondents who were asked to complete a survey to assess their current condition. This may result in a nonresponse bias due to pain or possibly due to lack of access to care or general health. Respondents who screened positive for a condition and were not diagnosed more often had a higher number of years lived with pain, lower overall health, and lower functional ability. The results suggest that people who report chronic pain may not be adequately treated for their pain.

REFERENCES


