Abstract

Objective: To compare the prevalence of selected medical conditions in Russia as assessed by the National Health and Wellness Survey (NHWS) with those from the medical literature.

Method: This study used data from the 2011 Russia NHWS, a cross-sectional survey administered to 10,039 adults living in large Russian cities recruited through both online and offline methods. All data were self-reported. Weighted prevalence was estimated through self-report and validated scales embedded in the questionnaire. Conditions included insomnia, restless legs, allergies (hay fever), and depression. Gender differences were also assessed. NHWS estimates were compared with prevalence estimates taken from published studies.

Results: Twelve-month prevalence estimates of depression according to self-report were 20% in men and 25% in women, and depression of moderate or greater severity was identified through the Patient Health Questionnaire (PHQ-9) in 17% of men and 21% of women, both slightly higher than the approximately 10% and 20% estimates of clinically significant depression in men and women, respectively, reported by Akarachkova and Vershinina (2010). In NHWS, restless leg syndrome was estimated at 6.4% and 10.1% of men and women respectively in NHWS, and 30% of men and 28% of women (Romanova et al., 2007). Allergic rhinitis (either nasal allergies or hay fever) in the past 12 months was reported by 15% of adults in St. Petersburg, slightly higher than the 10.0% estimated by Emelianov et al. (2002) a decade ago.

In the NHWS, prevalence for all four conditions among urban Russian adults was reported by 15% of adults in St. Petersburg, slightly higher than the 10.0% estimated by Emelianov et al. (2002) a decade ago.

Conclusions: Prevalence estimates and gender differences calculated from NHWS Russia data were generally similar to those taken from previous literature, providing initial evidence for its use in estimating prevalence of disease in urban Russia. Reports of experiencing a condition were much more common than reports of confirmed diagnosis, suggesting substantial unmet medical need.

Introduction

Understanding the prevalence of different medical conditions, as well as their impact on individuals and society, is imperative for efficient allocation of finite healthcare resources.

Prevalence information can be obtained in many markets through government-funded national health surveys such as the Etude Nationale Nutrition Santé in France, the Gesundheitsberichterstattung in Germany, and the National Health and Nutrition Examination Survey (NHANES) in the USA.

Comparable survey data for Russia are generally not available, except those organized by pharmaceutical companies to study one or two specific conditions. Although there were several Russian health surveys conducted to inform policy decisions in health care 1, they studied predominantly most severe conditions, and complicated the disease burden by including socio-economic status. Less severe conditions which might reduce patients’ quality of life significantly, but are not directly connected to mortality level (e.g., allergic rhinitis, or insomnia) have been much less studied in modern Russia.

Generalizing prevalence from other countries may lead to incorrect estimates and biased conclusions.

The National Health and Wellness Survey (NHWS) is a self-report health survey fielded by Kantar Health in several of the world’s major healthcare markets using a mixture of internet and offline recruitment, depending on country.

In Russia, the NHWS used the same methodology as the Russian National Health and Wellness Survey (NHANES) has supported the use of NHWS as a viable tool for estimating prevalence of conditions for which respondents can accurately self-report experience of the condition or a physician diagnosis.

A version of the NHFS was fielded in urban Russia in late 2011, but research has not yet assessed the comparability of the prevalence estimates that can be made from self-reported NHFS Russia data.

Objectives

To compare the prevalence of selected medical conditions in urban Russia as assessed by the National Health and Wellness Survey (NHWS) with those available in the medical literature for the comparable Russian population.

Methods

Data Sources

- NHWS Russia
  - Sample: 10,039 adults aged 18+.
  - 72% were drawn from opt-in internet survey panels through stratified random sampling. Invitations were stratified according to gender, age, and major urban area (cities with over 100,000 inhabitants).
  - 28% were recruited via telephone or intercept to supplement the internet-based sample for the population aged 40 and older. This was also stratified according to age, gender, and urban area (cities with over 1,000,000 inhabitants).
  - Data collection period was November-December 2011.

- NHANES

Medical Literature

- Akarachkova and Vershinina (2010) 2
- Romanova et al. (2007) 3
- Romanov et al. (2007) 3
- Emelianov et al. (2002) 4
- Emelianov et al. (2002) 4

Emelianov et al. (2002): Questionnaires were distributed among inhabitants (aged 16-62 years) of 5 districts of St-Petersburg (n=114; 1,742 men, 2,442 women).

Measure NHWS

- PHQ: All respondents completed a Russian language version of the Patient Health Questionnaire, a 9-item questionnaire assessing the presence and severity of depression symptoms.

Statistical Analysis

- Frequency weights were calculated according to age, gender, and urban area to allow for projection of the urban Russian population, using statistics from the Russian State Statistics Agency.

Results

- The prevalence in NHFS for the conditions examined was similar to that reported in estimated prevalence estimates.
  - Depression in the past 12 months was reported by 20% in men and 25% in women in NHWS, and depression of moderate or greater severity was identified through PHQ in 17% of men and 21% of women, both slightly higher than the approximately 10% and 20% estimates of clinically significant depression in men and women, respectively, reported by Akarachkova and Vershinina (2010).
  - Restless leg syndrome was estimated at 6.4% and 10.1% of men and women respectively in NHWS, and 30% of men and 28% of women (Romanova et al., 2007).
  - Allergic rhinitis (either nasal allergies or hay fever) in the past 12 months was reported by 15% of adults in St. Petersburg, slightly higher than the 10.0% estimated by Emelianov et al. (2002) a decade ago.

- In the NHWS, prevalence for all four conditions among urban Russian adults was reported by 15% of adults in St. Petersburg, slightly higher than the 10.0% estimated by Emelianov et al. (2002) a decade ago.

Discussion

- Although some large surveys of health and disease exist in Russia, prevalence estimates for many diseases in Russia are scarce, and what estimates do exist vary across different regions. Thus the quality and comprehensiveness of new estimates of disease prevalence more difficult than in other markets.

- Prevalence estimates and gender differences calculated from NHWS Russia data were generally similar to those taken from published literature.

- The concurrence between existing prevalence estimates and those sourced through NHWS Russia provide initial evidence for its use in estimating prevalence of disease in urban Russia.

- Reports of experiencing depression, RLS, insomnia, and allergies were much more common than self-reported physician diagnosis of those conditions. This may indicate substantial unmet need among Russian adults for medical treatment.

References