Mind the Gap: Comparing Treated Prevalence of Mental and Substance Use Disorders in British Columbia with Expected Prevalence Based on Epidemiological Literature

Background

- There is widespread recognition that not all people with mental and substance use (MSU) disorders are receiving treatment. Service planners need a standardized approach to monitor and track service utilization patterns of MSU disorders and whether service use aligns with the expected need within the population.
- Administrative data can assist in tracking and monitoring services utilization patterns of MSU disorders at the population-level.

- The purpose of this project was to examine the feasibility of establishing a standardized approach to monitor the treated prevalence of specific MSU disorders using administrative data and comparing the results with the expected prevalence derived from the epidemiological literature.

Methods

- Annual expected and treated prevalence were derived and adjusted to represent individuals aged 15 and above in British Columbia.

- Expected prevalence from systematic literature reviews:
  - The annual prevalence estimate of each disorder grouping was derived by conducting a meta-analysis. The prevalence was used to estimate the expected number of people with the disorder in BC population using the 2016 BC PEOPLE population estimates for individuals aged 15 and over.
  - Age- and sex-specific prevalence estimates were derived using methodological triangulation from various sources (e.g., systematic literature reviews, published administrative data, and COHS 2012 Mental Health Supplement), and adjusted to reflect the expected number of people with the disorder in BC.

- To qualify as having the disorder, an individual has to have at a minimum:
  - Either one hospital discharge (DAD) claim with the disorder-specific ICD-10 coding in any position; OR
  - Two MSP claims with the disorder-specific ICD-9 coding within 365 days

- Individuals with only one MSP claim of the disorder were included in the base definition.

Results

- The administrative data can be used to track specific mental and substance use disorders, with varying degrees of success.

- As predicted, the expected prevalence were higher than the treated prevalence when using the case definition for each condition. While the baseline definition over-estimated estimates for most disorders, it followed a similar pattern as the case definition for each condition.

- Schizophrenia spectrum had the smallest treatment gap, while alcohol use disorder and bipolar and related disorders had the largest treatment gaps.

- The treated and observed prevalence estimates for substance use disorders, other than alcohol, aligned closely after the age group of 30 to 34 for both males and females.

Conclusions

- Our findings demonstrate that administrative data are useful in capturing the treated prevalence of MSU disorders.

- The demographic variability observed in treated and epidemiological prevalence across the MSU disorders supports the need to monitor MSU disorders separately and is informative for service planners and providers working towards reducing the treatment gap.

- One limitation of this project was that most MSP claims in BC are missing the ID9 digits after the decimal level, which reduced the specificity for certain disorders, particularly substance use disorders.

- As a further limitation, the data was limited to MSP billing and hospital discharge claims. The inclusion of community mental and substance use services funded through health authorities and private sector services could strengthen estimates of treated prevalence.

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