INTRODUCTION

- The healthcare system in Brazil is divided into two types. The public sector (served by 75% of the population) provides universal health service through a network of public hospitals and health centers.

- The private sector (served by 25% of the population) is mainly composed of a relatively small number of more expensive private hospitals.

- Income is highly associated with the PHQ and overall healthcare consumption.2

- National studies suggested that people with lower educational level and socioeconomic status are more likely to suffer from psychiatric disorders, including depression, than those in higher and wealthier socioeconomic groups.3

- A multi-national observational study in Brazil showed a significant rate of resource use in diagnosed depression patients indicating that access to quality care is a key step toward proper treatment.

OBJECTIVES

- To assess differences between private and publically insured patients in access for depression, and in health, social, economic, and depression severity.

- Methodology:

  Sample

- The sample came from Kantar Health’s Brazil 2014 National Health and Wellness Survey (NHWS) (n=1,343), a random-walk survey of adult residents aged 18 years and older.

  Depressive Diagnoses: Respondents who reported experiencing depression in the prior 12 months and whose diagnoses were considered to be in active care.

- Demographics and Health Characteristics: Demographic and health characteristics included age, sex, race/ethnicity, marital status, education, household income, body mass index (BMI) category, smoking status, alcohol use, and work status.

- Outcomes Measures

- Depression severity: Measured using the Patient Health Questionnaire (PHQ)-9 total score ranging from 0-27, with higher scores indicating greater depression severity.

- Work Productivity and Activity Impairment: Measured using the (WPAI-GH) (absenteeism and presenteeism combined).

- Health-related Quality of Life: Measured using metrics calculated from the revised Short Form 36 (SF-36).

- Resource Use Among Privately Insured Respondents

- Two sets of analyses were conducted:

  - Within the total NHWS sample to identify differences in diagnosis and access to care across race and education.

  - Within diagnosed depression patients to identify differences in outcome according to type of insurance.

  - Binary comparisons used chi-square test for categorical variables and t-tests for continuous variables.

  - Multivariate regression analyses were conducted to assess associations between depression diagnoses, insurance type, and health outcomes controlling for demographic and health-related covariates.

  - Private insurance was also associated with higher odds of visiting a psychiatrist or psychologist.

Depression Patients

- 51% of those diagnosed with depression had private insurance, a significantly higher rate than those without a diagnosis of depression (42.9%, p<0.01).

- Privately insured depression patients were more likely to be white, college educated, married, employed with partner, have higher income, and own or rent their own homes.

Depression Severity and MHQs

- Multivariate models comparing estimated effects of health outcomes of depression patients with public and private insurance had few differences.

- Depression patients with private insurance had lower PHQ depression severity scores and higher MCS scores.

- No significant differences were found for SF-6 or PHQ utilities scores (Table 4).

Work Productivity and Activity Impairment

- Abortion was more common among those with private insurance.

- No significant differences were found for presenteeism, overall work impairment, and activity impairment.

Healthcare Insurance Use

- Fewer insured patients had higher odds of using particular types of healthcare resources, including greater odds for visiting the psychiatrist, psychologist/therapist, emergency room, and hospital in general (Figure 2).

- Converging odds of using a particular general patient were lower in the privately insured (Figure 2).

Table 1. Demographics and lifestyle characteristics among adults in Brazil by depression diagnosis

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total Adult Population (n=1,343)</th>
<th>Depressed Patients by Insurance Status</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race (White)</td>
<td>51.0% (674)</td>
<td>61.8% (821)</td>
<td>0.013</td>
</tr>
<tr>
<td>Race (Black)</td>
<td>48.9% (656)</td>
<td>38.2% (511)</td>
<td>1.82</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>62.9% (850)</td>
<td>62.1% (818)</td>
<td>0.51</td>
</tr>
<tr>
<td>Education Completed or Higher</td>
<td>43.5% (520)</td>
<td>62.0% (808)</td>
<td>3.68</td>
</tr>
<tr>
<td>Annual Household Income</td>
<td>90.9% (1,204)</td>
<td>94.8% (1,221)</td>
<td>0.09</td>
</tr>
<tr>
<td>Age</td>
<td>19.8% (266)</td>
<td>19.7% (261)</td>
<td>0.05</td>
</tr>
<tr>
<td>Sex</td>
<td>46.9% (503)</td>
<td>65.3% (639)</td>
<td>1.95</td>
</tr>
</tbody>
</table>

Table 2. Demographics and lifestyle characteristics among adults in Brazil by depression diagnosis

CONCLUSION

- Universal health care is believed to have improved health care utilization and has been shown to increase access to care, though it may be indirectly responsible for increased resource use among low-income and other patient demographic and health characteristics.

- Further investigations are warranted as to whether private insurance improves health outcomes, as well as whether universal care is likely to solve depression in Brazil.

- Although private insurance was associated with lower depression severity and higher mental quality of life, neither difference was clinically significant.

- Future research should aim to improve the understanding of depression in Brazil and extend further study to enable new influences to be explored, such as type of employment.

LIMITATIONS

- The depression sample back a higher proportion of females, consistent with previous studies.4

- However, a depression diagnosis was associated with higher income and education, and certain other socioeconomic characteristics, which may have confounded with other factors like region, occupation, and health care utilization, which would be consistent with lower rates of visits to mental health professionals by the lower income groups.

- The sample size of visits to general practitioners were limited for the privately insured depression patients, which may have led to an underestimation for the differences in health services used between the groups, which could be limited with lower rates of visits to mental health professionals by the lower income groups.

- Although private insurance was associated with lower depression severity and higher mental quality of life, neither difference was clinically significant.

- Future research should aim to improve the understanding of depression in Brazil and extend further study to enable new influences to be explored, such as type of employment.

REFERENCES


