

Multimorbidity among Wayuu people of Colombia: A cross-sectional study based on administrative data

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Background

The presence of two or more chronic conditions in the same individual has increased among different population groups. Studies have indicated that multimorbidity affects many adults and youths and leads to the overuse of healthcare services. Multimorbid patients frequently require extensive and continuing treatment. In Colombia, the available evidence shows that 19.5% of all patients suffered several chronic conditions simultaneously in the 2012-16 period. Evidence describing multimorbidity from an intercultural perspective is needed.

The Wayuu people is one of the approximately 87 Indigenous ethnic groups in Colombia, which population is estimated to be 380,400 (20% of the Indigenous people in the country). One of their primary sources of income are producing and selling hand-woven hammocks and handbags, and livestock. Anas Wayuu (AW) is a non-profit health insurance company that provides health coverage to Wayuu people and collects data to reimburse health care services.

Research questions

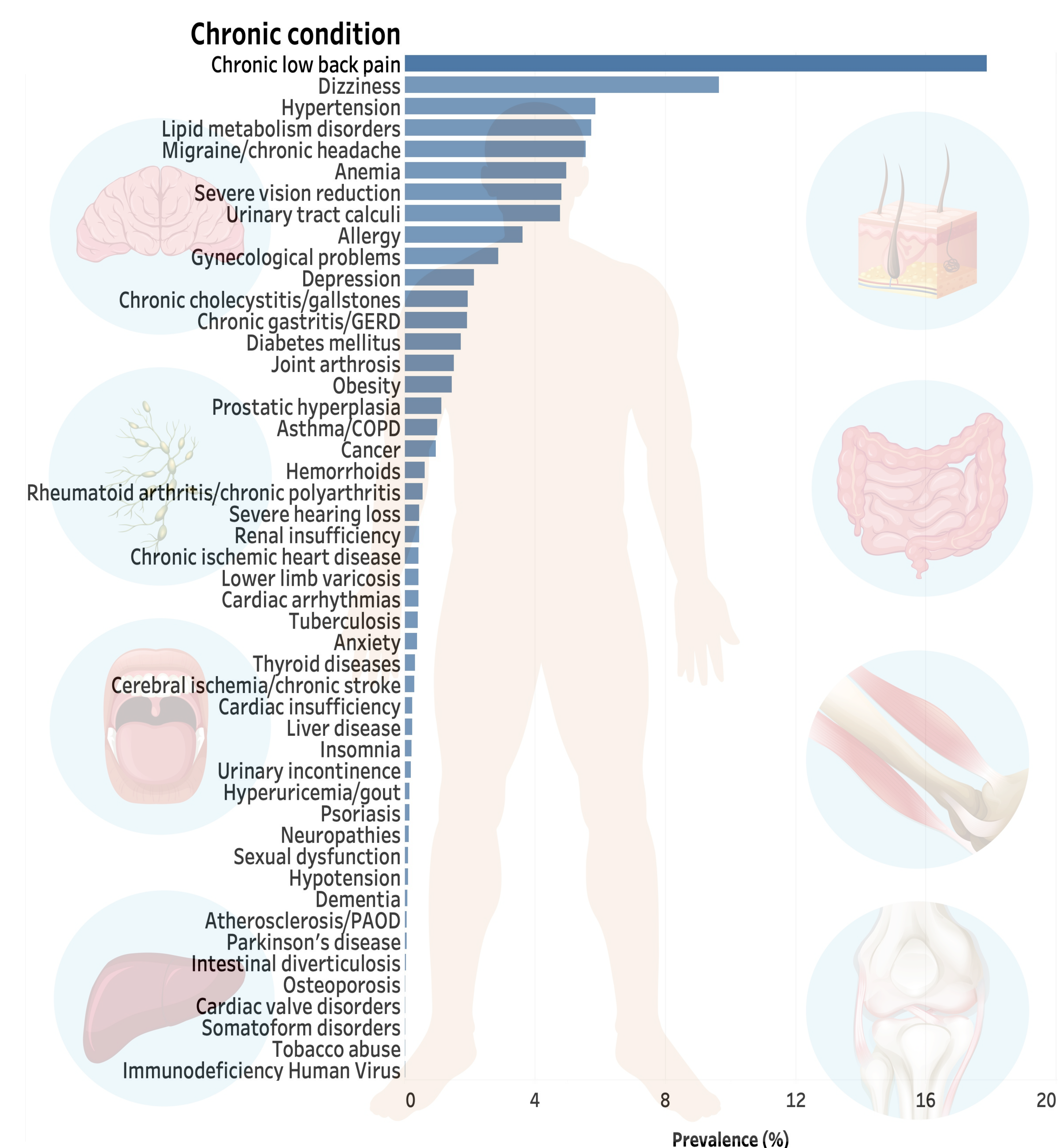
- What are the multimorbidity typologies represented amongst AW Indigenous enrollees suffering two or more chronic conditions?
- Are there statistically significant differences in the average number of hospitalizations amongst multimorbid patients?

Methods

A cross-sectional study will be performed. The study population will be AW Indigenous enrollees aged 18 years or more who were enrolled between 2014 and 2019.

Electronic health records from AW healthcare institution will be used as the data source. Data include information about patient's characteristics, date of service and single diseases diagnosis coded using the 10th Revision of the International Classification of Diseases (ICD-10).

The definition of Multimorbidity considered will be the coexistence of two or more chronic conditions: a non-communicable disease, a mental health condition, or a long-term infectious disease. Chronic condition cases will be enrollees with chronic diseases showing either at least one hospital discharge abstract or two or more physician visits for the same chronic condition. A listing of 48 chronic conditions based on ICD-10 codes will be used to identify multimorbidity clusters.



Gastroesophageal Reflux Disease (GERD); Peripheral Arterial Occlusive Disease (PAOD); Chronic Obstructive Pulmonary Disease (COPD)

Figure 1. Prevalence of Chronic conditions among AW Indigenous enrollees older than 17 years old in 2014-2019 period.

Background image source: <https://www.vecteezy.com/vector-art/301088-human-organ-anatomy-part-of-body>

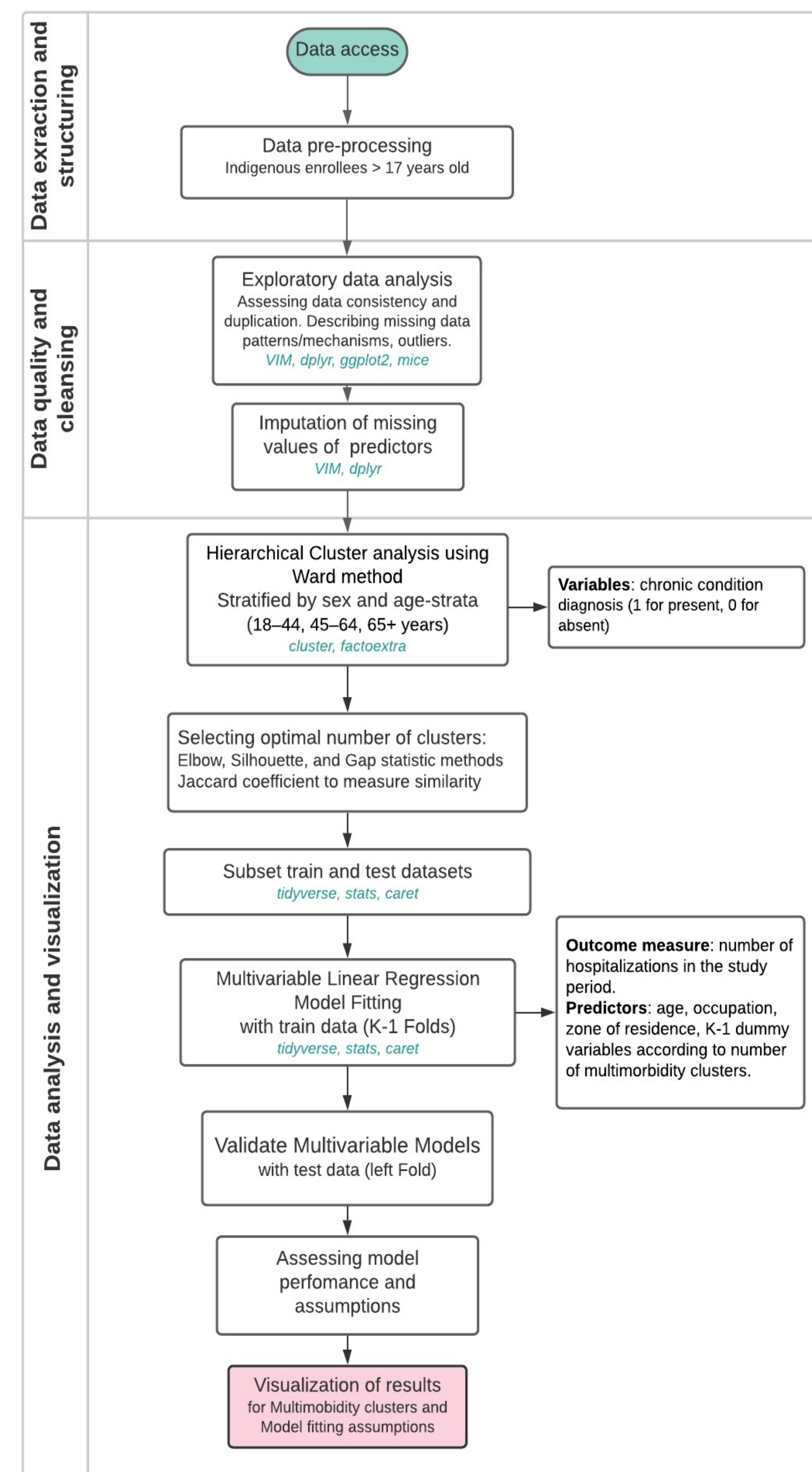


Figure 2. Flow Diagram of the Proposed Analytic Process

Significance

This study will describe the extent of multimorbidity clusters in an Indigenous population and contribute to Health Care System improvement. Obtaining evidence about multimorbidity will help identify chronic disease clusters requiring further epidemiological research on causes, prevention, and treatment. The evidence might also be helpful for the health services planning and financing and patients' clinical care. Findings might be useful for implementing intercultural health care initiatives related to the AW Indigenous enrollees. Finally, the study will provide information about multimorbidity among Wayuu people, contributing to the Colombian population health status monitoring and analysis strategy using administrative data.

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