Barriers to Essential and Basic Neurosurgical Care in the Public Sector throughout Peru

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Background

- In Andean Latin America, an estimated 60% of the population is without access to safe, affordable, timely surgical care.1
- Peru is an upper-middle-income country with over 32 million inhabitants.2 The insured population rose steadily from 2004 to 2017 (37.3% to 76.4%).3
- In 2019, it is estimated that 854,795 surgeries were performed, which is significantly less than the 5,000 major surgeries per 100,000 inhabitants recommended by LCoGS4
- Access to basic and essential neurosurgical care remains a significant barrier for many Peruvians

Research Objectives

Evaluated public health hospitals of the Peruvian Ministry of Health (MINSA) through site visits and formal interviews to determine barriers to basic and essential neurosurgical services.

Methods

- Cross-sectional, descriptive study included site visits at MINSA facilities throughout Peru between August to December 2019.
- Semi-structured interviews were performed among neurosurgeons to assess surgical capacity & a qualitative analysis using ground theory was performed, NVIVO software
- Data on equipment and supplies, infrastructure, and human resources were collected for all sites and descriptively summarized.

Results

- Twenty-five hospitals were visited as part of the evaluation, 13 hospitals located in the capital, Lima (52%).
- 158 neurosurgeons work in the 28 MINSA hospitals, representing 1 neurosurgeon: 82,656 inhabitants.
- Twenty recorded interviews were conducted with 23 participants.

Essential/Baseic Neurosurgical Equipment & Supplies:

CT Scanner
- 28% (n = 7) hospitals did not have immediate
- 20% (n = 5) reported CT was non-functional
- 48% (n = 12) reported CT did not belong to hospital

MR: 76% (n=19) did not have immediate access

Angiography: 48 % (n = 12) did not have immediate access

Microscope: 36% (n = 9) did not have functional scope

Fluoro: 24% (n=6) did not have immediate access

Neuroendoscope: 52% (n=13) did not have immediate access

Drills: One hospital did not have any

n= 28 manual n= 15 electrical. n= 22 pneumatic

Themes influencing access to neurosurgical care

- lack or poor maintenance of equipment and supplies
- insufficient hospital beds and operating rooms
- poor distribution of neurosurgeons and surgical staff

- Significant consequences of limitations were significant delays to surgical intervention, & poor patient outcomes
- Priorities included increasing the neurosurgical budget and providing more in country training opportunities.

Discussion/Limitations

- This study serves as a baseline evaluation neurosurgical capacity among public hospitals throughout Peru.
- Important context-specific factors were identified among the majority of hospitals that provide healthcare to nearly 70% of the population.

Limitations- small sample size, not generalizable