

Impact of Fragility Fractures in the Bolívar Department, Colombia

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Objective

To assess the economic and health impact of fragility fractures in the Bolívar Department, Colombia, and identify areas for improvement in the prevention and management of osteoporosis.

Results

Osteoporotic fractures represent a significant public health burden in Bolívar. Approximately 40% of patients with fragility fractures do not recover their previous quality of life. Hip fractures, in particular, have a devastating impact, with 80% of patients unable to perform basic tasks independently and 64% being transferred to nursing homes. The direct costs of treatment are high, with a hip fracture costing \$12,835,880 COP, a vertebral fracture with surgical management \$16,766,724 COP, and without surgical management \$7,437,740 COP. Additionally, there is significant underdiagnosis, with an estimated diagnostic gap of 28,700 people at risk of fracture who are not identified.

Methods

An analysis was conducted based on epidemiological and economic data on osteoporosis and fragility fractures in Bolívar. Information was collected from national and international sources, including previous studies and local statistics. Direct costs of fractures were adjusted to present value.

Conclusions

Fragility fractures in Bolívar have a high economic and health impact, comparable to diseases like diabetes and cancer. Managing the risk of the first fracture is crucial to reduce the associated morbidity and mortality, improving access to early diagnostics and densitometries. Addressing underdiagnosis is essential to prevent first fractures and mitigate economic impact. Implementing effective policies and increasing awareness about osteoporosis can significantly improve the quality of life of the affected population and reduce long-term associated costs.

