

Prevalence and Characteristics of Back Pain in a Low-Income Rural Community in Cameroon: A Cross-Sectional Study



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Introduction

Back pain is a pervasive global health issue, with prevalence rates varying across regions. Africa has been shown to have higher rates of back pain compared to developed nations, attributable to diverse factors encompassing lifestyle, occupation, healthcare accessibility, and socio-economic status. In rural Sub-Saharan Africa, agriculture remains the primary occupation, with practices entailing carrying heavy loads across extensive distances, often with improper lifting techniques. These factors, compounded by prolonged standing, inadequate seating arrangements and overall poor ergonomic conditions significantly increases the risk of musculoskeletal disorders.

Objectives

This study aims to assess the prevalence of back pain in a low-income rural community in Cameroon, raising awareness and highlighting the need for ongoing efforts to address musculoskeletal health issues within the community. It fills a critical gap in the literature, as the investigation of back pain in rural Sub-Saharan Africa remains largely unexplored. By specifically focusing on rural Cameroon and Sub-Saharan Africa , this research endeavors to shift the narrative surrounding back pain, advocating for heightened public awareness and fostering meaningful change.

Methods

This study was conducted within a low-income community in Dschang Cameroon, during a health fair at Mary Health of Africa, Clinic Saint Constance, from March 8th to 13th, 2024. A total of 1169 patients attending the health fair for medical check-ups were screened for back pain. Sociodemographic profiles, blood pressure, pulse, weight, and comorbid conditions were recorded. Data were analyzed using frequency tables, means, and graphs with a 95% confidence interval. The study received IRB approval and patient consent authorization from Mary Health of Africa, Clinic Saint Constance. Informed consent was obtained from each participant.

Results

Out of the 1169 patients screened, 91 presented with back pain, representing 7.8% of the sample. The female-to-male ratio was 1.45, with 54 females and 37 males. Lower back pain accounted for 16.5% of cases, while 83.5% reported unspecified back pain. Patients below the age of 30 accounted for 9.89% of cases, while 85.7% were aged 30 and above.

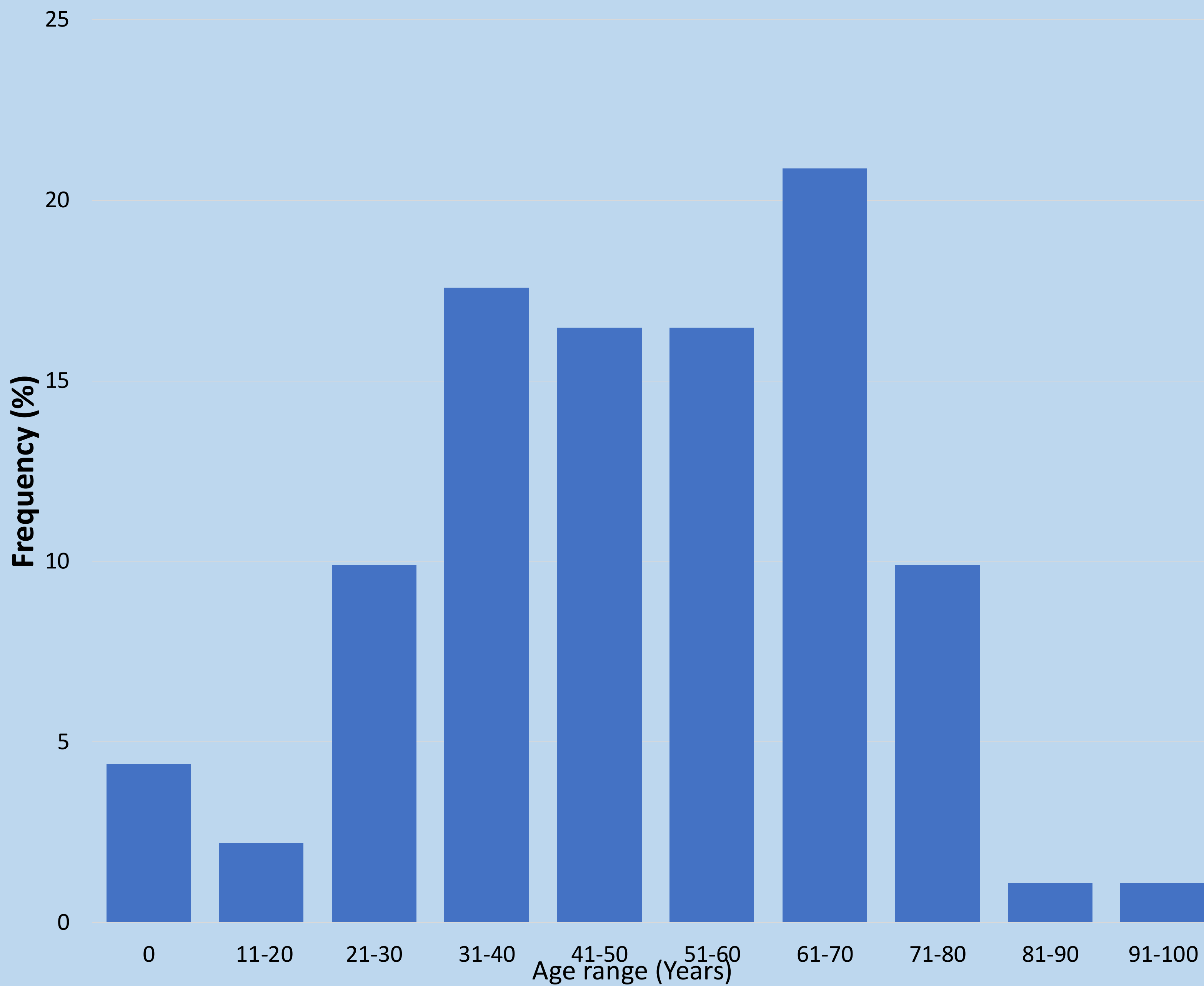


Figure 1: This bar chart illustrates the distribution of back pain cases by age group among the screened participants.

Occupational data revealed that the majority of patients experiencing back pain were farmers, constituting 47.25% of the cases. Teachers and builders represented smaller proportions, with 5.49% and 3.30% cases reported, respectively.

Occupation	Sum of frequency (%)	Sum of Number
Farmer	47.25	43
Unknown	35.16	32
Teacher	5.49	5
Student	3.30	3
Builder	3.30	3
Nurse	2.20	2
Housewife	1.10	1
Pupil	1.10	1
Business	1.10	1

Table 1: Occupation Distribution Among Participants with Back Pain

Table 1 shows the distribution of occupations among participants with back pain complaints, highlighting the frequency and number of individuals in each occupation category

Conclusion

The relatively low percentage of patients presenting with back pain at the health fair may reflect a selection bias towards healthier individuals or those with acute health issues unrelated to back pain. Additionally, cultural factors, such as stoicism regarding pain and reluctance to seek medical attention for musculoskeletal complaints, may further contribute to the underrepresentation of back pain cases. Nevertheless, these factors, the significant number of individuals identified with back pain underscores the critical need to prioritize musculoskeletal health initiatives within this community. Key interventions including education about the detrimental effects of carrying heavy loads on the head and improving access to health care services are essential in mitigating the burden of back pain and promoting overall well-being. Future research should explore cultural determinants and develop targeted interventions, while collaborative efforts are essential to implementing sustainable solutions.

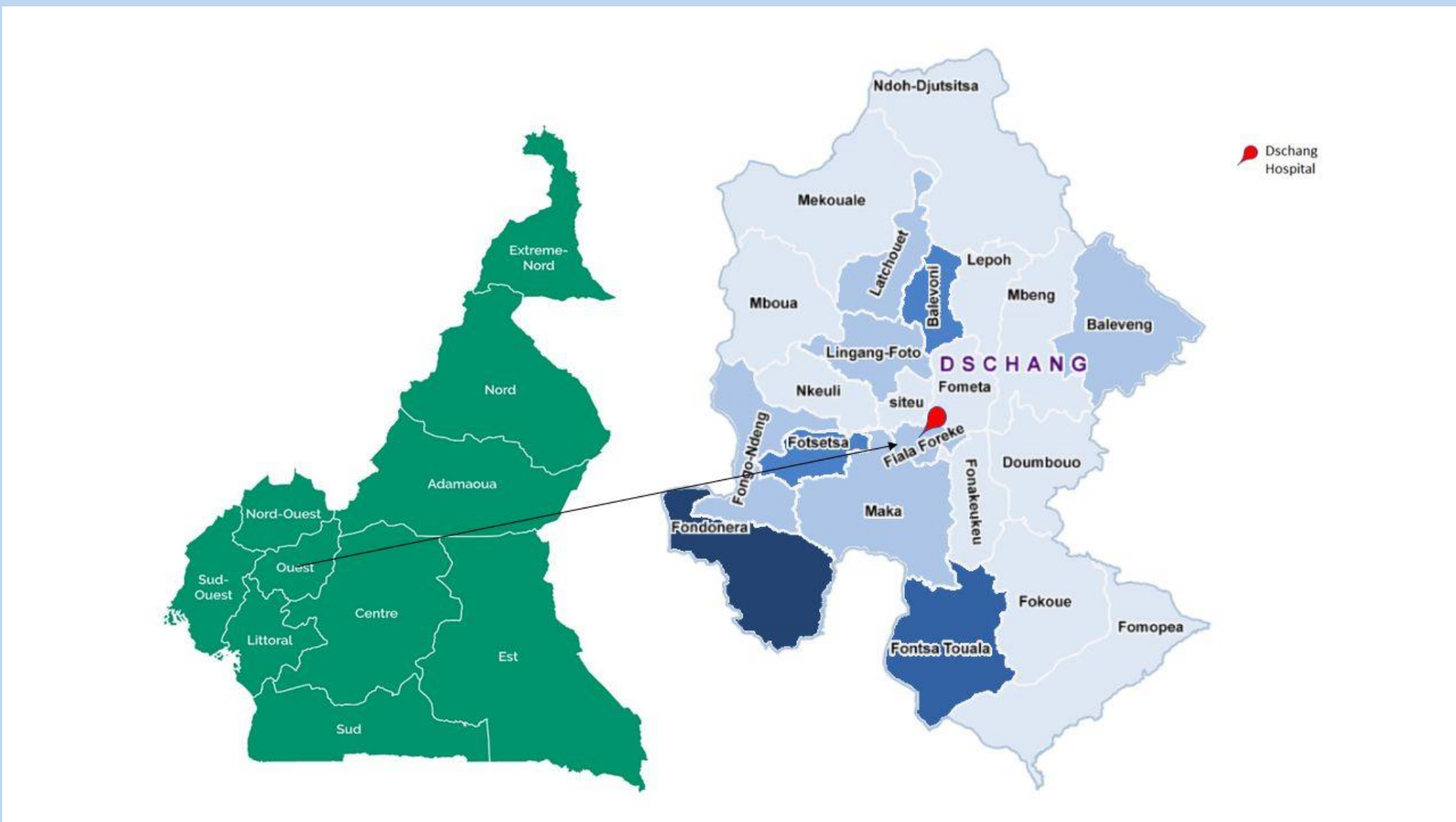


Figure 2: Map of Cameroon and of the districts of health: location of study site

Acknowledgements

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References

Doualla M, Aminde J, Aminde LN, et al. Factors influencing disability in patients with chronic low back pain attending a tertiary hospital in sub-Saharan Africa. BMC Musculoskelet Disord. 2019;20(2):25. Published 2019 Jan 15. doi:10.1186/s12891-019-2403-9

Emorinken A, Erameh CO, Akpasubi BO, Dic-Ijiewere MO, Ugheoke AJ. Epidemiology of low back pain: frequency, risk factors, and patterns in South-South Nigeria.Reumatologia.2023;61(5):360-367. doi:10.5114/reum/173377

Roux AN, Kenfack B, Ndjalla A, et al/ Barriers to cervical cancer prevention in rural Cameroon: a qualitative study on healthcare providers' perspective *BMJ Open* 2021;11:e043637. doi: 10.1136/bmjopen-2020-043637