PROMOTING GLOBAL HEALTH
FOR SUSTAINABLE DEVELOPMENT
FUTURE HEALTH

RESEARCH STUDY · 2026

Traumatic Physical Disability in Burundi

A Descriptive Cross-Sectional Study

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LOCATION & SCOPE

52 National Hospitals · Burundi

STUDY SAMPLE

14,107 Patients Reviewed

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1 Introduction & Context

14,107	82%	1.14‰	51%
patients	of patients	per 1,000 people	of disabled
TOTAL RECORDS REVIEWED	HAVE A DISABILITY AFTER TRAUMA	TRAUMA/DISABILITY FREQUENCY	RECEIVE NO TECHNICAL AID

1.1 — General Context

Burundi is an East African country characterized by high population density, a predominantly rural and resource-poor economy, and a healthcare system facing material and human resource constraints. These factors have a significant impact on the prevention, management, and consequences of trauma.

Traffic accidents and war-related incidents are a major cause of trauma in Burundi, due to the increase in vehicles (cars, motorcycles, motorcycle taxis), deteriorated road infrastructure, failure to comply with traffic rules, low use of protective equipment, and limited driver training.

PRIMARY INJURY TYPES

Head injuries · Limb fractures (upper and lower) · Spinal injuries · Multiple trauma

CONFLICT-RELATED INJURIES

Gunshot wounds · Stab wounds · Explosions · Psychological trauma (PTSD)

PRIMARY CONSEQUENCES

Permanent disabilities (paralysis, amputations) · Inability to work · Increased family dependency

HEALTHCARE SYSTEM GAPS

Limited rehabilitation services · Shortage of prosthetics · Limited access to specialized trauma care · Social stigmatization of persons with disabilities

1.2 — Study Objectives

Overall objective: To describe the prevalence of adults in Burundi who have experienced trauma, with or without a disability.

Objective 1

Describe the prevalence of adults in Burundi who have experienced trauma and/or have a disability

Objective 2

Analyze types of disabilities and possible correction/adaptation measures

Objective 3

Formulate recommendations to address disability in Burundi for sustainable development

1.3 — Methodology

This is a **cross-sectional, descriptive study** of individuals who have experienced trauma or were born with a disability in Burundi. Data was collected from all healthcare facilities nationwide using

Open Clinic (all primary healthcare facilities). The country has 52 district, regional, and national hospitals.

A total of **14,107 trauma patient records** were reviewed, collecting: sex, age, marital status, occupation, employment status, side of injury, injured body part, type of injury, required treatment, and disability categories.

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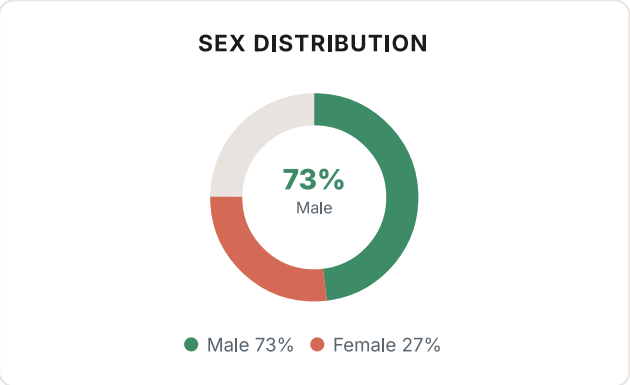
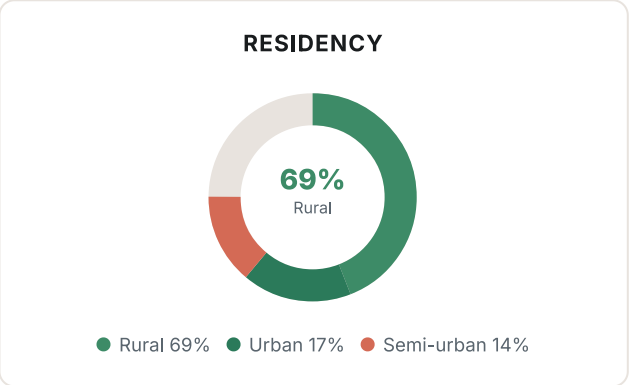
2 Results: Demographics & Trauma Profile

2.1 — Frequency

> For **12,332,778 people** living in Burundi, **14,107 were treated** for trauma or disability — representing **1.14 per thousand (1.14‰)**. Median patient age: **32 years** (range: 13–68).

2.2 — Socio-Demographic Factors

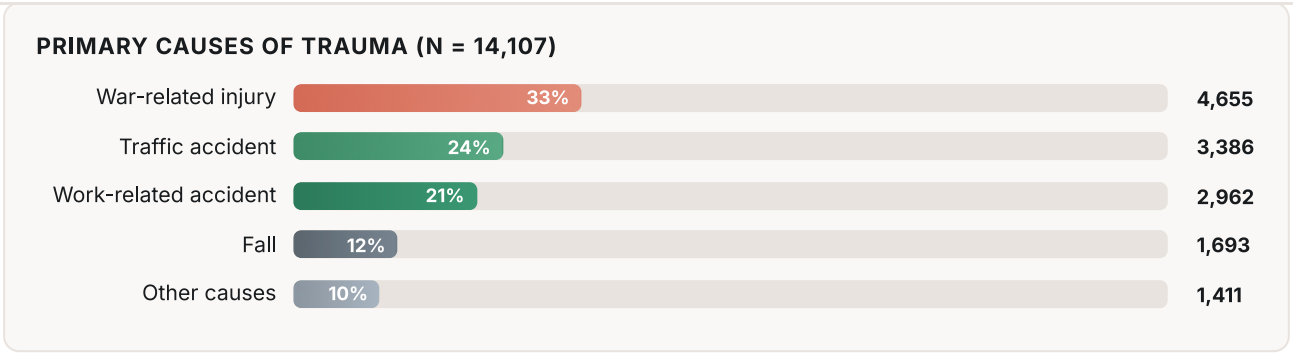




VARIABLE	CATEGORY	N	PROPORTION	VISUAL
Sex	Male	10,298	**73%**	
	Female	3,809	**27%**	
Residency	Rural	9,734	**69%**	
	Urban	2,398	**17%**	
	Semi-urban	1,975	**14%**	
Civil Status	Married	10,862	**77%**	
	Single	3,104	**22%**	
	Widower	141	**1%**	
Employment	Employed	1,552	**11%**	
	Not employed	12,555	**89%**	

The majority are men (73%), predominantly rural, married with family responsibilities. Over 89% lack formal employment — highlighting the need for strategies addressing poverty, geographic isolation, and family dynamics.

2.3 — Causes of Trauma



War-related trauma dominates as the leading cause, followed by traffic accidents. Fractures are the most common injury type, reflecting significant mechanical trauma exposure.

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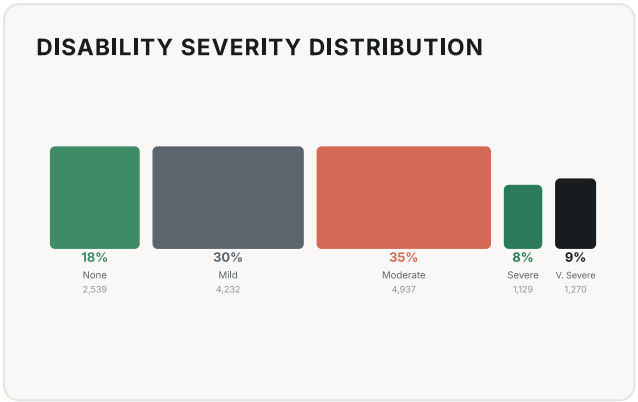
3 Disability Categories & Care Gap Analysis

3.1 — Categories of Disability (n = 14,107)



CATEGORY	N	%
No disability	2,539	18%
Mild disability	4,232	30%
Moderate disability	4,937	35%
Severe disability	1,129	8%
Very severe disability	1,270	9%
Total disabled	**11,568**	82%

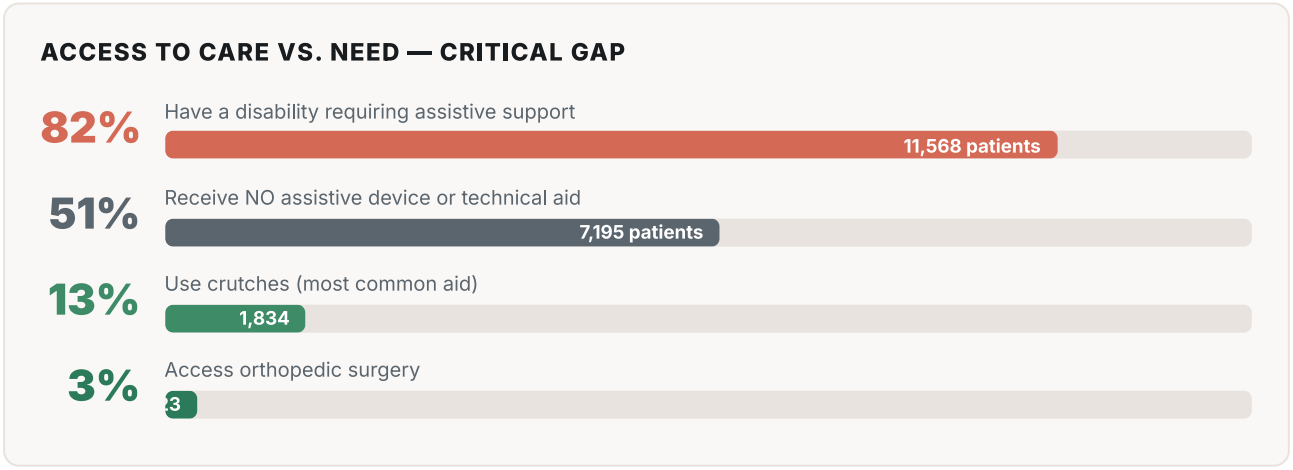
Moderate disability predominates (35%), with a notable presence of severe forms (8–9%), reflecting serious trauma and inadequate care or rehabilitation.

3.2 — Critical Care Gap

82%

Of treated trauma patients have a disability

Yet 51% receive no technical aids whatsoever — revealing a profound mismatch between needs and available services, exacerbated by poverty and barriers to care access.



3.3 — Appropriate Care Types

TYPE OF CARE	N	% OF PATIENTS	COVERAGE
None (no technical aid)	7,195	51%	
Crutches	1,834	13%	
Wheelchair	1,552	11%	
Adapted bicycle (tricycle)	846	6%	
Prosthesis — lower limb	705	5%	
Orthopedic surgery	423	3%	

3.4 — Social Services Needed

48%

Need no social assistance (6,771 patients)

29%

Need income-generating activity support (4,091)

23%

Need entrepreneurship training & education (3,245)

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4 Conclusion & Recommendations

4.1 — Conclusion

This study analyzed the extent and characteristics of injuries and their impact on disability and patient care. Results show a frequency of **1.14 per thousand** in the general population. The study population is predominantly young, rural, and socioeconomically vulnerable, with a high proportion of people without income-generating activities.

CRITICAL FINDING — THE VICIOUS CYCLE

This study highlights a **vicious cycle** linking trauma, disability, and socioeconomic vulnerability: limited surgical access (3%) · limited prosthetics coverage (~16%) · more than half of patients (51%) receive no technical aids. This mismatch calls for **urgent and tailored interventions**.

4.2 — Recommendations

1 Strengthen the Healthcare System

- Expand trauma and orthopedic services in rural areas
- Improve access to emergency care and surgical procedures
- Establish specialized functional rehabilitation units

2 Improve Access to Assistive Devices

- Subsidize prosthetics, wheelchairs, crutches, and adapted tricycles
- Establish local fitting and maintenance centers
- Reduce cost barriers for vulnerable populations

3 Develop Rehabilitation & Reintegration

- Establish community physical therapy programs
- Promote social and professional reintegration
- Support adapted income-generating activities

4 Injury Prevention

- Strengthen road safety awareness campaigns
- Prevent falls, war, and traffic accidents
- Involve local authorities and communities

5 Social & Community Approach

- Reduce inequalities in access to care
- Involve communities in care delivery
- Combat stigmatization of persons with disabilities

6 Improve Data Collection

- Strengthen health information systems
- Train health workers to collect reliable data
- Reduce missing data (cause of injury: 43% unreported)

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