GLOBAL JOURNAL
OF MEDICAL RESEARCH: K

Online ISSN: 2249-4618
Print ISSN: 0975-5888
DOI: 10.17406/MR



INTERDISCIPLINARY

Child Abuse Reporting by PHC Professionals

The Physicians Are Not at Fault

Compassion Fatigue and Burnout in ED Nurses

Rare Nasopharyngeal Solitary Plasmacytoma Case

Discovering Thoughts, Inventing Future

VOLUME 26 / ISSUE 3 / VERSION 1.0

© 2001-2026 by Global Journal of Medical Research: K, USA

Global Journal of Medical Research

Section K - Interdisciplinary

Volume 26 **Issue K3**

2026

Global Journal of Medical Research

ISSN (Online): 2249-4618 • ISSN (Print): 0975-5888

Open Access Policy

All articles published in Global Journal of Medical Research are open access articles published under the Global Journals Open Access Publishing Agreement, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Publisher

Global Journals Incorporated
301 Edgewater Place, Suite 100
Wakefield, MA 01880, United States

Copyright

© 2026 by Global Journals Incorporated (USA). All rights reserved.
No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

Disclaimer

The authors, editors, and publisher will not accept any legal responsibility for any errors or omissions that may be made in this publication. The publisher makes no warranty, express or implied, regarding the material contained herein.

Compiled in the United States of America

GJMR / EDITORIAL BOARD

Global Journal of Medical Research

Medicine, clinical research, public health, biomedical science and allied health disciplines.

Dr. Seung-Yup Ku
CLINICAL RESEARCHER · PH.D. · M.D.

Department of Obstetrics and Gynecology · Seoul National University
Seoul, South Korea

Research focuses on Genetics, with related work in Molecular Biology, Orthopedics and Sports Medicine.

ORCID • Scholar • OpenAlex

Dr. Sonia Jain
RESEARCHER · PH.D. · M.SC.

Microbiology · University of Calcutta
India

Research focuses on Infectious Diseases, with related work in Surgery, Medicine.

ORCID • OpenAlex

Dr. Hengrui Liu
RESEARCHER · PH.D.

Department of Biochemistry · University of Cambridge
Shenzhen, United Kingdom

Research focuses on Oncology, with related work in Medicine, Biochemistry.

ORCID • Scholar • OpenAlex

Dra. Caddie Laberiano Fernandez
RESEARCHER

University of Texas
Houston, United States

Research focuses on Epidemiology, with related work in Public Health, Environmental and Occupational Health, Medicine.

ResearchGate

Dr. Marcia Elson
CLINICAL RESEARCHER · PH.D. IN INFECTIOUS DISEASES · M.D.

Department of Medical Education
United States

Research focuses on Microbiology.

Dr. Izzet Yavuz
RESEARCHER · PH.D.

Department of Pediatrics · Dicle University
Diyarbakir, Turkey

Research focuses on Periodontics, with related work in Dentistry, Restorative Dentistry.

Scholar

Sanguansak Rerksuppaphol
RESEARCHER

Department of Pediatrics · Srinakharinwirot University
Thailand

Research focuses on Hepatology, with related work in Pediatrics, Perinatology and Child Health, Surgery.

OpenAlex

Dr. Chi-Shing Cho
RESEARCHER · PH.D.

Department of Clinical Oncology · Queen Elizabeth Hospital
Hong Kong

Research focuses on Medical Research, with related work in Cancer biomarker, proteomics.

ORCID

Dr. Peter Hart
ASSISTANT PROFESSOR · PH.D.

Department of Pharmacology · Roosevelt University
Schaumburg, United States

Research focuses on Cancer Research, with related work in Cognitive Neuroscience, Immunology.

ORCID • Scholar • OpenAlex

Dr. An-quan Shang
RESEARCHER · PH.D. · M.D.

Department of Laboratory medicine · Tongji University
Shanghai, China

Research focuses on Cancer Research, with related work in Infectious Diseases, Molecular Biology.

ORCID • Scholar • OpenAlex

Dr. Antonio Simone Lagan
RESEARCHER · PH.D.

Department of Human Reproduction · University of Messina
Italy

Research focuses on Reproductive Medicine, with related work in Medicine, Endometriosis.

ORCID • Scholar • OpenAlex

Dr. Ana Pejcic
PROFESSOR · PH.D. · D.D.S.

Department of Periodontology and Oral Medicine · University of Nis
Nis, Serbia

Research focuses on Periodontics, with related work in Dentistry, Periodontology.

ORCID • OpenAlex

Dr. Ian Robertson
CLINICAL RESEARCHER · M.D.

Uniformed Services University
Bethesda, United States

Research focuses on Radiology, Nuclear Medicine and Imaging, with related work in Medicine.

ResearchGate

Dr. Alfio Ferlito
PROFESSOR

School of Medicine · University of Udine
Italy

Research focuses on Cancer Research, with related work in Biochemistry, Genetics and Molecular Biology.

ResearchGate

Dr. Tsvetelina Velikova
RESEARCHER · PH.D.

Department of Medical · Medical University of Sofia
Sofia, Bulgaria

Research focuses on Complementary and alternative medicine, with related work in Medicine, Clinical Immunology.

ORCID • Scholar • OpenAlex

Prof. Giuseppe Merra
ASSOCIATE PROFESSOR · PH.D. · M.D.

Biomedicine and Prevention · University of Rome Tor Vergata
Rome, Italy

Research focuses on Food Science, with related work in Public Health, Environmental and Occupational Health, Agricultural and Biological Sciences.

ORCID • OpenAlex

Dr. Changlin Yang
RESEARCHER · PH.D.

Department of Neurosurgery · University of Florida
Gainesville, United States

Research focuses on Oncology, with related work in Medicine, Immunity.

ORCID • Scholar

Dr. KHUE VU NGUYEN
PROFESSOR · PH.D.

Departments of Medicine and Pediatrics · Université Louis Pasteur
United States

Research focuses on Molecular Biology, with related work in Genetic Diseases, Biosensors.

ResearchGate

Dr. Dhastagir Sheriff
RESEARCHER · PH.D. · M.SC.

Department of Medical · Benghazi University
Salem, Libya

Research focuses on Cardiology and Cardiovascular Medicine, with related work in Reproductive Medicine, Medicine.

Dr. Hiroshi Suzuki
PROFESSOR EMERITUS · PH.D.

Medical Doctor · Niigata Seiryo University
Niigata, Japan

Research focuses on Medical Doctor, with related work in Infectious Diseases, Clinical Virology.

Dr. Dominik Lewandowski
RESEARCHER · PH.D.

Department of Molecular and Structural Biology · University of California
Irvine, United States

Research focuses on Molecular Biology, with related work in Parasitology, Physiology.

ORCID • **Scholar** • **OpenAlex**

Dr. Rabiatul Basria SMN Mydin
LECTURER · PH.D.

Department of Cancer Genetics · Universiti Sains Malaysia
Kepala Batas, Malaysia

Research focuses on Cancer Research, with related work in Oncology, Otorhinolaryngology.

ORCID • **Scholar** • **OpenAlex**

Dr. Wael Aikhiary
CLINICAL RESEARCHER · PH.D. · M.D.

Department of Clinical Pathology · Mansoura University
Egypt

Research focuses on Blood Hemostasis and Thrombosis, with related work in Clinical Pathology.

Dr. Ivandro Monteiro
PROFESSOR · PH.D. · M.SC.

Department of Clinical Psychologist · University of Minho
Portugal

Research focuses on Depression, with related work in Interpersonal Psychotherapy, Psyc.

Dr. Sunanda Sharma
RESEARCHER · PH.D.

Swami Keshwanand Rajasthan Agricultural University
Bikaner, India

Research focuses on Small Animals, with related work in Veterinary, Obstetrics and Gynaecology.

Rama Ganga
CLINICAL RESEARCHER · M.B.B.S.

Universty of Health Sciences
Valhalla, United States

His work reflects a deep dedication to surgical excellence and academic rigor.

Shravan Gowrishankar
RESEARCHER

Cambridge University
London, United Kingdom

Research focuses on Endocrinology, Diabetes and Metabolism, with related work in Otorhinolaryngology, Surgery.

ORCID • **OpenAlex** • **ResearchGate**

Dr. Saber Abd-Allah
ASSOCIATE PROFESSOR · PH.D.

Theriogenology Department · Beni-Suef University
Beni-Suef, Egypt

Research focuses on Genetics, with related work in Public Health, Environmental and Occupational Health, Reproductive Medicine.

ORCID • **OpenAlex** • **Profile**

Umberto Aguglia
CLINICAL RESEARCHER · M.D.

Department Of Neurology · Magna Graecia University
Italy

Research focuses on Epilepsy, with related work in clinical neurophysiology, clinical neurology.

Scholar

Dr. Július Rajčáni
CLINICAL RESEARCHER · PH.D. · M.D.

Medical · MD, PhD, ScD
Bratislava, Slovakia

Research focuses on Medical.

Dr. Maria Pelaez Soni
CLINICAL RESEARCHER · PH.D. · M.D.

Department of Applied Physics · Rice University
Houston, United States

Research focuses on Biomaterials, with related work in Modeling and Simulation, Oncology.

ORCID • **Scholar** • **OpenAlex**

Dr. Krishna Vukoti
RESEARCHER · PH.D.

Department of Biochemistry · Case Western Reserve University
Smyrna, United States

Research focuses on Biochemistry Microbiology.

Dr. Sanjay Dixit
DIRECTOR · M.D.

Cardiac Arrhythmia Univ of Penn School of Medicine
United States

Dixit's expertise lies in cardiac arrhythmia management, with a particular focus on idiopathic outflow tract ventricular arrhythmia ablation.

Dr. P. Farooq Baba
CLINICAL RESEARCHER · M.B.B.S.

Plastic Surgery · Sher-i-Kashmir Institute of Medical Sciences
Srinagar, India

Research focuses on Plastic surgery, with related work in MCh Plastic surgery.

Dr. Yash Kapadia
RESEARCHER · D.D.S.

Department of Rehabilitative · University of Louisville
Louisville, United States

Research focuses on Renewable Energy, Sustainability and the Environment, with related work in Energy, Dentistry.

ORCID • **OpenAlex**

Dr. Arpita Myles
RESEARCHER · PH.D. · M.SC.
Scottsdale, United States

Research focuses on Rheumatology, with related work in Medicine.

Dr. Lisa Koodie
RESEARCHER · PH.D. IN PHARMACOLOGY

Department of Surgery · University of Minnesota
Minneapolis, United States

Research focuses on Genetics, with related work in Immunology, Modeling and Simulation.

OpenAlex

Dr. Zhiming Li
RESEARCHER · PH.D.

Department of biochemistry and molecular biology · Columbia University
United States

Research focuses on Epigenetics, with related work in Gene Regulation, Cell Culture.

Dr. M. Alagar Raja
RESEARCHER · PH.D.

Department of Pharmaceutical Sciences · Jawaharlal Nehru Technological University, Hyderabad
MADURAI, India

Research focuses on Pharmacy.

Dr. Michel Leclerc
RESEARCHER

Cellular and humoral Immunology · University of Orleans
France

Research focuses on Cellular and humoral Immunology.

Dr. Pina Sanelli
ASSOCIATE PROFESSOR · M.D.

State University of New York
Bangladesh

Sanelli specializes in advanced neuroimaging modalities including MRI, MRA, CT, and CTA, with a focus on neuroradiology and diagnostic radiology.

Dr. Burcin Becerik-Gerber
RESEARCHER · PH.D.

Department of Civil and Environmental Enginee · Harvard University
United States

Research focuses on Biomedical Engineering, with related work in Health, Toxicology and Mutagenesis, Social Psychology.

Scholar • **ResearchGate**

Dr. Subhadra Nandakumar
RESEARCHER · PH.D. · M.SC.

Department of Microbiologist · University of Madras
Atlanta, United States

Research focuses on Microbiology.

Dr. Naina Deshpande
PROFESSOR

Department of Pharm.D · Jawaharlal Nehru Technological University, Hyderabad
India

Research focuses on Pharmaceutics.

Dr. Adel Al Jumaily
RESEARCHER · PH.D.

Department of Engineering and IT · University of Technology
Sydney, Australia

Research focuses on Public Health, Environmental and Occupational Health, with related work in Rehabilitation, Medicine.

ORCID • **Scholar** • **OpenAlex**

Dr. Roberto Sanchez
ASSOCIATE PROFESSOR · PH.D.

Department of Structural and Chemical Biology · Rockefeller University
United States

from The Rockefeller University, where his research laid the foundation for his expertise in structural biology and chemical biology.

Scholar

Dr. Osama Alali
RESEARCHER · PH.D.

Department of Orthodontics · University of Aleppo
Aleppo, Syria

Research focuses on Orthodontics.

Dr. Bingyun Li
RESEARCHER · PH.D.

Department of Orthopaedics · West Virginia University
Morgantown, United States

Research focuses on Microbiology, with related work in Immunology and Microbiology, Medical Research.

Scholar • **ResearchGate**

Dr. Guodong Niu
RESEARCHER · PH.D.

Department of Entomology · Pennsylvania State University
University Park, United States

Research focuses on Entomology, with related work in Mycotoxins, Molecular Biology.

Scholar

Dr. Rajeev Vats
RESEARCHER · PH.D. · M.SC.

The University of Dodoma
Tanzania

Rajeev Vats is a distinguished academic and researcher affiliated with The University of Dodoma in Tanzania.

Dr. Carlos Garcia Pont
ASSOCIATE PROFESSOR

Universidad de Navarra
Spain

Research focuses on Epidemiology, with related work in Virology, Immunology and Microbiology.

ResearchGate

Dr. Xingnan Li
RESEARCHER · PH.D.

Department of Hematology · Stanford University
Stanford, United States

Research focuses on Cell Biology.

Dr. Feng Feng
RESEARCHER

Boston University
China

Research expertise is aligned with medical.

Dr. Joaquim Carneiro
VISITING PROFESSOR · PH.D.

Department of Mechanical Engineering · University of Minho
Portugal

Research focuses on Biomedical Engineering, with related work in Electronic, Optical and Magnetic Materials, Materials Chemistry.

ORCID • **Scholar** • **ResearchGate**

Dr. Han-Xiang Deng
RESEARCHER · PH.D.

Department of Science · Chinese Academy of Sciences
China

Research focuses on Sustainable Development, with related work in Econometric Analysis, Economic Policy Analysis.

Dr. Bing-Fang Hwang
PROFESSOR · PH.D.

Department of Occupational Safety and Health · China Medical University
Taichung, Taiwan

Research focuses on Epidemiology, with related work in Public Health, Environmental and Occupational Health, Medicine.

ORCID • **Scholar** • **OpenAlex**

Dr. Fausto Gallucci
PROFESSOR · PH.D.

Department Of Chemical Engineering and Chemistry · Eindhoven University of Technology
Eindhoven, Netherlands

Research focuses on Aerospace Engineering, with related work in Biomedical Engineering, Catalysis.

ORCID • **Scholar** • **OpenAlex**

Dr. Mojtaba Lashgari
RESEARCHER · PH.D.

Department of Computing · University of Leeds
United Kingdom

Research focuses on Image Processing, with related work in Medical Image Analysis, Medical Imaging.

Scholar • **ResearchGate**

Dr. Juan Antonio Serrano
RESEARCHER · PH.D. IN ULTRASONOGRAPHY IN VETERINARY MEDICINE

Department of Veterinary Medicine · University of California, San Francisco
San Francisco, United States

Research focuses on Cancer Research, with related work in Oncology, Biochemistry, Genetics and Molecular Biology.

ORCID • **OpenAlex** • **ResearchGate**

Dr. Bingsuo Zou
DIRECTOR · PH.D.

Department of Science · Beijing Institute of Technology
haidian district, United States

Research focuses on Atomic and Molecular Physics, and Optics, with related work in Biomedical Engineering, Electrical and Electronic Engineering.

ORCID • **OpenAlex**

Dr. Yuh-Shan Ho
PROFESSOR · PH.D. IN CHEMICAL ENGINEERING

Department of Biomedical Informatics · Asia University
Taiwan

Research focuses on Wastewater Treatment, with related work in Research Papers, Environment.

Scholar • **ResearchGate**

Marran Aldossari
RESEARCHER

Computers · Lawrence Technological University, Southfield, MI, USA
United States

Research focuses on Artificial Intelligence, with related work in Human-Computer Interaction, Public Health, Environmental and Occupational Health.

OpenAlex

Prof. Maria Kuman
RESEARCHER · PH.D.

Department of Physics and Space · Holistic Research Institute
Knoxville, United States

Research focuses on Atomic and Molecular Physics, and Optics, with related work in General Health Professions, Radiology, Nuclear Medicine and Imaging.

Dr. Zi Chen
RESEARCHER · PH.D.

Department of Mechanical & Aerospace Engineering · Dartmouth College
United States

Research focuses on Artificial Intelligence, with related work in Biomaterials, Biomedical Engineering.

ORCID • **Scholar** • **OpenAlex**

Dr. Ciprian Lapusan
ASSOCIATE PROFESSOR · PH.D.

Department of Mechanical Engineering · Technical University of Cluj-Napoca
Cluj-Napoca, Romania

Research focuses on Control and Systems Engineering, with related work in Biomedical Engineering, Industrial and Manufacturing Engineering.

ORCID • **Scholar** • **OpenAlex**

Nora Fung-yee Tam
PROFESSOR · D.PHIL.

Department of Biology and Chemistry · City University of Hong Kong
Kowloon, Hong Kong

Research focuses on Health, Toxicology and Mutagenesis, with related work in Water Science and Technology, Environmental Science.

ORCID • **OpenAlex** • **ResearchGate**

Dr. Wei-Hsin Chen
RESEARCHER · PH.D.

Department of Aeronautics and Astronautics · National Cheng Kung University
Tainan, Taiwan

Research focuses on Aerospace Engineering, with related work in Biomedical Engineering, Computational Mechanics.

ORCID • **Scholar** • **OpenAlex**

Dr. Yufeng Zhou
ASSISTANT PROFESSOR · PH.D.

Department of Mechanical Engineering · Nanyang Technological University
Singapore

Research focuses on biomedical ultrasound, with related work in Shock wave lithotripsy (SWL) for kidney calcu, Focused Ultrasound.

Scholar

Dr. Zhen Yuan
PROFESSOR · PH.D.

Faculty of Health Sciences · University of Macau
Taipa, China

Research focuses on Complementary and alternative medicine, with related work in Medicine, Neurosciences and Neuroimaging.

ORCID • **OpenAlex**

Dr. Angelo Basile
PROFESSOR · PH.D.

Institute on Membrane Technology (ITM) · Italian National Research Council
Italy

Research focuses on Biomedical Engineering, with related work in Engineering, inorganic membrane reactors.

Scholar

Dr. Agni Aliu
ASSOCIATE PROFESSOR · PH.D.

Department of Management · South East European University
struga, United States

Research focuses on Condensed Matter Physics, with related work in Materials Chemistry, Oncology.

ResearchGate

Dr. Bachchu Kaini
LECTURER · PH.D.

Department of Health Management · Anglia Ruskin University
London, United Kingdom

Research focuses on Emergency Medical Services, with related work in Health Professions, Health Care Management.

Scholar • **ResearchGate**

Dr. Safieh Javadinejad
POSTDOCTORAL RESEARCHER · PH.D. IN WATER RESOURCE ENGINEERING

Department of Civil Engineering · Université de Montréal
Birmingham, United Kingdom

Research focuses on Clinical Psychology, with related work in Ecology, Ecology, Evolution, Behavior and Systematics.

ORCID • **OpenAlex**

Dr. Rania I.M. Almoselhy
RESEARCHER · PH.D.

Department of Food Science · Ain Shams University
Egypt

Research focuses on Agricultural Science, with related work in Nutraceuticals, Clinical Nutrition.

ORCID • **Scholar**

Dr. Ioannis Baziotis
RESEARCHER · PH.D.

Department of Agricultural · Agricultural University of Athens
Athens, Greece

Research focuses on Geochemistry and Petrology, with related work in Geophysics, Astronomy and Astrophysics.

ORCID • **Scholar** • **OpenAlex**

Dr. Alejandro Plascencia Jorquera
RESEARCHER · PH.D.

Department of Animal Science · Universidad Nacional Autónoma de Mexico
México

Research focuses on Animal Science and Zoology, with related work in Agricultural and Biological Sciences, PhD. Animal production & health sciences.

Scholar

Dr. Moustafa Saleh Abbassy
ASSOCIATE PROFESSOR · PH.D. · M.SC.

Department of Environmental Studies · Alexandria University
Alexandria, Egypt

Research focuses on Food Science, with related work in Health, Toxicology and Mutagenesis, Plant Science.

Scholar • **OpenAlex**

Nwawuike Nnawugwu
RESEARCHER · PH.D. · D.SC.

Geoscience and Geoenvironmental Science · Shimane University, Japan
Matsue, Japan

Research focuses on Analytical Chemistry, with related work in Artificial Intelligence, Ecology.

OpenAlex

Dr. Noor Hassline Mohamed
LECTURER · PH.D.

Department of Philosophy · International Islamic Science University
Malaysia

Research focuses on Clinical Assessment, with related work in Child Psychology, Clinical Neuropsychology.

Scholar

Dr. Moaed Almeselmani
RESEARCHER · PH.D. IN PLANT PHYSIOLOGY

Department of Biotechnology · Damascus University
Douma, Syria

Research focuses on Agronomy and Crop Science, with related work in Plant Science, Agricultural and Biological Sciences.

OpenAlex

Preface

The Global Journal of Medical Research (GJMR) is pleased to present this issue, bringing together a curated collection of high-quality research papers that explore the latest advances in medical science and clinical practice.

This issue features research spanning topics including neurology, pharmacology & drug discovery, microbiology & pathology, radiology & diagnostics, gynecology, diseases, veterinary science, orthopedics, surgery & cardiovascular medicine, dentistry, nutrition, and interdisciplinary medical studies. Each paper has undergone a rigorous double-blind peer-review process to ensure clinical rigor and scientific originality.

We would like to express our sincere gratitude to the authors for entrusting their research with us, to the reviewers for their thorough and constructive evaluations, and to our readers for their continued engagement with the medical scientific discourse.

We hope that the research presented herein inspires further inquiry and contributes meaningfully to the advancement of medical knowledge and patient care.

The Chief Editor
Global Journal of Medical Research
Global Journals Organization

Table of Contents

Title	Author	Pages
Copyright		i
Editorial Board		iii
Preface		vii
Recognizing and Responding to Suspected Child Physical Abuse: Knowledge, Attitudes, and Practices of Primary Health Care Professionals	Souto Nóbrega et al.	1-10
The Physicians Are Not at Fault	Ellenbogen	11-16
Compassion Fatigue, Burnout and Compassion Satisfaction among Emergency Department Nurses in Lusaka, Zambia	Muchindu et al.	17-22
Solitary Plasmacytoma of the Torus Tubarius: A Rare Case Report	Briguglio	23-25
Enhancing Nursing Education through Multi-Specialty Faculty Clinical Placements in Oncology, Emergency and Critical Care Nursing	Mwiinga-Kalusopa et al.	27-35
Subject Index		37
Author Guidelines		39

GLOBAL JOURNAL
OF MEDICAL RESEARCH - K: INTERDISCIPLINARY

Volume 26 | Issue 3 | 2026 | Article ID: GJMR-277477 | Language: English | DOI: 10.34257/GJMRK277477

CATALOGING

MESH - MEDICAL SUBJECT HEADINGS • D002648, D008297

Recognizing and Responding to Suspected Child Physical Abuse: Knowledge, Attitudes, and Practices of Primary Health Care Professionals

Article Record

Corresponding author

Waleska Fernanda Souto Nóbrega § *

§ Department of Social and Preventive Dentistry, School of Dentistry, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Complete author list p. 1

RECEIVED	ACCEPTED	ONLINE PUBLISHED	PUBLISHED	PEER REVIEW
2026-09-26	2026-10-06	2026-10-12	2026-11-24	Double Blind

Abridged Abstract

This cross-sectional study evaluated the knowledge, attitudes, and practices of 155 primary healthcare physicians and nurses regarding suspected child abuse. While 20.6% identified suspected abuse in the past year, only 7.1% reported cases. Increased reporting significantly associated with maternal and child health training ($p < 0.001$), professional role as a physician ($p = 0.044$), and 21–30 years of primary care experience ($p < 0.001$). However, underreporting remains driven by fear, confidentiality concerns, and unfamiliarity with reporting protocols.

Key Sections

Context and Study Objectives 1
Methodology and Primary Care Sample 2
Reporting Rates and Statistical Associations 2
Professional Dilemmas and Underreporting Barriers 6
Professional Training and Reporting Protocols 7

Index Terms

Child Abuse | Child Care | Liability | Mandatory Reporting

Declarations

Full declarations p. 9

GENERATIVE AI
Prepared without generative AI (analysis/results)

FUNDING
The research did not receive institutional funding.

CONFLICT OF INTEREST
The authors declare no conflicts of interest

DATA AVAILABILITY
The data used to support the findings of this study can be made available upon request to the corresponding author.

ETHICS APPROVAL
Approved by CEP HUAC UFCG (opinion 7.110.427) under CNS Resolution 466/2012.

CONSENT
Participants signed the Free and Informed Consent Form (FICF).

TRIAL REGISTRATION
Not applicable to this study

HOW TO CITE
Souto Nóbrega et al. (2026). Recognizing and Responding to Suspected Child Physical Abuse: Knowledge, Attitudes, and Practices of Primary Health Care Professionals. Global Journal of Medical Research, 26(3), 1-10. DOI: 10.34257/GJMRK277477

LICENSE
Licensed to Global Journals Organization for publication. This article is distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0), subject to proper attribution.

AR EXPERIENCE | ARTICLE ONLINE | DOI | PRINT ISSN 0975-5888 | ONLINE ISSN 2249-4618 | OARS COMPLIANCE

Under the strict compliance and defined process of

Global Journal of Medical Research - Section K
GJMR Volume 26 Issue 3

Recognizing and Responding to Suspected Child Physical Abuse: Knowledge, Attitudes, and Practices of Primary Health Care Professionals

Waleska Fernanda Souto Nóbrega[§ *], Sarah Fernandes Assis Gadelha Botelho Leonel, Paula Falcão Carvalho Porto de Freitas, Maria Jeanette de Oliveira Silveira, Heitor Leonel de Paiva Lima, Ana Beatriz Dantas Nogueira, and Danilo Vieira Barbosa[ϑ]

Affiliations
§ Department of Social and Preventive Dentistry, School of Dentistry, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Qualifications
ϑ Postgraduate degree in Dentistry

Abstract

Background: To investigate the knowledge, attitudes, and practices of physicians and nurses when faced with suspected cases of physical abuse and child maltreatment.

Methods: This was a cross-sectional, quantitative, analytical study involving 155 physicians and nurses working in Primary Health Care (PHC). A previously validated questionnaire was administered. Statistical analyses were performed using IBM SPSS Statistics, version 21.0. Pearson's chi-square test was used to identify associations between variables, and a decision tree analysis was performed to assess the influence of independent variables on the dependent variable, "number of reported cases." Outcomes: Most participants were female (77.4%), with a mean age of 35.6 years. Approximately 58.1% had postgraduate degrees, 38.7% of whom had specialized in public health. In the previous year, 20.6% of participants had identified suspected cases of abuse, but only 7.1% had reported them. The variables with the greatest influence on reporting were training in maternal and child health ($p < 0.001$), being a physician ($p = 0.044$), and 21–30 years of experience in PHC ($p < 0.001$).

Conclusion: Physicians with longer professional experience and training in maternal and child health were more likely to report suspected cases of child abuse. However, reporting decisions were also influenced by barriers such as fear, uncertainty regarding confidentiality, and lack of knowledge of reporting protocols.

Keywords: *Child Abuse, Child Care, Liability, Mandatory Reporting*

*** Corresponding author** Waleska Fernanda Souto Nóbrega

1. Introduction

Violence against children and adolescents is defined as any form of emotional and/or physical mistreatment, sexual abuse, neglect, commercial exploitation, or other forms of exploitation that may cause actual or potential harm to their health, survival, development, or dignity [1]. Child abuse can occur both in their home environment and in institutions, schools, or communities with which they have contact [2].

In this article, child abuse is defined according to the World Health Organization [3] as interpersonal acts of violence against individuals under 18 years of age, including any form of maltreatment inflicted by a parent or caregiver at home (whether physical, emotional, or sexual abuse, neglect, or exposure to domestic violence), intimate partner (or dating) violence during childhood and adolescence, as well as community violence occurring between individuals who are not connected as family members, such as peers, acquaintances, or strangers [3, 4].

Child abuse represents a significant public health challenge with severe impacts. Despite advances in scientific production and awareness-raising in society over the past ten years, infant mortality rates associated with reported cases of abuse have increased [5]. The study by Hillis et al. [6] points out that, in just one year, more than 1 billion children aged 2 to 17 experienced some form of violence.

In Brazil, the fight against child abuse began in the 1980s, with a focus on preventing risk factors and providing specialized treatment [7]. However, a report published by the United Nations Children's Fund (Unicef) identified 34,918 intentional violent deaths of children and adolescents in the country between 2016 and 2020, an average of 6,970 deaths per year. Among the victims, at least 1,070 were children up to 9 years of age [8].

Cases of child abuse reported in Brazil revealed higher prevalence in children aged 0-4 years (63.5%) compared to those aged 5-9 years (36.5%). Reporting rates for different forms of violence, such as physical, psychological, neglect, and sexual, varied between boys and girls in different age groups [9]. The largest number of notifications occurs among girls, most of whom are black or brown, and in most cases the abuser is identified among friends, acquaintances or family members [10].

Under current health policies, primary health care teams play a crucial role in identifying and responding to violence against children and adolescents. As they are in close contact with families and involved in individual and collective health actions, they are well positioned to identify cases of violence, provide support and appropriate care, diagnose and treat affected individuals, and report suspected cases by referring them to the social protection network.

In addition, collaboration among different professionals, services, and sectors is essential to ensure the comprehensive pro-

tection of children and adolescents. Health services play a crucial role in this process through their participation in child protection networks [11].

Despite their strategic position, many professionals working in the Family Health Strategy (FHS) have not received adequate training to identify and support victims of domestic violence. The predominance of practices based on the biomedical model may hinder the appropriate management of situations involving children and adolescents who have experienced violence. International studies emphasize the importance of investing in training programs that develop the pedagogical competencies needed to address domestic violence. These studies highlight collective reflection, team communication, and the sharing of beliefs and experiences as essential components of group learning [12].

Furthermore, in cases of intrafamilial violence against children, it is necessary to consider the dynamic relationship of power and affection, in which subordination and domination are present. In these relationships, parents and children from different generations occupy distinct and asymmetrical positions, particularly in terms of authority, power, and dependence. In this context, violence represents an abuse of power that objectifies children and adolescents and violates their fundamental rights [13].

However, challenges in addressing violence remain rooted in cultural beliefs and practices that hinder changes in the way child maltreatment is perceived and addressed, for example, by accepting corporal punishment as a legitimate form of education and discipline [14].

Therefore, this study aimed to investigate the knowledge, attitudes, and practices of physicians and nurses working in primary health care in Campina Grande, Paraíba, Brazil, regarding suspected cases of child physical abuse and maltreatment.

2. Material and methods

2.1. Study Characterization and Setting

This was a cross-sectional, quantitative, analytical study of knowledge, attitudes, and practices (KAP). KAP studies assess a specific population's knowledge, beliefs, and behaviors regarding a particular topic, thereby identifying potential gaps, cultural influences, and behavioral patterns that may affect how the topic is understood and addressed [15].

The study was conducted in Campina Grande, Paraíba, Brazil, the state's second-largest city in terms of population. The Human Development Index (HDI) of Campina Grande is among the highest in Paraíba, with education being the dimension that evolved the most from 2000 to 2010, followed by longevity and income. Furthermore, the state of Paraíba has the tenth largest economy in Brazil, with Campina Grande being one of the municipalities that stands out in this topic based on livestock, tourism, agriculture, among others [16].

According to the Human Development Atlas of Brazil [17], social inequality in Campina Grande changed over the period, with the Gini index increasing from 0.61 in 1991 to 0.62 in 2000 before decreasing to 0.58 in 2010.

2.2. Study population and Sampling

The study included physicians and nurses working in primary health care (PHC) services within the Family Health Strategy in Campina Grande, Paraíba, Brazil. According to information from the Municipal Health Department, the municipality currently has 204 family health teams, which accounts for a total of 408 physicians and nurses. In addition, nurses working in Basic Health Units enrolled in multidisciplinary residency (five) were included, totaling a population of 413 individuals [18].

The sample size was calculated using Epi Info for Windows, considering a 95% confidence level and a 5% margin of error. The resulting sample consisted of 155 professionals. The sample was divided into two groups, comprising 78 physicians and 77 nurses.

2.3. Eligibility criteria

All physicians and nurses working in the Primary Health Care (PHC) within the scope of the family health strategy during the research period were included.

Professionals who refused to sign the Free and Informed Consent Form (FICF) or were absent from work due to leave or medical reasons during data collection were excluded. Those who could not be reached after three attempts on different days and at different times were considered losses.

2.4. Questionnaire and data Collection

The data collection instrument was based on a questionnaire previously developed and tested by Silva-Oliveira et al. [19]. The questionnaire underwent cross-cultural adaptation into Brazilian Portuguese and demonstrated excellent reproducibility. Response stability was assessed using simple and weighted kappa coefficients, which were predominantly above 0.80, indicating excellent test–retest agreement. The authors concluded that the Brazilian version of the instrument is a reliable tool for assessing the knowledge and attitudes of primary healthcare professionals regarding child physical abuse [19].

The seven health districts were divided between two researchers, who visited the Basic Health Units on different days and at different times to locate the professionals. To avoid potential embarrassment while completing the self-administered questionnaire, printed copies were distributed to the participants and collected at a later date. The health units to be visited in search of the professionals were chosen for the researchers' convenience, with no randomness in the selection process.

Collection was carried out between September and December 2024.

2.5. Data analysis

Two researchers independently entered the data into the database, and the entries were checked for inconsistencies. Statistical analyses were performed using IBM SPSS Statistics for Windows, version 21.0. First, descriptive analysis was performed, followed by Pearson's chi-square test to verify associations between dependent and independent variables. Finally, the influence of independent variables on the dependent variable "number of reported cases" was investigated using a decision tree.

2.6. Ethical Clearance

The study followed the guidelines established in National Health Council Resolution No. 466/2012 for research involving human participants. The study was submitted for ethical review through Plataforma Brasil and approved by the Research Ethics Committee of HUAC/UFCG (approval number 7.110.427).

Participants were invited to sign the Free and Informed Consent Form (FICF), which explained that their participation was voluntary. In addition, institutional approval was obtained to conduct the research.

3. Outcomes

Most participants were physicians (50.3%) and female (77.4%). The mean age was 35.65 years, ranging from 24 to 68 years. Most participants had 1–10 years since graduation (62.6%), 1–10 years of professional experience (57.4%), 1–10 years of experience in PHC (47.7%), and 1–10 years of experience in their current unit (45.2%). The majority had graduate degrees (58.1%), in the area of collective/public health or family health (38.7%).

Table 1 presents issues on the recognition and reporting of suspected cases of child abuse in professional life. Most participants reported that they had never encountered suspected cases of physical abuse among their pediatric patients during their professional experience (59.4%). However, 20.6% had identified suspected cases in the previous year, whereas only 7.1% had reported suspected or confirmed cases to the authorities during that period.

Most participants considered themselves capable of recognizing signs and symptoms of child physical abuse and of making an appropriate diagnosis. When asked where suspected cases should be reported, 71.0% identified the Child Protection Council. However, when asked if they had the telephone number for the reporting department, the majority responded that they did not (55.5%) (Table 1).

Most participants identified confidentiality (72.3%), safety (70.3%), and training (72.3%) as factors that could facilitate or encourage the reporting of suspected cases. When asked about the main barriers to reporting, the main responses were fear (82.6%), insufficient knowledge (81.3%) and lack of confidentiality (60.0%) (Table 2).

Most participants expressed interest in receiving training on identifying suspected cases of child abuse (97.4%). In addition, 89.7% reported being willing to become involved in detecting physical abuse against children. Regarding the knowledge acquired during their undergraduate studies on the subject, the majority considered it sufficient (50.3%) and finally, when asked about their interest and preparation for child care, the majority responded that they were interested (93.5%) and claimed to be sufficiently prepared (90.3%) (Table 3).

Table 4 presents the bivariate analysis of the dependent and independent variables. Sex was associated with identifying fear as a barrier to reporting suspected cases and with participants' perceived preparedness to report such cases. In addition, it can be observed that age group, time since graduation, time working in PHC, time working in the unit, type of professional and graduate area influenced the number of cases observed (suspected and confirmed) by the professionals participating in the research.

Figure 1 presents the decision tree illustrating the association between the number of reported child abuse cases and the study variables. The variables most strongly associated with reporting were specialization in maternal and child health ($p<0.001$), being a physician ($p = 0.044$), and having 21–30 years of experience in primary health care ($p<0.001$).

Table 1. Questions regarding suspected/confirmed cases of child abuse identified and reported in professional experience, Campina Grande – PB, 2025.

Variable	N	%
In your professional experience, have you ever encountered a suspected case of physical abuse among your pediatric patients?		
No	92	59,4
Yes	63	40,6
If yes, please indicate the number of cases. If you are not sure, provide an approximate number		
Up to 5 cases	59	38,1
Between 6 and 10 cases	3	1,9
From 11 to 20 cases	1	0,6
Not applicable	92	59,4
Have you ever reported a suspected case of physical abuse in a child among your patients?		
No	127	81,9
Yes	28	18,1
If yes, please indicate the number of reported cases		
Up to 5 cases	26	16,8
Between 6 and 10 cases	1	0,6
From 11 to 20 cases	1	0,6
Not applicable	127	81,9
Have you seen any case of pediatric orofacial trauma related to physical abuse in the past year?		
No	153	98,7
Yes	2	1,3
If yes, please indicate the number of trauma cases		
Up to 5 cases	2	1,3
Not applicable	153	98,7
Have you seen any suspected cases of physical abuse in a child in the past year?		
No	123	79,4
Yes	32	20,6
If yes, please indicate the number of cases seen		
Up to 5 cases	30	19,4
Between 6 and 10 cases	2	1,3
Not applicable	123	79,4
Have you seen any confirmed cases of physical abuse in a child in the past year?		
No	146	94,2
Yes	9	5,8
If yes, please indicate the number of cases seen		
Up to 5 cases	8	5,2
Between 6 and 10 cases	1	0,6
Not applicable	146	94,2
Have you reported any suspected or confirmed cases of physical abuse in a child to the authorities in the past year?		
No	144	92,9
Yes	11	7,1
If yes, please indicate the number of cases reported		
Up to 5 cases	11	7,1
Not applicable	144	92,9
Using a scale from zero to ten, how capable are you of recognizing signs and symptoms of physical abuse in a child?		
1 to 5 - Not very capable	21	13,5
6 to 10 - Very capable	134	86,5
Using a scale from zero to ten, how capable are you of effectively diagnosing physical abuse in a child?		
1 to 5 - Not very capable	35	22,6
6 to 10 - Very capable	120	77,4
Do you know who to contact to report a suspected or confirmed case of physical abuse in a child?		
No	18	11,6
Yes	137	88,4
If yes, please specify the agency, institution, or professional you would contact		
Guardianship Council	110	71,0
Civil Police	4	2,6
Social Worker / Social Service	10	6,5
CPAI (Child Protection and Assistance Center)	5	3,2
Health Department	4	2,6
Children's Hospital	1	0,6
Public Prosecutor's Office	1	0,6
SINAN (National System for Notifiable Diseases)	1	0,6
Community Health Worker (CHW)	1	0,6
Not applicable	18	11,6
Do you have any phone number or contact address for the agency, institution, or professional responsible for receiving reports of physical abuse in children?		
No	86	55,5
Yes	69	44,5
Total	**155**	**100**

Source: Research author, 2025

Table 2. Factors that facilitate and hinder the reporting of suspected cases of child abuse, interest in training on reporting abuse and willingness to get involved in suspected cases, Campina Grande – PB, 2025.

Variable		N	%
In your opinion, why are some cases of physical abuse in children not reported?			
Fear	No	79	51,0
	Yes	76	49,0
Insufficient knowledge	No	89	57,4
	Yes	66	42,6
Negligence	No	133	85,8
	Yes	22	14,2
Mark three factors that you believe may facilitate or encourage healthcare professionals to report suspected cases of physical abuse in children			
Confidentiality	No	43	27,7
	Yes	112	72,3
Safety	No	46	29,7
	Yes	109	70,3
Training	No	43	27,7
	Yes	112	72,3
Simplifying the reporting process	No	78	50,3
	Yes	77	49,7
Interdisciplinarity and intersectorality	No	108	69,7
	Yes	47	30,3
In your opinion, what are the three main barriers preventing healthcare professionals from reporting physical abuse in children?			
Fear	No	27	17,4
	Yes	128	82,6
Insufficient knowledge	No	29	18,7
	Yes	126	81,3
Lack of confidentiality	No	62	40,0
	Yes	93	60,0
Negligence	No	105	67,7
	Yes	50	32,3
Excessive workload	No	112	72,3
	Yes	43	27,7

Source: Research author, 2025

Table 3. Questions regarding interest in training on reporting abuse and willingness to get involved in suspected cases, Campina Grande – PB, 2025.

Variable	N	%
Would you like to receive training on how to identify and the reporting mechanisms for suspected cases of physical abuse in children? (e.g., courses, workshops)		
No	4	2,6
Yes	151	97,4
Do you think that the mechanisms for identifying and reporting possible cases of physical abuse in children should be part of professional training courses?		
Yes	155	100
Using a scale from zero to ten, how willing do you feel to get involved in detecting physical abuse against children?		
0 - Not willing at all	1	0,6
1 to 5 - Slightly willing	15	9,7
6 to 10 - Very willing	139	89,7
Using a scale from zero to ten, how sufficient do you think your undergraduate education was in preparing you to care for children?		
0 – Insufficient	1	0,6
1 to 5 - Slightly sufficient	76	49,0
6 to 10 – Sufficient	78	50,3
Using a scale from zero to ten, how interested do you feel in caring for children?		
1 to 5 - Slightly interested	10	6,5
6 to 10 - Very interested	145	93,5
On a scale from zero to ten, how prepared do you feel to care for children?		
1 to 5 - Slightly prepared	15	9,7
6 to 10 - Very prepared	140	90,3
On a scale from zero to ten, how interested are you in continuing education courses and training to improve care for children?		
1 to 5 - Slightly interested	4	2,6
6 to 10 - Very interested	151	97,4

Source: Research author, 2025

Table 4. Bivariate analysis between dependent and independent variables of the study, Campina Grande – PB, 2025.

Independent variable	Dependent variable	p*
Sex	In your opinion, what are the three main barriers preventing healthcare professionals from reporting physical abuse in children? – Fear	0,048
	Using a scale from zero to ten, how willing do you feel to get involved in detecting physical abuse against children?	0,039
Age group	Using a scale from zero to ten, how interested are you in providing care for children?	0,003
	Number of suspected or confirmed cases (seen) during professional experience	0,039
Time since graduation	Number of reported cases during professional experience	0,003
	Number of suspected or confirmed cases (observed) during professional experience	0,044
Work experience	Number of reported cases during professional experience	0,004
	Number of suspected or confirmed cases (observed) during professional experience	0,013
Time working in PHC	Mark three factors that you believe may facilitate or encourage healthcare professionals to report suspected cases of physical abuse in children - Interdisciplinarity and intersectorality	0,029
Time working in the current unit	Number of suspected or confirmed cases (observed) during professional experience	0,047
	Do you have any phone number or contact address for the agency, institution, or professional responsible for receiving reports of physical abuse in children?	0,016
Type of professional	In your opinion, why are some cases of physical abuse in children not reported? - Insufficient knowledge	0,046
	In your professional experience, have you seen any suspected cases of physical abuse among your pediatric patients?	0,007
	Number of suspected or confirmed cases (observed) during professional experience	0,048
	Have you reported any suspected cases of physical abuse in a child among your patients?	0,014
	Number of suspected cases in the past year	0,024
	Do you have any phone number or contact address for the agency, institution, or professional responsible for receiving reports of physical abuse in children?	0,001
	Mark three factors that you believe may facilitate or encourage healthcare professionals to report suspected cases of physical abuse in children – Confidentiality	0,022
	In your opinion, what are the three main barriers preventing healthcare professionals from reporting physical abuse in children? – Excessive workload	0,022
Postgraduate degree	Number of suspected cases in the past year	0,025
	In your opinion, what are the three main barriers preventing healthcare professionals from reporting physical abuse in children? – Negligence	0,036
Field of postgraduate degree	Number of suspected or confirmed cases (observed) during professional experience	0,001
	Have you reported any suspected cases of physical abuse in a child among your patients?	0,022
	Number of reported cases during professional experience	0,001
	Using a scale from zero to ten, how capable do you consider yourself in recognizing signs and symptoms of physical abuse in children?	0,026

**Pearson's chi-square test (p<0.05). Source: Research author, 2025.*

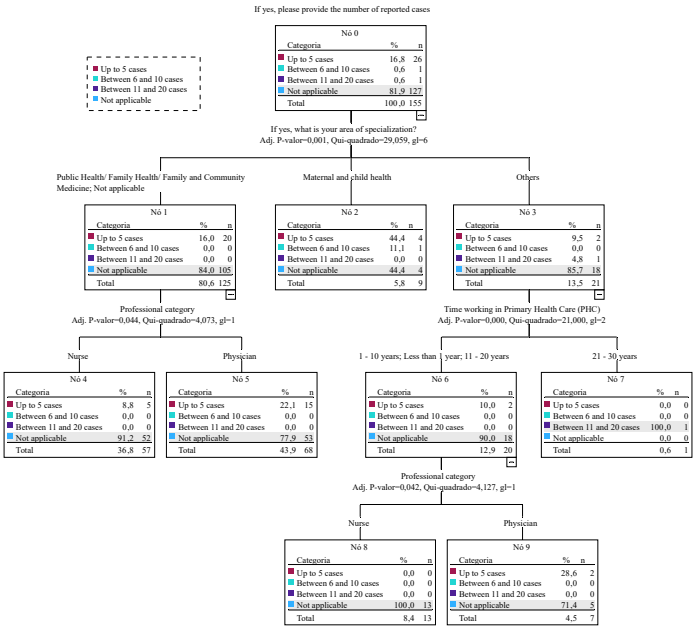


Figure 1. Decision tree demonstrating the association between number of reported cases of child abuse and the dependent variables of the study

4. Dialogue

Articles 13 and 245 of the Statute of Children and Adolescents (ECA) [20], together with Ministry of Health Ordinances No. 1968/2001 [21] and No. 104/2001 [22], established the requirement for professionals to report violence against children, which constitutes an action of utmost importance for measuring the epidemiological dimension of these injuries and the formulation of policies aimed at their prevention [19].

The Notifiable Diseases Information System (SINAN) is responsible for consolidating reports of violence cases submitted by health

units. It should be noted that the Ministry of Health provides training that covers everything from the proper completion of forms, data processing, and analysis, to the dissemination of information. However, it is observed that many municipalities and states still do not properly maintain the system [23].

The identification and documentation of child abuse remain major challenges in pediatric practice, resulting in cases that go unnoticed and are not formally reported [24]. The acceptance of physical punishment as a culturally accepted form of discipline hinders the identification and prevention of cases of violence [14]. Furthermore, the lack of sufficient knowledge and sensitization among professionals, whose practices are still guided by the biomedical model, compromises the proper management of children who have experienced violence and the measures to address it [12].

The results showed that physicians, particularly those with training in maternal and child health and longer professional experience, reported more cases of child abuse. This finding corroborates the study by Martins-Júnior et al. [25], who demonstrated that, among physicians, nurses and dentists, physicians make the most reports.

In addition, Silva-Oliveira et al. [19] stated that older professionals with longer time in the public service are those who are most likely to notice and report cases of child abuse. A recent study conducted by Mandadi et al. [5] identified that physicians trained in pediatric emergency medicine have high confidence and knowledge about the treatment of child abuse.

A concerning finding was that not all professionals who had encountered suspected cases in the previous year reported them. Most respondents identified the Child Protection Council as the preferred reporting destination, corroborating the results found by Silva-Oliveira [19].

Limited knowledge and uncertainty about recognizing signs and symptoms of child abuse are among the main barriers to reporting suspected maltreatment [24]. Other barriers include insufficient knowledge of reporting procedures [26], previous negative experiences after reporting [27], and the absence of strong legal consequences for failure to report [28].

According to Lima [26], even when training is provided, health systems continue to face challenges in ensuring that violence remains a sustained priority on the public health policy agenda. The decrease in reporting rates since 2020 may be related to pandemic-related restrictions and concerns about COVID-19 transmission, which may have led to underreporting [29].

One of the initiatives that can assist in the identification of signs and factors associated with child abuse is the dissemination of screening, identification, and assessment tools for the different forms of violence experienced in childhood and adolescence. A study by Oliveira (2016) identified eight instruments with this purpose, five of which are intended for identifying violence in domestic settings. The author believes that the proper use of these tools can contribute to the accurate identification and reporting of cases.

Nevertheless, it is necessary to analyze whether it is prudent or fair to require reporting of cases in a scenario where, often, there is no policy to support, protect and assist these professionals responsible for reporting violence against children [30].

The convenience-based selection of health units constitutes a limitation of this study, as it may introduce selection bias and restrict the generalizability of the findings to all Family Health Strategy teams in the municipality. Although the participating units encompassed different healthcare contexts, a systematic comparison of their demographic and geographic characteristics with those of non-selected units was not performed. Therefore, the findings should be interpreted in light of the specific context of the participating units. Furthermore, the presence of small terminal subgroups in the CHAID decision tree may introduce instability in lower-level splits; therefore, these results should be interpreted with caution.

5. Conclusion

Reporting suspected cases of child abuse is a complex challenge involving not only health professionals' technical knowledge but also personal, institutional, and ethical factors.

Physicians with longer professional experience and training in maternal and child health were more likely to report suspected cases. However, reporting decisions were also associated with multiple barriers, including fear, uncertainty about confidentiality and lack of information about the reporting process.

These findings highlight the importance of strategies that strengthen training and support for health professionals, ensuring that they have the confidence and clear, adequate information needed to act ethically and effectively. Measures such as implementing protocols, offering psychological and legal support, and promoting an institutional culture that values child protection can contribute to increase the reporting of suspected cases.

Therefore, this study reinforces the need for a multidisciplinary and intersectoral approach, where the commitment to child safety is shared among health professionals, managers and regulatory bodies, aiming not only at complying with legislation, but, above all, at guaranteeing the fundamental rights of children.

REFERENCES

[1] Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Lancet. 2002;360(9339):1083-8.

[2] Alsaleem SA, Alsaleem MA, Asiri AM, Alkhidhran SS, Alqahtani WSS, Alzahrani MS, et al. Knowledge and attitude regarding child abuse among primary health care physicians in Abha, Saudi Arabia, 2018. J Family Med Prim Care. 2019;8(2):706-10. doi:10.4103/jfmpc.jfmpc_442_18

[3] World Health Organisation (WHO). Violence against children. 2022. Available from: https://www.who.int/news-room/fact-sheets/detail/violence-against-children. Accessed 28 Oct 2025.

[4] Nation A, et al. Prevalence of violence against children in the United Kingdom: a systematic review and meta-analysis. Child Abuse Negl. 2023;146:106518.

[5] Mandadi AR, Dully K, Brailsford J, Wylie T, Morrissey TK, Hendry P, et al. A national survey of pediatric emergency medicine physicians on improving education in child maltreatment recognition and reporting. Child Abuse Negl. 2021;122:105324. doi:10.1016/j.chiabu.2021.105324

[6] Hillis S, et al. Global prevalence of past-year violence against children: a systematic review and minimum estimates. Pediatrics. 2016;137(3):e20154079.

[7] Sanchez RN, Minayo MCS, Souza ER. Violência contra crianças e adolescentes: questão histórica, social e de saúde. In: Minayo MCS, organizer. Violência faz mal à saúde. Rio de Janeiro: Editora Fiocruz; 2004. p.23-8.

[8] United Nations Children's Fund (UNICEF). Panorama of lethal and sexual violence against children and adolescents in Brazil. 2021. Available from: panorama-lethal-sexual-violence-against-children-adolescents-in-brazil.pdf. Accessed 28 Oct 2025.

[9] De Paula Correia JV, Pimentel Diniz CM, Oliveira MFB, Mendes IRT, Lacerda JT. Violência infantil: o perfil epidemiológico no Brasil a

partir de dados do Sistema de Informação de Agravos de Notificação (SINAN). 2023.

[10] Brasil. Ministério da Saúde (BR). Boletim epidemiológico: volume 54, nº 08 [Internet]. Brasília: Ministério da Saúde; 2023 [cited 2025 May 1]. Available from: https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/edicoes/2023/boletim-epidemiologico-volume-54-no-08

[11] Deslandes SF. Redes de proteção social e redes sociais: uma práxis integradora. In: Minayo MCS, organizer. Violência faz mal à saúde. Rio de Janeiro: Editora Fiocruz; 2006. p.135-41.

[12] Leite JCS, et al. Percepções de agentes comunitários de saúde acerca da violência doméstica contra crianças e adolescentes. Enferm Foco (Brasília). 2024;1-9.

[13] Moreira MIC, Sousa SMG. Violência intrafamiliar contra crianças e adolescentes: do espaço privado à cena pública. O Soc Quest. 2012;28:13-25.

[14] Theodoro R. A violência oculta na sola do chinelo: punição corporal, violência intrafamiliar e os modelos de autoridade em São Paulo, Brasil. Cad Saúde Pública. 2025;41:e00110324.

[15] Soares MTF, Low ST, da Silva Bastos ME, Nascimento AJF, Beserra MA, de Lima Cantarutti LM, et al. Validação de um instrumento de avaliação do conhecimento, atitude e prática de puérperas sobre os sinais gerais de perigo do recém-nascido. Aracê. 2024;6(4):11104-25.

[16] Instituto Brasileiro de Geografia e Estatística (IBGE). Cidades e Estados: Campina Grande – PB [Internet]. Rio de Janeiro: IBGE; [cited 2025 May 1]. Available from: https://www.ibge.gov.br/cidades-e-estados/pb/campina-grande.html

[17] Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos não Transmissíveis e Promoção da Saúde. Sistema de Vigilância de Violências e Acidentes (Viva): 2009, 2010 e 2011. Brasília: Ministério da Saúde; 2013. 164 p.

[18] Campina Grande (PB). Secretaria de Saúde. Quantitativo de equipes de saúde da família no município no ano de 2024 [informações cedidas]; 2024 Sep.

[19] Silva-Oliveira F, Diniz NM, Alves MDS, Pimentel Diniz CM, Gama CAP. Adaptação transcultural e reprodutibilidade de questionário para avaliação de conhecimento e atitude de profissionais de saúde frente a casos de abuso físico infantil. Cien Saude Colet. 2014;19(3):917-29.

[20] Brasil. Lei nº 8.069, de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. Diário Oficial da União. 1990 Jul 13.

[21] Brasil. Ministério da Saúde. Portaria nº 1968, de 25 de outubro de 2001. Dispõe sobre a notificação às autoridades competentes de casos de suspeita ou de confirmação de maus-tratos contra crianças e adolescentes atendidos nas entidades do Sistema Único de Saúde. Diário Oficial da República Federativa do Brasil. 2001 Oct 25.

[22] Brasil. Ministério da Saúde. Portaria nº 104, de 29 de janeiro de 2001. Dispõe sobre as Normas de Execução do Sistema de Vigilância Epidemiológica Hospitalar. Diário Oficial da União. 2001 Jan 30.

[23] Alves JM, et al. Notificação da violência contra crianças e adolescentes por profissionais de saúde. Rev Fac Ciênc Méd Sorocaba. 2017;19(1):26-32.

[24] Berchtold MB, Wüthrich C, Garcia D, Berger S, Löllgen RM. Nurses' and physicians' reported difficulties and enablers to recognising and reporting child abuse in Swiss paediatric emergency and paediatric surgery departments—an observational study. Swiss Med Wkly. 2023;153:40017. doi:10.57187/smw.2023.40017

[25] Martins-Júnior PA, Macedo JP, Silva-Oliveira F, Lacerda JT. Abuso físico de crianças e adolescentes: os profissionais de saúde percebem e denunciam? Cien Saude Colet. 2019;24(7):2609-16.

[26] Lima JS, Deslandes SF. Olhar da gestão sobre a implantação da ficha de notificação da violência doméstica, sexual e/ou outras violências em uma metrópole do Brasil. Saude Soc. 2015;24(2):661-73.

[27] Elarousy W, Abed S. Barriers that inhibit reporting suspected cases of child abuse and neglect among nurses in a public hospital, Jeddah, Saudi Arabia. East Mediterr Health J. 2019;25(6):413-21. doi:10.26719/emhj.18.055

[28] Owaidah SF, Alharaz RI, Aljubran SH, Almuhanna ZY, Menezes RG. Factors affecting reporting of suspected child maltreatment in Saudi Arabia. J Forensic Leg Med. 2022;89:102371. doi:10.1016/j.jflm.2022.102371

[29] Platt VB, Guedert JM, Coelho EBS. Violência contra crianças e adolescentes: notificações e alerta em tempos de pandemia. Rev Paul Pediatr. 2021;39:e2020267. Available from: https://www.scielo.br/j/rpp/a/Ghh9Sq55dJsrg6tsJsHCfTG/?format=pdf&lang=pt. Accessed 31 Jan 2025.

[30] Oliveira DGR. Instrumentos de rastreio, identificação e avaliação das diferentes formas de violência sofridas na infância e na adolescência: uma revisão de literatura. Trabalho de Conclusão de Curso. Universidade de Brasília, Brasília – DF; 2016.

Author contacts

Contact

2. Sarah Fernandes Assis Gadelha Botelho Leonel

3. Paula Falcão Carvalho Porto de Freitas

4. Maria Jeanette de Oliveira Silveira

5. Heitor Leonel de Paiva Lima

6. Ana Beatriz Dantas Nogueira

7. Danilo Vieira Barbosa

Contribution matrix

CRediT role	1	2	3	4	5	6	7
Conceptualization	•	•					
Methodology	•						
Software	•						
Validation		•					
Formal analysis	•						
Investigation	•						
Resources	•						
Data curation		•					
Writing - original draft	•	•	•	•	•	•	•
Writing - review and editing	•	•	•	•	•	•	•
Visualization	•						
Supervision			•	•			
Project administration			•	•			
Funding acquisition			•	•			

• Supplied role; blank: assignment absent from this record. Column numbers follow article byline order.

Declarations

Ethics approval

The study followed the guidelines established in Resolution 466/2012 of the National Health Council (CNS) for research involving human beings and submitted to ethical evaluation by a Research Ethics Committee designated by “Plataforma Brasil” and approved by CEP HUAC UFCG under opinion number 7.110.427.

Consent

Participants were invited to sign the Free and Informed Consent Form (FICF), which explained that their participation was voluntary.

GLOBAL JOURNAL
OF MEDICAL RESEARCH - K: INTERDISCIPLINARY

Volume 26 | Issue 3 | 2026 | Article ID: GJMR-278671 | Language: English | DOI: 10.34257/GJMRK278671

CATALOGING
MESH • D003704

The Physicians Are Not at Fault

Article Record

Michael Ellenbogen *

* Correspondence

RECEIVED	ACCEPTED	ONLINE PUBLISHED	PUBLISHED	PEER REVIEW
2026-10-19	2026-10-28	2026-11-16	2026-11-24	Double Blind

Abstract

This perspective piece argues that physicians are not at fault for inadequate dementia care in hospitals; rather, the systemic lack of training and support is to blame. The author, a person living with dementia, describes his own hospital experiences and those of others, and presents a proposal for a national hospital designation program to improve dementia care. The paper includes reflections from multiple physicians and dementia experts, highlighting the need for systemic change and evidence-based training programs such as the Cognibility Hospital Dementia Accreditation.

Key Sections

Introduction 11
Dementia DREAMM Team 11
Physicians' Perspectives and Systemic Challenges 11
Developing a Hospital Dementia Training Program 14
Cognibility® Hospital Dementia Accreditation 15
Center of Excellence Designation for US Hospitals 15

Index Terms

cognitive impairment | dementia | dementia training | healthcare system | hospital care | patient advocacy | physician education

Declarations

GENERATIVE AI
Prepared without generative AI (analysis/results)

FUNDING
External funding not declared

CONFLICT OF INTEREST
Free of competing interests

DATA AVAILABILITY
Data sharing not applicable

ETHICS APPROVAL
Approval not required for this article type

CONSENT
Outside this article's scope

TRIAL REGISTRATION
Not applicable to this study

HOW TO CITE
Ellenbogen (2026). The Physicians Are Not at Fault. Global Journal of Medical Research, 26(3), 11-16. DOI: 10.34257/GJMRK278671

LICENSE
Licensed to Global Journals Organization for publication. This article is distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0), subject to proper attribution.

AR EXPERIENCE | ARTICLE ONLINE | DOI

PRINT ISSN 0975-5888
ONLINE ISSN 2249-4618

OARS COMPLIANCE
Under the strict compliance and defined process of

Global Journal of Medical Research - Section K
GJMR Volume 26 Issue 3

The Physicians Are Not at Fault

Michael Ellenbogen*

Abstract

This perspective piece argues that physicians are not at fault for inadequate dementia care in hospitals; rather, the systemic lack of training and support is to blame. The author, a person living with dementia, describes his own hospital experiences and those of others, and presents a proposal for a national hospital designation program to improve dementia care. The paper includes reflections from multiple physicians and dementia experts, highlighting the need for systemic change and evidence-based training programs such as the Cognibility Hospital Dementia Accreditation.

Keywords: *cognitive impairment, dementia, dementia training, healthcare system, hospital care, patient advocacy, physician education, quality improvement*

* **Corresponding author** Michael Ellenbogen

1. Introduction

Hospitals in the United States generally do not effectively support those living with dementia. As an individual living with dementia, I have been hospitalized three times for issues unrelated to dementia, and on each occasion I felt that the hospital and staff failed me. My experience prompted me to speak with others living with dementia and their caregivers, and I discovered that I was not alone; my encounter was not an isolated case. The individuals I spoke to all responded extremely negatively about their hospital experiences. It became apparent that many of the hospital challenges I had, and those voiced by others, could not be understood or appreciated unless one was living with dementia. Because most US hospitals do not have well-established procedures for effectively supporting patients who are living with dementia, I decided to create a group to focus on creating changes to the hospital system.

2. Dementia DREAMM Team

- **D**etermined
- **R**esourceful
- **E**ngaged
- **A**dvocates
- **M**oving
- **M**ountains

2.1. Mission

Advance a national designation program for hospitals that meet specific quality measures related to identifying and treating patients experiencing cognitive issues, supported by organizations like the National Quality Forum and the Centers for Medicare and Medicaid Services.

2.2. Key Objectives

1. Identify and promote routine utilization of structured cognitive assessments during the Medicare Annual Wellness Visit.
2. Identify and promote mandatory requirements of all hospitals treating Medicare beneficiaries to adopt quality measures that ensure the best care for patients; these measures would include identification and performance improvement related to patients experiencing cognitive changes.
3. Recommend a method for identifying patients living with cognitive changes using a verification system to ensure accuracy (i.e. wristband, door signage).
4. Identify and promote programs that teach empathy to healthcare professionals and hospital staff (e.g., simulating what it is like to live with dementia) to increase understanding of the need for dementia-specific training.
5. Identify and promote training requirements related to supporting individuals living with dementia for both healthcare professionals and their care partners.

2.3. Benefits and Outcomes

1. Positive competition will be created among hospitals with the designation of implemented quality measures related to cognition.
2. Individuals living with cognitive changes will be given appropriate and evidence-based care when they are in hospital settings.
3. Individuals living with cognitive changes will have a more positive, accurate, and safe outcome in hospital settings.
4. Family care partners will be actively involved in the discharge planning process and will be provided detailed, written care plans and instructions to help prevent hospital readmissions.
5. For those newly suspected of cognitive changes, recommendations for following up with a full cognitive assessment will be provided.
6. A cost savings for hospitals will be provided due to fewer unnecessary readmissions and patient incidents.

3. Physicians' Perspectives and Systemic Challenges

As a person living with dementia, over the years I have had many interactions with healthcare providers and medical organizations. Based the experiences I had and the experiences of others who are living with dementia, I became increasingly aggravated and angry with physicians. As I have now become a world-renowned dementia advocate and an expert in many issues related to dementia, my perspective has changed. After having the opportunity to speak to many physicians, as friends, I started to realize most of the issues were actually not their fault, but a fault of the system. As one example, few have received in-depth education about dementia during their training. How can we expect physicians to provide effective care for those living with cognitive changes when they are not set up for success upon graduation?

I had heard a world-renowned physician and medical educator admit mistakes he had made related to dementia care. I was so impressed with his candor and willingness to admit this publicly. I decided to reach out to other physicians to invite them to share their personal comments and experiences. Specifically, I emailed each of them and asked them to describe three situations related to dementia whereas they later realized that they were using an ineffective approach. The individuals have consented to have their professional roles and unedited statements published in a peer-reviewed journal. I am hopeful that this information helps bring a new understanding to the issues they face as physicians, and that this will help inform teaching institutions on the importance of educating our future health care professionals about dementia.

> "I think there is a greater need than ever to use "practice" to describe medicine, which is what physicians are forced to do due to so much misinformation both taught and published. The way doctors are taught is that you are essentially given a seemingly infallible collection of knowledge. Because there is so much information to disseminate, the instructors skip over invalid assumptions and other biases intrinsic to large bodies of observations. Every so often, you are reminded (or you read on your own) that materials described as cold hard facts in medicine are entirely proven wrong because someone dares to challenge the dogma. For example, prior to 1984, senile dementia was considered a normal part of aging and only pre-senile dementia was considered abnormal. 40 years later, others want to call a trace of asymptomatic Alzheimer's pathology the first stage of Alzheimer's disease. These polar opposites can't both be true, yet no one would ever acknowledge one is wrong. Instead of each new opinion being structured as a **hypothesis** which needs to be tested and proven (at least the 1984 inclusion of senile dementia as abnormal was), terms like "framework" are used to elevate their scientific and clinical merits. As a result, many patients with subjective memory concerns who were called worry-wells are now suddenly considered patients needing immediate immunotherapy; how do we reconcile that as a field, and how do we expect patients to trust us when we flip flop without any sound science beyond random p-values?
> Another example of how we lost the public's trust is the reliance on syndromic diagnosis in dementia. Patients were told they did or did not have Lewy body dementia or behavioral variant frontotemporal dementia based on imperfect criteria derived from a small set of physicians and neuropsychologists who saw self-selected patients (who could afford to go to a 3rd or 4th opinion). Patients would then be told to undergo tests which usually performed well in very artificial settings without much real-world validation, and specialty physicians (usually at research centers where these patients go) would further solidify their biases after subjectively interpreting these tests. If non-patient facing scientists question these practices, specialty physicians would then go find other scientists who would agree with them for a share of the fame (and grant dollars). This leads to the current (mal)practice of pathologists and biochemists describing what neurologists should look for during dementia diagnosis (at least they haven't waded into dementia care yet), even though these "key opinion leaders" don't ever, nor are they trained to, medically care for people living with dementia."
>
> —*Professor of Neurology*

> "1. Speaking with a family member about the person living with Alzheimer's disease, in the presence of the person, as if he/she is not there (not thinking how it makes the person feel).
> 2. Assuming that complaints made by a person living with Alzheimer's must be inaccurate because of their cognitive disability ("written off" / don't even bother speaking with them / "She doesn't know what she is talking about" / "She makes things up").
> 3. Using demeaning terms to describe a person living with dementia such as "He is out of it" / "He is no longer there."
> 4. Giving a diagnosis of "dementia" when "dementia" per se is not a stand-alone diagnosis (a specific form of dementia such as Alzheimer's disease, vascular dementia, or frontotemporal dementia needs to be diagnosed).
> 5. Thinking that once diagnosed with Alzheimer's, the person is necessarily not safe driving a car and automatically must stop driving / Telling a person with Alzheimer's disease they must stop driving without giving hope that transportation arrangements will be made to ensure that they can get to their desired destinations.
> 6. Thinking that Alzheimer's causes aggression (when the truth is that in the vast majority of situations unmet emotional, medical, and other human needs primarily drive these understandable behavioral expressions, intersecting with the person's cognitive processing disabilities).
> 7. Assuming that people living with Alzheimer's don't feel emotions (when they are able to experience and feel the same range of emotions cognitively intact people feel).
> 8. Not giving a person with Alzheimer's disease enough time to formulate their thoughts to answer questions asked / Rushing the person.

9. Using biomedical and harmful terms to describe the person living with Alzheimer's disease: “Dementia patient” and “Demented” (as opposed to “a person living with a cognitive disability” / “a person living with cognitive changes” / need to focus on the person first).
10. Not assessing the person's remaining abilities and thus not focusing on them when developing a care plan (a missed opportunity to enhance the person's psychological well-being and physical function).
11. Doing something for the person with Alzheimer's disease (When the person is able to do it on their own), causing “Excess Disability.”
12. Diagnosing and telling the person that she/he has Alzheimer's disease without giving them hope regarding what the person can do to live a meaningful life despite cognitive disabilities.
13. Giving the person with Alzheimer’s disease false hope that a new medication is effective, in making a real, noticeable difference in their memory and cognitive function, when it is not.
I can go on but maybe some of it is useful to you...”

—Gerontologist, Dementia Behavior Specialist, and Elder Mistreatment Researcher (PhD)

Dr. first response: “For some of the doctors, they very much are at fault. They delay diagnosis, they are afraid of the diagnosis, the fail to make a diagnosis. Even those who treat sometimes won't treat folks with APOE44, so they are engaging in genetic discrimination.
I get not wanting to beat up doctors in general. Many are trying to help. Some are indifferent. Some are actively horrible. Sometimes medicine advances retirement to retirement.”

My reply: *Is that what you want me to use above? I have to say I am a bit surprised by your answer. Is it because you may have had more education than the others? Do you think the doctors are educated properly to deal with dementia after graduation?*

Dr. reply: “Yes, easy to criticize others. But in an age of disease modifying therapy, time is brain, and delays result in worse outcomes. Sad to say many doctors are complicit in this.”

—Neurologist and Clinical Researcher

“One of the biggest things I got wrong early in my career was assuming that evidence from randomized controlled trials could be applied too literally to individual patients. As physicians and scientists, we are trained to think from population data outward. We learn what works for the “average” patient. That science is essential, but it is only a map. The patient in front of us is the terrain: one person with a unique body, history, family, priorities, and social, medical, behavioral, and genetic context. I also came to realize that dementia care should not be thought of as a fixed treatment plan. It works best as a personalized, measurement-based, treatment-to-target process. The evidence gives us a starting point, but the real work is translating population-level knowledge into an individualized plan that aims for the right balance of benefit and harm for a particular person. In practice, this often becomes a series of n-of-1 trials: try a change, measure what matters, evaluate the trade-offs honestly, adjust, and repeat as goals evolve. Finally, I underestimated the importance of implementation. Through developing, evaluating, implementing, disseminating, and delivering collaborative dementia care, I learned that good care is not only about knowing the evidence. It is about creating systems that allow clinicians, patients, and care partners to apply that evidence in a way that is longitudinal, adaptive, and person-centered. The challenge is not simply discovering what works on average. It is helping each patient find what works for them.”

—Geriatrician

“My primary suggestion would be think about expanding your criticism of physician / clinician education so that it's also about the entire system of care, including how care for people living with cognitive symptoms are cared for. The GUIDE Model [1] is a demonstration project from CMS to test if paying for dementia care in a different way will improve quality of care, save money, and reduce caregiver strain. The reason to do this GUIDE model test is because the traditional “fee for service” medicare model has historically not included ways to pay for education of caregivers and education of people with cognitive symptoms about how to plan strategies to help themselves.
For my own experience, for my first job, I worked in a psychiatry hospital and people would sometimes be admitted in a crisis and I would wonder/believe that the crisis could have been avoided if the person/patient and family had been able to connect with a dementia specialist months earlier. So, my criticisms were not so much of the education of providers but more about the overall system of care. It was this concern about the importance of improving care in the community, to prevent hospital mental health crisis, which led to my personal motivation to work in dementia care policy and health systems improvements.”

—Professor of Psychiatry

“I do think the medical system has been improving in its explanation of dementia; although not perfect yet. I think one area the system could improve is by sharing more details about the prevalence of the disease and the effects that the disease has on caregivers.”

—Neurology Resident

> One doctor chose not to participate even though he is considered a world-renowned Neurologist. In fact, his statement at a conference was what inspired me to write this article. Although I don't remember exactly, his statement conveyed that he realized, after 20 years, his understanding of Alzheimer's patients was wrong. And he had been advising other physicians on this topic for all of that time.
>
> —*Professor of Medicine, Geriatrics*

4. Developing a Hospital Dementia Training Program

Since physicians, along with other medical and non-medical hospital staff, often do not receive adequate dementia knowledge during their education, it is clear that hospital systems need to step in to provide this training. As I was aware that this would be a massive undertaking, I divided it into a sequence of steps.

The first step was to inform hospital leaders and administrators on the financial benefit of such training. I assembled a team of leaders to form the Dementia DREAMM Team, and we drafted a white paper entitled, "The Business Case for Dementia-Competent Hospitals: Analyzing the Financial Return on Investment of Specialized Staff Training and Care Models," which was published in August of 2026 [2]. This paper is a analysis of how hospital systems can better serve patients who are living with dementia. It identifies structural and operational gaps and offers an evidence-based framework for building dementia-competent care environments. The work was reviewed and accepted by the Global Journal of Medical Research, an open-access, peer-reviewed journal.

The next step was to identify and create an educational model that could be used across all of hospital systems. While many currently exist, I did not feel that most of them are truly effective. I reached out to one of the dementia care experts on my team. She wrote the following:

> "We write to express our strong support for a national initiative for hospital dementia training. The U.S. population is aging rapidly, with the number of Americans aged sixty-five and older expected to nearly double by 2060. With age being the biggest risk factor for most forms of dementia, it is a condition that is becoming increasingly prevalent. Unfortunately, our current health care infrastructure is drastically underprepared for screening, diagnosing, and supporting those living with various forms of dementia.
>
> At present, many individuals are not diagnosed with dementia until they are well into life-altering symptoms of the disease, missing opportunities for early risk reduction of mitigation interventions and enhanced environmental, social, and health support. The delayed recognition of the presence of dementia can and does impede effective hospital care and health condition management. Missed awareness of developing dementias often contributes to physiological and/or psychological crises that result in hospitalization. Once admitted, many hospital systems are ill-equipped to recognize the possibility of dementia or other concurrent conditions such as delirium, depression, and anxiety. They also often lack adequate programs to reduce the incidence of negative sequalae. Without adequate follow-up screening for cognitive change and accurate multi-condition diagnoses and support upon discharge, the risk of readmission is extremely high. The devastating physiological and psychological effects on caregivers is another related effect. This issue is expected to worsen as the incidence of dementia increases, unless a program to address the situation is implemented.
>
> The recent pandemic and the risk of cognitive changes post-COVID, as well as the higher rate of anxiety, depression, and long periods of social isolation with minimal in-person medical support, have further exacerbated these issues. Thus, there is even more urgency in implementing a more robust program to screen for the possibility of dementia, delirium, depression, anxiety, or other complex combination conditions. The age range of possible concerns should also be addressed, with young onset forms of dementia being missed for an average of two to five years.
>
> Because dementia is a unique chronic and progressive condition affecting many aspects of both body and mind, it requires a specialized approach and training structure to adequately prepare hospital teams to screen and support effectively. We strongly recommend required cognitive screening for those aged sixty-five and older, or for anyone younger than sixty-five who is experiencing cognitive or behavioral symptoms. Screening for related and often concurrent conditions of delirium, depression, and anxiety should also be mandated, using existing specific screening protocol. By doing so, the number of individuals who will receive early diagnosis, intervention, and support will be significantly increased.
>
> If an individual is suspected to have a cognitive condition after admission intake screening, we strongly recommend the use of an identifier such as a uniquely coded hospital bracelet and/or door sign. Use of a code so that the identification that does not outwardly label the person is recommended. The identifiers should provide hospital health care providers with the necessary information about decision-making regarding treatments and medical interventions, and deploy the resources and support to provide effective, person-centered in-patient care. At discharge, the patient should be referred to a health provider with expertise in providing evaluation and care for people who are living with complex health conditions, for further follow-up and continued care management. Clear and concise care plans, including medication programs, should be provided and confirmed with both the person and their provider/caregivers, in both verbal and visual formats, as appropriate for the situation.
>
> All hospital staff, even those that are not health care professionals, should receive basic mandatory dementia care training. This training should include methods of effectively communicating with and supporting those living with various forms of dementia, including de-escalation of situations of distress. It would be strongly recommended that all hospitals also designate individuals to serve as a consultant, coach, and trainer for the or-

ganization. These individuals would receive specialized skill training for these roles. This training must include hands-on rehearsals to optimize performance in real-life situations.
Adoption of these recommendations will not only result in significantly improved care for those living with dementia and their care partners, but will also result in improved staff and patient safety and satisfaction. It is possible that lengths of stay can be reduced with better in-hospital programming and readmission rates can be decreased, resulting in a financial benefit for the hospital, as well as improved reputation."

—Teepa Snow, MS, OTR/R, FAOTA

I needed an evidence-based training program that would address the following key challenges:

1. There is a lack of awareness that symptoms of cognitive changes often actively interfere with communication between hospital personnel and the person or family seeking care.

2. Due to insufficient dementia-focused education and training, many staff in acute care settings find it challenging to support those living with cognitive changes due to differences in sensory and cognitive processing, possible extreme reactions and unexpected responses to procedures and protocols, and the need for modifications to mitigate risk and promote improved interactions and outcomes.

3. Upon noticing symptoms of cognitive changes in the hospital, there is an absence of dedicated skill training and precepted practical application of techniques to effectively evaluate, monitor, and support the individual during the stay. Also, there is a deficiency in consistently creating and following patient-centered care plans and discharge plans that optimize outcomes, minimize negative hospital events (fall-related injuries, antipsychotic use, elopement attempts, and refusals), and reduce rehospitalizations.

I reached out to three organizations: Second Wind Dreams® (SWD) Virtual Dementia Tour® (VDT®), CARES® Dementia 5-Step Method (CARES 5-Step), and Positive Approach to Care® (PAC™), which have successfully demonstrated their ability to provide effective dementia education programs. At my request, these three independently operating organizations have formed a collaborative under the name *Cognibility*. The collaborative group provides the following:

- Improved attitudes and appreciation of the experience of those living with cognitive changes in a hospital setting through a simulated experience and short discussion session (VDT).

- Essential knowledge and awareness of the shifts needed to provide support and care in hospital settings through a self-paced, online training and certification course (CARES).

- Use of newly acquired skills and strategies in the practice setting to improve communication patterns, de-escalate situations, and promote effective evaluations that reduce hospital events of concern (PAC).

5. Cognibility® Hospital Dementia Accreditation

Proposed Evidence-Based Dementia Programs Transforming Hospital Care:

5.1. Virtual Dementia Tour (Second Wind Dreams®)

The world-renowned Virtual Dementia Tour is a patented, evidence-based scientific method of building a greater understanding of neurodiversity by building awareness and empathy in individuals caring for people with dementia. The Hospital Virtual Dementia Tour is specifically designed for use with staff caring for those coming into the Emergency Department and beyond who are exhibiting confusion possibly associated with a change in mental status.

5.2. CARES® Dementia 5-Step Method for Hospitals

CARES® Dementia 5-Step Method for Hospitals™ program provides evidence-based dementia care training nursing assistants, dietary, housekeeping, transportation, lab techs, and other hospital worker. It was specifically designed with the goals of reducing costly adverse events such as delirium, falls, urinary tract infections, aspiration, pressure ulcers, elder abuse, and hospital readmissions.

5.3. In-Person Coaching to Improve Dementia Care Skills (Positive Approach to Care®)

A group of staff from each hospital would be selected to form a skilled intervention team. This team would receive in-person training in interactive skills and approaches, as well as training in the Positive Approach to Care Coaching model. This team will then be able to coach hand-on skills in real time on the hospital units, starting with one unit as its pilot site, then expanding to other units.

6. Center of Excellence Designation for US Hospitals

With the educational team created, I also needed a way to reward the hospitals that meet specific criteria and standards of care. As a center for excellence designation related to dementia did not exist, I decided to begin the process of creating it. I gathered a larger team of about forty-five experts from the fields of dementia education, hospital administration, healthcare, and the Center for Improvement in Healthcare Quality (CIHQ); and we are in the process of drafting the first Center of Excellence designation for US hospitals. Early in the process, this team identified three domains to be considered in structuring the standards:

6.1. Healthcare Staff Education and Training

This domain focuses on establishing evidence-based dementia education across all levels of hospital personnel. Training encompasses mandatory foundational instruction for non-clinical and support staff, advanced dementia-capable communication and de-escalation strategies for nursing staff, and specialized coaching models (such as CARES and Positive Approach to Care) to embed hands-on competencies directly into acute inpatient units.

6.2. Standardized Screening for Cognitive Impairment

This domain addresses routine admission intake screening to identify cognitive changes, delirium, depression, and anxiety early during hospital presentation. Utilizing validated screening protocols for patients aged sixty-five and older (or younger patients

presenting with cognitive symptoms), hospital teams can differentiate acute confusional states from progressive neurocognitive conditions and establish timely clinical safeguards.

6.3. Standards of Quality of Care During Admission

This domain outlines inpatient care standards and quality metrics designed to prevent adverse events, including fall-related injuries, inappropriate antipsychotic prescribing, catheter-associated infections, and elopement. It further establishes individualized care plans, non-stigmatizing identification systems, and coordinated discharge planning involving family care partners to prevent avoidable hospital readmissions.

This work is currently underway, and the document is expected to be completed by the end of 2026.

REFERENCES

[1] Centers for Medicare & Medicaid Services. (2023). Guiding an Improved Dementia Experience (GUIDE) Model. U.S. Department of Health and Human Services.

[2] Ellenbogen, M., Beville, P. K., Grande, S. W., Hobday, J., Logan, P., Minor, M., & Snow, T. (2026). The Business Case for Dementia-Competent Hospitals: Analyzing the Financial Return on Investment of Specialized Staff Training and Care Models. *Global Journal of Medical Research*, 26(K2).

GLOBAL JOURNAL
OF MEDICAL RESEARCH - K: INTERDISCIPLINARY

Volume 26 | Issue 3 | 2026 | Article ID: GJMR-277320 | Language: English | DOI: 10.34257/GJMRK277320

CATALOGING

MESH • D002055, D000076222, D016511

Compassion Fatigue, Burnout and Compassion Satisfaction among Emergency Department Nurses in Lusaka, Zambia

Article Record

Harriet Nawila §

Yasmin Sultana-Muchindu § *

* Correspondence

§ School of Medicine & Health Sciences, University of Lusaka, Lusaka, Zambia

RECEIVED	ACCEPTED	ONLINE PUBLISHED	PUBLISHED	PEER REVIEW
2026-09-22	2026-10-03	2026-10-19	2026-11-24	Double Blind

Abridged Abstract

Emergency department nurses in Lusaka, Zambia face severe occupational stressors. This cross-sectional survey evaluated compassion fatigue, burnout, and compassion satisfaction among 165 registered nurses across three Level 3 hospitals using the ProQOL-5 scale. Moderate compassion fatigue affected 74.5% of nurses and moderate burnout 71.5%. Compassion satisfaction was moderate in 61.2% and high in 38.8%. Bachelor's degree holders showed significantly higher odds of compassion satisfaction, while married nurses had lower odds. Targeted wellbeing initiatives and workforce-support interventions are warranted.

Key Sections

Background and Study Aims 17
Cross-Sectional Survey and ProQOL-5 17
Fatigue, Burnout, and Satisfaction Rates 18
Contextual Factors and Predictors 19
Workforce Support and Interventions 20

Index Terms

burnout | compassion fatigue | compassion satisfaction | emergency department nurses | Professional Quality of Life | zambia

Declarations

Full declarations p. 22

GENERATIVE AI
No AI tools were used to generate or alter study data or results.

FUNDING
No external funding received; all costs covered by the researchers.

CONFLICT OF INTEREST
The authors declare no conflicts of interest.

DATA AVAILABILITY
Data available from corresponding authors upon reasonable request.

ETHICS APPROVAL
Approved by University of Lusaka REC and National Health Research Authority of Zambia.

CONSENT
Outside this article's scope

TRIAL REGISTRATION
Not applicable to this study

HOW TO CITE
Nawila et al. (2026). Compassion Fatigue, Burnout and Compassion Satisfaction among Emergency Department Nurses in Lusaka, Zambia. Global Journal of Medical Research, 26(3), 17-22. DOI: 10.34257/GJMRK277320

LICENSE
Licensed to Global Journals Organization for publication. This article is distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0), subject to proper attribution.

AR EXPERIENCE | ARTICLE ONLINE | DOI | PRINT ISSN 0975-5888 | ONLINE ISSN 2249-4618 | OARS COMPLIANCE

Under the strict compliance and defined process of

Global Journal of Medical Research - Section K
GJMR Volume 26 Issue 3

Compassion Fatigue, Burnout and Compassion Satisfaction among Emergency Department Nurses in Lusaka, Zambia

Harriet Nawila[§] and Yasmin Sultana-Muchindu[§ *] iD

Affiliations

§ School of Medicine & Health Sciences, University of Lusaka, Lusaka, Zambia (OA)

Abstract

Background: Emergency department nurses experience repeated exposure to trauma, critical illness, death, high patient volumes and time pressure. This study assessed compassion fatigue, burnout and compassion satisfaction among emergency department nurses in Lusaka, Zambia.

Methods: A cross-sectional survey of 165 registered nurses from three Level 3 hospitals used the Professional Quality of Life Scale, Version 5. Descriptive statistics, chi-square/Fisher's exact tests and multivariable logistic regression were applied.

Results: Moderate compassion fatigue affected 74.5% and moderate burnout 71.5%; high levels were 7.9% and 0.6%, respectively. Compassion satisfaction was moderate in 61.2% and high in 38.8%. Married nurses had lower odds of high compassion satisfaction (AOR 0.42, 95% CI 0.21–0.85), whereas bachelor's degree holders had higher odds (AOR 2.74, 95% CI 1.13–6.62).

Conclusion: Preventive wellbeing and workforce-support strategies are warranted.

Keywords: *burnout, compassion fatigue, compassion satisfaction, emergency department nurses, Professional Quality of Life, zambia*

* **Corresponding author** Yasmin Sultana-Muchindu

1. Introduction

Nurses constitute the largest segment of the healthcare workforce and are central to healthcare delivery, yet their psychological wellbeing remains an important occupational-health concern. Emergency departments are particularly demanding because nurses provide rapid, technically complex and emotionally intensive care while facing unpredictable patient flow, trauma, critical illness and death. Repeated exposure to suffering may contribute to secondary traumatic stress and compassion fatigue, while chronic workload and organisational stressors may contribute to burnout [17, 15, 12]. Reviews of emergency medicine further identify repeated exposure to patient suffering, traumatic events and demanding clinical environments as important contributors to compassion fatigue [3]. At the same time, nurses may retain compassion satisfaction, the fulfilment and professional meaning derived from helping others, even when negative work experiences are present [13, 14].

In sub-Saharan Africa, workforce shortages, high caseloads and constrained resources may intensify these pressures. A regional systematic review and meta-analysis identified a substantial burden of compassion fatigue among healthcare professionals, with nurses among the most affected groups [5]. A broader scoping review similarly identified compassion fatigue as an occupational-health concern across healthcare professions and highlighted individual-, organisational- and system-level antecedents [2]. In Zambia, Kanyanta et al. [6] reported high secondary traumatic stress in 23% of nurses, high burnout in 26% and high compassion satisfaction in 32.4% among nurses in selected teaching hospitals in Lusaka. However, evidence focused specifically on emergency department nurses remains limited.

Understanding professional quality of life in emergency nursing is important for workforce retention, staff wellbeing and the sustainability of high-quality emergency care. Evidence from emergency and critical care nursing indicates that resilience is shaped by working pressure, organisational conditions, social support and opportunities for personal growth [10]. Burnout has been associated internationally with organisational and position turnover, poorer safety climate, adverse events, lower patient satisfaction and lower nurse-assessed quality of care [7, 9]. Context-specific evidence is therefore needed to inform preventive and supportive interventions in Zambian referral hospitals.

This study determined the prevalence of compassion fatigue, burnout and compassion satisfaction among emergency department nurses in three selected Level 3 hospitals in Lusaka, Zambia, and examined socio-demographic and work-related factors associated with these outcomes.

2. Materials and Methods

2.1. Study design and setting

A quantitative cross-sectional study was conducted in the emergency departments of University Teaching Hospitals–Adult Hospital, University Teaching Hospitals–Children's Hospital and Levy Mwanawasa University Teaching Hospital in Lusaka, Zambia. These are major referral and teaching hospitals providing emergency care to trauma, acute medical and critically ill patients.

2.2. Population, sample and sampling

The target population comprised 281 registered nurses working in the emergency departments of the three hospitals. Eligible participants were registered nurses providing direct patient care who had worked in the emergency department for at least six months and provided informed consent. Nurses with less than six months of emergency experience, those on leave, and staff working solely in administrative or managerial roles were excluded. A sample of 165 was determined using Yamane's finite-population formula

with a 5% margin of error [16]. Proportionate stratified random sampling allocated 104 participants to UTH–Adult Hospital, 19 to UTH–Children's Hospital and 42 to LMUTH.

2.3. Data collection and measures

Data were collected using a structured self-administered questionnaire. Socio-demographic variables included age, sex, marital status, education and hospital. Work-related variables included nursing experience, emergency department experience, shift pattern, patient load, overtime and consideration of leaving emergency nursing because of stress. Professional quality of life was measured using the 30-item Professional Quality of Life Scale, Version 5 (ProQOL-5) [13]. A pilot study was conducted among 10 nurses from Cancer Diseases Hospital, which was not included in the main study.

2.4. ProQOL-5 scoring

Each ProQOL-5 item was scored from 1 (never) to 5 (very often). Ten items each measured compassion satisfaction, burnout and secondary traumatic stress; compassion fatigue was operationalised using the secondary traumatic stress subscale. Positively worded burnout items were reverse-scored before summation. Each subscale ranged from 10 to 50: scores ≤22 were classified as low, 23–41 as moderate and ≥42 as high. For regression analysis, compassion fatigue and burnout were dichotomised as low versus moderate/high; compassion satisfaction was analysed as moderate versus high because no participant recorded a low score.

2.5. Statistical analysis

Data were entered, cleaned and analysed using Stata version 14. Frequencies, percentages, means and standard deviations summarised participant characteristics and ProQOL-5 outcomes. Pearson's chi-square test or Fisher's exact test assessed bivariate associations. Separate binary logistic regression models were fitted for elevated compassion fatigue, elevated burnout and high compassion satisfaction. Variables with bivariate $p<0.20$ were considered for inclusion, while age and sex were retained as potential confounders. Crude and adjusted odds ratios with 95% confidence intervals were reported. Statistical significance was set at $p<0.05$. Model fit was assessed using likelihood-ratio and Hosmer–Lemeshow tests, and multicollinearity using variance inflation factors.

2.6. Validity and reliability

The standardised ProQOL-5 was reviewed for contextual relevance. Internal consistency was assessed using Cronbach's alpha, with coefficients ≥0.70 considered acceptable. In the study sample, alpha coefficients were 0.81 for compassion satisfaction, 0.71 for burnout and 0.76 for compassion fatigue/secondary traumatic stress.

2.7. Ethical considerations

Ethical approval was obtained from the University of Lusaka Research Ethics Committee and the National Health Research Authority of Zambia before data collection. Administrative permission was obtained from the participating hospitals. Participation was voluntary, informed consent was obtained, no identifying information was recorded on the questionnaire, and study data were stored securely for research purposes.

3. Results

All 165 planned questionnaires were complete and included in the analysis. UTH–Adult Hospital contributed 104 respondents (63.0%), LMUTH 42 (25.5%) and UTH–Children's Hospital 19 (11.5%). Most participants were female (78.2%), aged 20–29 years (52.1%), married (65.5%) and diploma-qualified (83.6%). All were registered nurses.

Regarding work characteristics, 43.6% had 2–5 years of overall nursing experience and 39.4% had 6–10 years. Most (59.4%) had 2–5 years of emergency department experience, 66.1% worked rotational shifts and 54.5% cared for more than 15 patients per shift. All respondents reported working overtime, and 43.0% had considered leaving emergency nursing because of work-related stress.

Mean ProQOL-5 scores were 38.24 (SD 6.70) for compassion satisfaction, 25.70 (SD 5.42) for burnout and 28.67 (SD 6.70) for compassion fatigue. Internal consistency was acceptable to good across the three subscales (Cronbach's alpha 0.71–0.81).

Compassion fatigue was low in 17.6%, moderate in 74.5% and high in 7.9% of respondents. Burnout was low in 27.9%, moderate in 71.5% and high in 0.6%. Compassion satisfaction was moderate in 61.2% and high in 38.8%; no participant had low compassion satisfaction. For inferential analysis, 82.4% were classified as having elevated compassion fatigue and 72.1% as having elevated burnout.

No socio-demographic or work-related factor was significantly associated with elevated compassion fatigue at the bivariate level. Elevated compassion fatigue was more frequent among nurses with less than two years of emergency experience than among those with at least two years (89.1% vs 78.2%), but the association was not statistically significant ($p=0.075$). No examined factor was significantly associated with elevated burnout; burnout was more frequent among women than men (75.2% vs 61.1%), but this difference was not significant ($p=0.096$).

Marital status and education were associated with high compassion satisfaction in bivariate analysis. High compassion satisfaction was reported by 50.9% of single respondents compared with 32.4% of married respondents ($p=0.021$), and by 59.3% of bachelor's degree holders compared with 34.8% of diploma holders ($p=0.017$).

In adjusted models, no factor was independently associated with elevated compassion fatigue or elevated burnout. Nurses with at least two years of emergency experience had lower estimated odds of elevated compassion fatigue, although the confidence interval included the null (AOR 0.42, 95% CI 0.16–1.07; $p=0.068$). Female nurses had higher estimated odds of elevated burnout than male nurses, but the association was not statistically significant (AOR 1.94, 95% CI 0.89–4.23; $p=0.097$). For compassion satisfaction, married respondents had lower odds of high compassion satisfaction than single respondents (AOR 0.42, 95% CI 0.21–0.85; $p=0.016$), while bachelor's degree holders had higher odds than diploma-qualified respondents (AOR 2.74, 95% CI 1.13–6.62; $p=0.026$).

Table 1. Distribution of Professional Quality of Life outcomes (N=165)

Outcome	Low n (%)	Moderate n (%)	High n (%)
Compassion fatigue	29 (17.6)	123 (74.5)	13 (7.9)
Burnout	46 (27.9)	118 (71.5)	1 (0.6)
Compassion satisfaction	0 (0.0)	101 (61.2)	64 (38.8)

Source: Study data.

Table 2. ProQOL-5 descriptive statistics and internal consistency

Outcome	Mean (SD)	Range	Cronbach's α
Compassion satisfaction	38.24 (6.70)	25–48	0.81
Burnout	25.70 (5.42)	15–43	0.71
Compassion fatigue	28.67 (6.70)	14–44	0.76

Source: Study data.

Table 3. Multivariable logistic regression results

Outcome / factor	AOR	95% CI	p-value
Elevated compassion fatigue: age ≥30 years	1.59	0.69–3.68	0.280
Elevated compassion fatigue: female sex	1.33	0.50–3.54	0.568
Elevated compassion fatigue: ED experience ≥2 years	0.42	0.16–1.07	0.068
Elevated compassion fatigue: >15 patients/shift	0.61	0.26–1.44	0.259
Elevated burnout: age ≥30 years	0.78	0.39–1.55	0.482
Elevated burnout: female sex	1.94	0.89–4.23	0.097
High compassion satisfaction: age ≥30 years	1.47	0.75–2.88	0.259
High compassion satisfaction: female sex	0.81	0.36–1.80	0.608
High compassion satisfaction: married	0.42	0.21–0.85	0.016
High compassion satisfaction: bachelor's degree	2.74	1.13–6.62	0.026
High compassion satisfaction: >15 patients/shift	1.78	0.90–3.51	0.095

Source: Study data.

4. Discussion

The principal finding was the coexistence of substantial moderate occupational strain with preserved professional fulfilment. Nearly three-quarters of participants had moderate compassion fatigue and moderate burnout, while all participants reported moderate or high compassion satisfaction. This pattern accords with the ProQOL model, which recognises that positive and negative effects of helping may occur simultaneously rather than as mutually exclusive states [13].

The predominance of moderate compassion fatigue is consistent with broader nursing evidence. Yi et al. [17] reported that registered nurses and nursing students commonly experienced moderate compassion fatigue, while Pan et al. [12] identified emergency nurses as particularly vulnerable because of repeated trauma exposure and stressful clinical conditions. This is consistent with emergency-medicine evidence describing compassion fatigue as arising in settings characterised by repeated exposure to suffering, secondary traumatic stress and occupational strain [3]. In the present study, high compassion fatigue (7.9%) was lower than the 23% high secondary traumatic stress reported by Kanyanta et al. [6] among nurses in selected Lusaka teaching hospitals. Differences in clinical units, participant composition, timing and score distributions may partly account for this variation. Importantly, the relatively small high category should not obscure the 74.5% in the moderate category, who may benefit from preventive support.

High burnout was uncommon (0.6%), but 71.5% of respondents had moderate burnout. The proportion with high burnout was considerably lower than the 26% reported by Kanyanta et al. [6]. Because this study was cross-sectional and relied on self-report, it cannot determine why severe burnout was rare. Nonetheless, widespread moderate burnout remains relevant. A meta-analysis found an inverse association between resilience and burnout among nurses, supporting resilience as a potentially important protective resource [1]. International evidence links nurse burnout with poorer safety climate, more adverse events, lower patient satisfaction and lower nurse-assessed quality of care [9], although patient outcomes were not measured in the present study.

Compassion satisfaction remained comparatively strong: 38.8% had high compassion satisfaction and 61.2% had moderate levels. This high category was slightly greater than the 32.4% reported by Kanyanta et al. [6]. The finding suggests that emergency nurses may continue to derive meaning, competence and fulfilment from patient care despite emotional strain and heavy work demands. Preserving these positive dimensions is important because resilience and constructive professional engagement have been associated with compassion satisfaction and may buffer adverse work outcomes [8, 14]. Qualitative synthesis among emergency and critical care nurses also identifies social support, active learning, occupational benefit and self-regulation as factors relevant to resilience and professional growth [10].

Age and sex were not independently associated with any of the three outcomes. This is broadly consistent with the Zambian findings of Kanyanta et al. [6] for age and for secondary traumatic stress and burnout by sex. Reviews also indicate that demographic predictors are inconsistent across settings and should be interpreted alongside work environment and available support [11].

Marital status was independently associated with compassion satisfaction: married respondents had lower odds of high compassion satisfaction than single respondents. The study did not measure household responsibilities, family support or work-family conflict, so the finding should not be interpreted as evidence that marriage itself reduces compassion satisfaction. Rather, it identifies a subgroup

difference that warrants further investigation and supports equitable, non-stigmatising work-life and psychosocial support. This broader focus is consistent with evidence that compassion fatigue reflects interacting individual, organisational and system-level influences rather than a single personal characteristic [2].

Education was also independently associated with compassion satisfaction. Bachelor's degree holders had approximately 2.7 times the odds of high compassion satisfaction compared with diploma-qualified nurses. Degree-level preparation may be associated with greater professional confidence, autonomy or opportunities for role development, but causality cannot be inferred. Only 27 respondents held bachelor's degrees, and the confidence interval was relatively wide. Nevertheless, the finding is compatible with evidence that higher professional qualifications may contribute positively to compassion satisfaction in high-acuity healthcare settings [14].

No measured work-related factor independently predicted the three outcomes. This absence of statistical significance should not be interpreted as evidence that working conditions are unimportant. Overtime was universal and therefore could not be tested; rotational shifts and high patient loads were also common, reducing between-participant contrast. In addition, dichotomising ProQOL outcomes may have reduced information, and the sample size limited power for some categories. The descriptive finding that 43.0% had considered leaving emergency nursing because of work-related stress remains important for workforce planning and retention. Research on emergency and critical care nurses likewise highlights high job pressure, burnout and turnover as reasons to strengthen resilience and organisational support [10].

From a practice perspective, the findings support preventive rather than crisis-only approaches. Confidential wellbeing or ProQOL screening, referral pathways, counselling access, peer support following distressing cases, supportive supervision and mentorship for nurses newer to emergency care could be considered and evaluated. Hospital managers may also review patient allocation, overtime, rest periods and rotational scheduling. Mindfulness-based interventions may also be considered as one component of staff support: a systematic review of emergency and critical care nurses found that most included interventions improved psychological wellbeing, compassion or resilience [4]. These actions should be treated as strategies to test rather than as causal remedies established by this cross-sectional study.

Educational progression and continuing professional development may help strengthen the rewarding aspects of emergency nursing. At the same time, workforce support should recognise the coexistence of occupational strain and professional fulfilment. Interventions that focus only on reducing burnout may miss opportunities to reinforce professional meaning, recognition, teamwork and career development.

5. Strengths and Limitations

The study achieved the planned sample of 165 nurses from three major emergency-care sites using proportionate allocation. It used the standardised ProQOL-5 to assess positive and negative dimensions of professional quality of life simultaneously, achieved complete data, demonstrated acceptable-to-good internal consistency (α=0.71–0.81), and used separate multivariable models with checks for model fit and multicollinearity.

Limitations include the cross-sectional design, which precludes temporal or causal inference; reliance on self-report, with possible social-desirability and response-style bias; restriction to three Level 3 hospitals in Lusaka; limited variability in some exposures, including universal overtime; small numbers in some categories; and dichotomisation of outcomes for logistic regression. The questionnaire did not measure potentially relevant factors such as resilience, coping style, psychological support or work-family conflict.

6. Conclusion

Moderate compassion fatigue and burnout were widespread among emergency department nurses in the three selected Level 3 hospitals in Lusaka, although severe levels were uncommon. Compassion satisfaction remained moderate to high in all respondents. Married nurses had lower odds of high compassion satisfaction, whereas bachelor's degree holders had higher odds than diploma-qualified nurses. No measured factor independently predicted elevated compassion fatigue or burnout. The findings support preventive staff-wellbeing measures, workload and scheduling review, retention-focused support and equitable professional-development opportunities, alongside further longitudinal and mixed-methods research in Zambian emergency-care settings. Future intervention research should also evaluate resilience-building, mindfulness-based approaches and organisational support in this context [10, 4].

7. Acknowledgements

The author acknowledges the University of Lusaka, the management of University Teaching Hospitals–Adult Hospital, University Teaching Hospitals–Children's Hospital and Levy Mwanawasa University Teaching Hospital, and the emergency department nurses who participated in the research.

8. AI-Assisted Manuscript Preparation Disclosure

No AI tool was not used to generate or alter study data or statistical results. The author remains responsible for verifying the manuscript, references, interpretations and final submitted version.

REFERENCES

[1] Castillo-González, A., Velando-Soriano, A., De La Fuente-Solana, E. I., Martos-Cabrera, B. M., Membrive-Jiménez, M. J., Ramírez-Baena, L., & Cañadas-De La Fuente, G. A. (2024). Relation and effect of resilience on burnout in nurses: A literature review and meta-analysis. International Nursing Review, 71(1), 160–167. https://doi.org/10.1111/inr.12838

[2] Garnett, A., Hui, L., Oleynikov, C., & Boamah, S. (2023). Compassion fatigue in healthcare providers: A scoping review. BMC Health Services Research, 23, 1336. https://doi.org/10.1186/s12913-023-10356-3

[3] Jeanmonod, D., Irick, J., Munday, A. R., Awosika, A. O., & Jeanmonod, R. (2024). Compassion fatigue in emergency medicine: Current perspectives. Open Access Emergency Medicine, 16, 167–181. https://doi.org/10.2147/OAEM.S418935

[4] Joseph, A., & Jose, T. P. (2024). Coping with distress and building resilience among emergency nurses: A systematic review of mindfulness-based interventions. Indian Journal of Critical Care Medicine, 28(8), 785–791. https://doi.org/10.5005/jp-journals-10071-24761

[5] Kabunga, A., Kigongo, E., Tumwesigye, R., Udho, S., Musinguzi, M., Acup, W., Auma, A. G., Akello, A. R., Okalo, P.,

Nabaziwa, J., & Shikanga, E. M. (2024). A systematic review and meta-analysis of compassion fatigue among healthcare professionals before and during COVID-19 in sub-Saharan Africa. PLOS Global Public Health, 4(6), e0003388. https://doi.org/10.1371/journal.pgph.0003388

[6] Kanyanta, M. M., Makukula, M. K., & Wahila, R. (2023). Prevalence and social demographic factors associated with secondary traumatic stress, burnout and compassion satisfaction among nurses at selected teaching hospitals in Lusaka, Zambia. Journal of Biosciences and Medicines, 11, 86–104. https://doi.org/10.4236/jbm.2023.112007

[7] Kelly, L. A., Gee, P. M., & Butler, R. J. (2021). Impact of nurse burnout on organizational and position turnover. Nursing Outlook, 69(1), 96–102. https://doi.org/10.1016/j.outlook.2020.06.008

[8] Labrague, L. J., & de los Santos, J. A. A. (2021). Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic. Applied Nursing Research, 61, 151476. https://doi.org/10.1016/j.apnr.2021.151476

[9] Li, L. Z., Yang, P., Singer, S. J., Pfeffer, J., Mathur, M. B., & Shanafelt, T. (2024). Nurse burnout and patient safety, satisfaction, and quality of care: A systematic review and meta-analysis. JAMA Network Open, 7(11), e2443059. https://doi.org/10.1001/jamanetworkopen.2024.43059

[10] Liu, S., Zhang, Y., Liu, Y., Han, P., Zhuang, Y., & Jiang, J. (2023). The resilience of emergency and critical care nurses: A qualitative systematic review and meta-synthesis. Frontiers in Psychology, 14, 1226703. https://doi.org/10.3389/fpsyg.2023.1226703

[11] McGrath, K., Matthews, L. R., & Heard, R. (2022). Predictors of compassion satisfaction and compassion fatigue in health care workers providing health and rehabilitation services in rural and remote locations: A scoping review. Australian Journal of Rural Health, 30(2), 264–280. https://doi.org/10.1111/ajr.12857

[12] Pan, Y., Wang, X., & Jin, W. (2025). Risk of compassion fatigue among emergency department nurses: A systematic review and meta-analysis. BMC Emergency Medicine, 25, 155. https://doi.org/10.1186/s12873-025-01314-9

[13] Stamm, B. H. (2010). The concise ProQOL manual (2nd ed.). ProQOL.org.

[14] Unjai, S., Forster, E. M., Mitchell, A. E., & Creedy, D. K. (2023). Predictors of compassion satisfaction among healthcare professionals working in intensive care units: A cross-sectional study. Intensive and Critical Care Nursing, 79, 103509. https://doi.org/10.1016/j.iccn.2023.103509

[15] Xu, Z., Zhao, B., Zhang, Z., Wang, X., Jiang, Y., Zhang, M., & Li, P. (2024). Prevalence and associated factors of secondary traumatic stress in emergency nurses: A systematic review and meta-analysis. European Journal of Psychotraumatology, 15(1), 2321761. https://doi.org/10.1080/20008066.2024.2321761

[16] Yamane, T. (1967). Statistics: An introductory analysis (2nd ed.). Harper & Row.

[17] Yi, L., Hu, S., Liao, M., Cheng, L., Liu, Y., Tian, X., & Jiménez-Herrera, M. F. (2024). Prevalence and related factors of compassion fatigue among registered nurses and nursing students during the internship: A systematic review and meta-analysis. BMC Nursing, 23, 956. https://doi.org/10.1186/s12912-024-02597-2

Contribution matrix

CRediT role	1	2
Conceptualization		•
Methodology	•	•
Software	•	•
Validation	•	
Formal analysis	•	•
Investigation	•	•
Resources	•	•
Data curation	•	
Writing - original draft	•	•
Writing - review and editing	•	•
Visualization	•	•
Supervision		•
Project administration		•
Funding acquisition		•

• Supplied role; blank: assignment absent from this record. Column numbers follow article byline order.

Declarations

Generative AI

No AI tool was not used to generate or alter study data or statistical results. The author remains responsible for verifying the manuscript, references, interpretations and final submitted version.

Funding

This research received no external funding. All study-related costs were covered by the researchers.

Competing interests

The authors declare that they have no conflicts of interest related to this study or the publication of this article.

Data availability

The datasets generated and analysed during the current study are available from the corresponding authors on reasonable request, subject to applicable ethical approval, participant confidentiality, and institutional requirements.

Ethics approval

Ethical approval was obtained from the University of Lusaka Research Ethics Committee and the National Health Research Authority of Zambia before data collection. Administrative permission was obtained from the participating hospitals. Participation was voluntary, informed consent was obtained, no identifying information was recorded on the questionnaire, and study data were stored securely for research purposes.

GLOBAL JOURNAL
OF MEDICAL RESEARCH - K: INTERDISCIPLINARY

Volume 26 | Issue 3 | 2026 | Article ID: GJMR-254727 | Language: English | DOI: 10.34257/GJMRK254727

CATALOGING

MESH • D010954, D009305 | NLM • WH 440 | ICD-10 • C90.3

Solitary Plasmacytoma of the Torus Tubarius: A Rare Case Report

Article Record

Dr. Marco Briguglio *

* Correspondence

RECEIVED	ACCEPTED	ONLINE PUBLISHED	PUBLISHED	PEER REVIEW
2026-03-14	2026-08-03	2026-08-14	2026-11-24	Double Blind

Abridged Abstract

Solitary plasmacytoma is a rare localized neoplasm of monoclonal plasma cells distinguished from multiple myeloma by the absence of systemic myeloma-defining events. We present an exceptional case of a 59-year-old woman evaluated for pharyngeal symptoms, where flexible fiberoptic endoscopy revealed an incidental pedunculated mass arising from the right torus tubarius. Transoral endoscopic resection confirmed solitary plasmacytoma, followed by negative systemic workup and definitive radiotherapy.

Key Sections

Overview of Plasmacytomas 23
Clinical Presentation and Surgical Resection 23
Diagnostic Evaluation and Therapeutic Options 24
Differential Diagnosis and Patient Care 24

Index Terms

Extramedullary Plasmacytoma | immunohistochemistry | Nasopharyngeal Neoplasm | Plasma Cell Disorder | radiotherapy | Solitary Plasmacytoma | Torus Tubarius

Declarations

GENERATIVE AI
Prepared without generative AI (analysis/results)

FUNDING
External funding not declared

CONFLICT OF INTEREST
Free of competing interests

DATA AVAILABILITY
Data sharing not applicable

ETHICS APPROVAL
Approval not required for this article type

CONSENT
Outside this article's scope

TRIAL REGISTRATION
Not applicable to this study

HOW TO CITE
Briguglio (2026). Solitary Plasmacytoma of the Torus Tubarius: A Rare Case Report. Global Journal of Medical Research, 26(3), 23-25. DOI: 10.34257/GJMRK254727

LICENSE
Licensed to Global Journals Organization for publication. This article is distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0), subject to proper attribution.

AR EXPERIENCE | ARTICLE ONLINE | DOI | PRINT ISSN 0975-5888 | ONLINE ISSN 2249-4618 | OARS COMPLIANCE

Under the strict compliance and defined process of

Global Journal of Medical Research - Section K
GJMR Volume 26 Issue 3

Solitary Plasmacytoma of the Torus Tubarius: A Rare Case Report

Dr. Marco Briguglio *

Abstract

Solitary plasmacytoma is a rare neoplasm characterized by localized proliferation of monoclonal plasma cells and excessive production of the paraprotein M immunoglobulin; it's generally asymptomatic. When plasmacytomas present as isolated lesions, they are referred to as solitary plasmacytomas (SP). Solitary plasmacytoma is distinguished from multiple myeloma by the absence of the International Myeloma Working Group (IMWG)–defined criteria (criteria as > 10% of clonal plasma cells within bone marrow or biopsy-proven bony or EMP, and at least 1 myeloma-defining event). We report an extremely rare case of a 59-year-old woman who presented to the emergency department of our hospital in Chivasso, in the province of Turin, for unrelated reasons. During flexible fiberoptic endoscopic evaluation, an incidental pedunculated mass arising from the inferior portion of the right torus tubarius was identified.

Keywords: *Extramedullary Plasmacytoma, immunohistochemistry, Nasopharyngeal Neoplasm, Plasma Cell Disorder, radiotherapy, Solitary Plasmacytoma, Torus Tubarius*

* **Corresponding author** Dr. Marco Briguglio

1. Introduction

Plasmacytomas are rare tumors characterized by the monoclonal proliferation of plasma cells, which may localize either in bone or in soft tissues, generally without causing systemic manifestations, and they account for approximately 6% of all plasma cell disorders [1].

Plasmacytomas are classified into two categories—multiple or solitary—according to the number of detectable lesions, with a higher tendency toward progression to multiple myeloma in multiple forms. Solitary plasmacytomas are further subdivided based on their osseous or extramedullary localization.

The incidence of multiple myeloma has increased in recent years, with a concomitant rise in the occurrence of extramedullary plasmacytoma and solitary plasmacytoma, particularly among the elderly population. Although the pathogenesis of extramedullary plasmacytoma remains incompletely understood, several factors—including genetic predisposition, viral infections, and exposure to ionizing radiation—have been proposed as potential contributors.

Approximately 80% of extramedullary plasmacytomas arise in the head and neck region, with the nasal cavity and oropharynx among the most commonly involved sites. The patients can present symptoms such as headache, dysphagia, sore throat, epistaxis, or nasal obstruction. Extramedullary plasmacytomas involving the larynx, thyroid gland, parotid gland, or middle ear are considered particularly rare. The involvement of these uncommon regions like the larynx can cause dysphonia, dysphagia, wheezing, and airway obstruction [2].

1.1. Case Presentation

We report the case of a 59-year-old woman who presented to the emergency department of our hospital in Chivasso, in the province of Turin, complaining of a foreign body sensation in the pharyngeal region. The patient did not report any additional symptoms, including pharyngeal pain or odynophagia. She reported good general health, was not receiving any chronic medical therapy, and had no known allergies. Her only previous surgical procedure was uterine curettage following a spontaneous abortion approximately 20 years earlier.

On otorhinolaryngological examination, oropharyngoscopy was unremarkable; however, flexible fiberoptic endoscopic evaluation revealed a pedunculated mass in the nasopharynx, specifically arising from the distal portion of the right torus tubarius. A contrast-enhanced computed tomography (CT) scan of the maxillofacial region and neck was therefore requested and performed five days after the initial clinical evaluation.

CT imaging demonstrated asymmetry of the oropharyngeal air spaces related to the presence of an ovoid lesion located slightly inferior to the right torus tubarius, measuring approximately 10 × 11×7 mm. The lesion showed intense contrast enhancement, a broad base of attachment to the right oropharyngeal mucosa measuring approximately 1 cm, and a plunging appearance into the airway spaces, resulting in partial obliteration on the right side. No clear infiltrative features were observed, particularly with respect to the deep fat planes and the retropharyngeal space.

Following otorhinolaryngological reassessment and review of the CT findings, the patient was placed on the waiting list for surgical excision of the lesion. Preoperative laboratory tests were within normal limits, as was chest radiography. Approximately one month after the last ENT evaluation, the patient underwent surgery under general anesthesia. After placement of a self-retaining mouth gag, transoral excision of the lesion along with its pedicle was performed under endoscopic guidance using a 70° rigid endoscope, and the specimen was submitted for histopathological examination.

Histological analysis revealed a thin squamous epithelium covering a densely cellular lesion, vaguely subdivided into nests by thin fibrous septa and traversed by a rich vascular network with variably sized and shaped lumina and thin walls. The cellular component consisted predominantly of mature plasma cells with abundant cytoplasm and round eccentric nuclei, along with a smaller proportion of more immature cells with small nucleoli. Immunohistochemical staining demonstrated diffuse expression of vimentin and CD31, extensive but not complete positivity for CD138, CD79α, and kappa light chain, and negativity for CD34, CD45, pan-cytokeratin

(AE1/AE3), CD99, cyclin D1, smooth muscle actin, desmin, calponin, S100, synaptophysin, CD20, PAX5, and lambda light chain. Rare scattered CD45-positive lymphocytes were observed. The proliferative index assessed by MIB-1 was approximately 2%.

Based on these findings, the histopathological features were considered most consistent with a diagnosis of solitary plasmacytoma.

The patient was subsequently referred to the hematology team. A bone marrow biopsy was performed and yielded negative results, and a PET scan was carried out, which showed disease with high metabolic activity in the right nasopharyngeal region; therefore, she underwent radiotherapy to this area.

2. Discussion

Solitary plasmacytoma is a rare neoplasm characterized by the proliferation of plasma cells within a single anatomical site, such as bone or soft tissues, without evidence of bone invasion or systemic symptoms.

Soft tissue plasmacytomas are less prevalent than osseous forms, accounting for approximately 30% of all cases reported in the literature [3]. Extramedullary plasmacytomas predominantly occur in adulthood, with a higher incidence between 50 and 65 years of age.

Although they may affect younger individuals, they are considered rare before the age of 40–50 years. They occur more frequently in men than in women, with an estimated male-to-female ratio of approximately 3:1.

The diagnosis of extramedullary disease in multiple myeloma can be very difficult, and there may be delays due to varying locations or subtle presentations.

Extramedullary plasmacytomas may arise in a wide range of soft tissues, often producing nonspecific symptoms that can delay diagnosis and, consequently, postpone the initiation of appropriate treatment.

The symptoms that arise may be attributed to other conditions, which can increase the risk that patients delay seeking evaluation by a hematologist.

The head and neck region represents the most common site of involvement for these tumors (about 80% of all cases).

The sinonasal cavity is the most common site of EMP in the upper aerodigestive tract (38% occur within this subsite); when occurring at this site, they enter the differential diagnosis with lymphomas, melanomas, inverted papillomas, nasal polyps, or fungal rhinosinusitis.

They typically present with symptoms such as nasal obstruction or epistaxis.

At the nasopharyngeal level, they usually appear as slowly growing masses and are generally associated with a favorable prognosis [4].

Plasmacytoma shares cellular type and morphological features with multiple myeloma; however, it does not exhibit the systemic manifestations typical of advanced disease.

A high histological grade and the presence of angiogenesis in plasmacytomas are associated with an increased risk of progression to multiple myeloma (estimated to range between 10% and 30%) [3].

Extramedullary plasmacytoma is occasionally regarded as an intermediate stage between monoclonal gammopathy of undetermined significance (MGUS) and overt multiple myeloma.

In order to diagnose solitary plasmacytoma, multiple myeloma must be excluded, as up to 60% of solitary plasmacytomas are treated with local therapy alone, whereas the 5-year survival rate for multiple myeloma is approximately 35% [3].

The diagnostic criteria for solitary extramedullary plasmacytoma include histologically confirmed plasma cell neoplasia, less than 5% plasma cells on bone marrow biopsy from a separate site and the absence of myeloma-related end-organ damage.

Biopsy is essential to assess plasma cell infiltration and characterize the cellular phenotype. Histopathological evaluation confirms the presence of plasma cells, while immunohistochemistry (IHC) offers crucial information regarding cellular phenotype and clonality. Key IHC markers, including CD138, CD38, and MUM1, are routinely employed to establish the plasma cell origin of the lesion.

Even a complete skeletal survey to exclude intramedullary involvement is fundamental: current recommendations include the use of whole-body imaging modalities, such as low-dose computed tomography (CT), magnetic resonance imaging (MRI), or ^{18}F-FDG PET/CT (18-fluorodeoxyglucose positron emission tomography–CT), in accordance with local guidelines and interpreted alongside clinical and radiological findings [5].

PET-CT scans are a highly effective tool for identifying the localization of EMD lesions and assessing metabolic response to therapy; MRI is a very important technique used for detecting lesions in soft tissue caused by extramedullary plasmacytoma. Instead, CT helps assess bone lesions and is frequently used to evaluate MM cases. A better option is whole-body low-dose CT (WBLD-CT), which allows for the evaluation of the risk of pathological fractures [5].

In the present case, computed tomography was useful in defining the lesion's characteristics—particularly its intense contrast enhancement—and in excluding infiltration of deeper tissues.

Treatment options for solitary plasmacytoma include surgical resection, definitive radiotherapy, or surgery followed by adjuvant radiotherapy.

Radiotherapy is a treatment of choice and is frequently used in extramedullary disease. It achieves local control rates of approximately 80% in both solitary bone plasmacytomas and extramedullary plasmacytomas due to the radiosensitive nature of these lesions [3].

Surgical excision, either partial or complete, may be considered in cases of extramedullary or solitary bone plasmacytomas [1, 4]. Surgery is frequently performed when a newly identified tumor mass requires histopathological evaluation.

Chemotherapy is reserved for high-grade plasmacytomas or for extensive disease, primarily to reduce the risk of recurrence.

3. Conclusions

Although extremely rare, nasopharyngeal plasmacytoma should be considered in the differential diagnosis of other neoplasms, such as squamous cell carcinomas and lymphomas. Careful histopathological analysis is crucial for accurate diagnosis and appropriate management. In this context, close collaboration with a hematologist remains essential for optimal patient care.

REFERENCES

[1] Albandak M, Mikkawi A, Ayasa LA, Ansara Y, Janajri M. Solitary Plasmacytoma in the Calcaneus. *Cureus*. 2023 Apr 16;15(4):e37637. doi: 10.7759/cureus.37637. PMID: 37200639.

[2] Gao L, Li H, Shen W, Wang X, Ai C, Li X. Solitary extramedullary plasmacytoma of the left main bronchus: A case report and literature review. *Thorac Cancer*. 2023 Feb;14(4):419–422. doi: 10.1111/1759-7714.14790. PMID: 36635969.

[3] Charalampous C, Claveau JS, Kapoor P, Binder M, Buadi FK, Cook J, Dingli D, Dispenzieri A, Fonder AL, Gertz MA, Gonsalves W, Hayman SR, Hobbs MA, Hwa YL, Kourelis T, Lacy MQ, Leung N, Lin Y, Warsame R, Kyle RA, Rajkumar SV, Kumar SK. Solitary plasmacytoma: single-institution experience, and systematic review and meta-analysis of clinical outcomes. *Blood Adv.* 2025 Apr 8;9(7):1559–1570. doi: 10.1182/bloodadvances.2024013355. PMID: 39883947.

[4] Jaheddine F, Essaber H, Cherif A, Rabilleh M, Faraj C, El Bakkari A, Allioui S, Jerguigue H, Omor Y, Latib R, Amalik S. A rare encounter in the nasopharynx: Extramedullary plasmacytoma. *Radiol Case Rep.* 2024 Sep 17;19(12):5904–5907. doi: 10.1016/j.radcr.2024.08.099. PMID: 39328942.

[5] Wilkinson S, Jawad S, Kowa XY. Head and neck manifestations of extramedullary plasmacytomas and their differential diagnoses: a pictorial review. *Br J Radiol.* 2025 May;98(1169):640–649. doi: 10.1093/bjr/tqaf031. PMID: 39933021.

GLOBAL JOURNAL
OF MEDICAL RESEARCH - K: INTERDISCIPLINARY

Volume 26 | Issue 3 | 2026 | Article ID: GJMR-K-276967 | Language: English | DOI: 10.34257/GJMRK276967

CATALOGING

MESH • D004506, D005195

Enhancing Nursing Education through Multi-Specialty Faculty Clinical Placements in Oncology, Emergency and Critical Care Nursing

Article Record

Victoria Mwiinga-Kalusopa § *

Patricia Katowa Mukwato §

Christabel Mwiinga §

Celestine Nzala §

Fastone Goma §

* Correspondence

§ School of Nursing Sciences, University of Zambia, Lusaka, Zambia

RECEIVED	ACCEPTED	ONLINE PUBLISHED	PUBLISHED	PEER REVIEW
2026-09-04	2026-09-14	2026-10-16	2026-11-24	Double Blind

Abridged Abstract

This study documents the experiences of three nursing faculty members from the University of Zambia during a multi-specialty academic and observational clinical exchange at Birmingham City University and United Kingdom NHS institutions. The exchange provided valuable exposure to postgraduate curricula, simulation-based education, clinical protocols, multidisciplinary pathways, and advanced practice in oncology, emergency, and critical care. Participants identified actionable practices for contextual adaptation in Zambia, emphasizing structured mentorship, enhanced simulation, and institutional support.

Key Sections

Internationalization & Faculty Exchange 30
Exchange Structure & Placements 31
Clinical & Educational Observations 32
Contextual Adaptation & Mentorship 33
Strengthening Nursing Education 36

Index Terms

Clinical Placements | critical care | Emergency and trauma | experiences | Multi-Specialty Faculty | nursing | Nursing Education

Declarations

Full declarations p. 38

GENERATIVE AI
Prepared without generative AI (analysis/results)

FUNDING
Supported by NIH Fogarty International Center and PEPFAR (Award R25 TW011219, SHEPIZ Project)

CONFLICT OF INTEREST
Free of competing interests

DATA AVAILABILITY
Data sharing not applicable

ETHICS APPROVAL
Approval not required for this article type

CONSENT
Outside this article's scope

TRIAL REGISTRATION
Not applicable to this study

HOW TO CITE
Mwiinga-Kalusopa et al. (2026). Enhancing Nursing Education through Multi-Specialty Faculty Clinical Placements in Oncology, Emergency and Critical Care Nursing. Global Journal of Medical Research, 26(3). DOI: 10.34257/GJMRK276967

LICENSE
Licensed to Global Journals Organization for publication. This article is distributed under the terms and conditions of the Creative Commons Attribution 4.0 (CC BY 4.0), subject to proper attribution.

AR EXPERIENCE | ARTICLE ONLINE | DOI | PRINT ISSN 0975-5888 | ONLINE ISSN 2249-4618 | OARS COMPLIANCE

Under the strict compliance and defined process of

Global Journal of Medical Research - Section K
GJMR Volume 26 Issue 3

Enhancing Nursing Education through Multi-Specialty Faculty Clinical Placements in Oncology, Emergency and Critical Care Nursing

Victoria Mwiinga-Kalusopa [§ * iD G], Patricia Katowa Mukwato [§], Christabel Mwiinga [§], Celestine Nzala [§], and Fastone Goma [§]

Affiliations

§ School of Nursing Sciences, University of Zambia, Lusaka, Zambia [(OA)]

Abstract

Background: Internationalization of nursing education provides opportunities for faculty development, knowledge exchange, and exposure to alternative approaches to academic and clinical practice. However, evidence documenting lecturers' experiences and the potential educational value of international faculty exchange, particularly in resource-constrained settings, remains limited. This paper describes lecturers' experiences during a multi-specialty international academic and clinical exchange.

Methods: The experiences of three faculty members from the University of Zambia, School of Nursing Sciences, who participated in an international capacity-strengthening exchange programme under the Strengthening Health Professional Workforce Education Programs for Improved Health Care in Zambia initiative where documented. The exchange was conducted in collaboration with Birmingham City University (BCU), United Kingdom, from 12 August to 8 September 2024. Participants were faculty involved in postgraduate nursing education in oncology and palliative care, trauma and emergency nursing, and critical care nursing. Data were derived from participants' written accounts, structured placement schedules, and an exchange mission report documenting academic activities, simulation-based learning, professional engagements, and observational clinical placements across BCU and National Health Service institutions in Birmingham and surrounding areas.

Results: The exchange provided exposure to postgraduate nursing curricula, simulation and skills laboratory education, multidisciplinary practice, patient pathways, clinical protocols, mentorship, advanced nursing roles, and specialist clinical services. In oncology and palliative care, participants observed chemotherapy, radiotherapy, acute oncology, apheresis, stem-cell services, Peripherally Inserted Central Catheter line care, hospice care, and oncology research. Emergency and critical care experiences included patient navigation, triage, resuscitation, sepsis management, advanced monitoring, mechanical ventilation, renal replacement therapy, standardized protocols, checklists, multidisciplinary reviews, and critical care outreach. Participants identified several practices with potential for contextual adaptation, including structured mentorship, simulation-based education, clinical protocols, patient navigation, quality improvement, and strengthened clinical reasoning.

Conclusion: International faculty exchange provided valuable opportunities for professional learning, reflection, networking, and identification of contextually relevant approaches to strengthening nursing education. Sustained institutional support, structured knowledge translation, and evaluation of post-exchange implementation are recommended.

Keywords: *Clinical Placements, critical care, Emergency and trauma, experiences, Multi-Specialty Faculty, nursing, Nursing Education, Observations, Oncology*

*** Corresponding author** Victoria Mwiinga-Kalusopa

1. Background

Nursing is an increasingly globally connected profession, with growing demands for nurses to possess the knowledge, competencies, adaptability, and intercultural awareness required to practise effectively across diverse national and healthcare contexts (Raghavan, 2025; Yatsu and Saeki, 2022; Baker et al., 2021). In this context, the internationalization of nursing education has become an important strategy for strengthening the preparation of nurses and nurse educators for rapidly changing healthcare environments. Globalization is increasingly recognized as an important dimension of higher education and a means of maintaining educational quality, promoting knowledge exchange, and strengthening institutional capacity (Ul Hassan et al., 2025; Tight, 2021; Enskär et al., 2011). Internationalization of nursing education can therefore provide opportunities for faculty to develop a broader global perspective while critically examining their own educational and clinical practices.

The internationalization of healthcare has similarly facilitated the exchange of knowledge, expertise, educational approaches, and professional practices across national boundaries (Wei and Sumettikoon, 2024; Lee et al., 2018). International faculty and lecturer exchange programmes represent one mechanism through which this exchange can occur. Such programmes can expose nurse educators to alternative approaches to curriculum development, clinical education, simulation, professional practice, mentorship, multidisciplinary collaboration, and service delivery. Evidence suggests that participation in international exchange may contribute to broader global awareness, intellectual development, professional learning, cultural understanding, and personal growth among academic staff (Enskär et al., 2011). However, internationalization opportunities remain unevenly available across countries, and

evidence concerning the outcomes and longer-term educational impact of faculty exchange programmes remains limited (Rumbley et al., 2023; De Wit et al., 2021; Li et al., 2023).

Recent experiences from an international nursing exchange between the University of Zambia (UNZA) and Birmingham City University (BCU) provide a practical illustration of the potential value of such programmes. The exchange incorporated academic orientation, simulation and skills-laboratory exposure, networking with academic leaders, and observational clinical experiences within several United Kingdom healthcare institutions. In oncology and palliative care, participants were exposed to chemotherapy services, radiotherapy, stem-cell transplantation, apheresis, peripherally inserted central catheter care, acute oncology services, patient pathways, hospice care, and oncology research. The experience highlighted the importance of multidisciplinary care, clearly established patient pathways, structured clinical processes, and patient navigation across the cancer-care continuum.

The exchange also provided exposure to emergency and critical care nursing practices. Participants observed emergency department organization, patient navigation, triage and assessment processes, resuscitation, sepsis management, patient monitoring, simulation-based education, and multidisciplinary approaches to emergency care. In critical care settings, exposure included advanced monitoring and ventilatory support, complex medication management, standardized protocols, clinical checklists, infection-prevention practices, and critical care outreach services. The report particularly identified structured mentorship, specialization, clinical reasoning, decision-making, quality improvement, standardized protocols, and greater nursing autonomy as important areas for consideration in strengthening critical care nursing education and practice in Zambia.

Importantly, the exchange was not limited to individual professional exposure but generated opportunities for institutional learning and potential adaptation. Participants identified practices that could potentially be contextualized within Zambian nursing education and healthcare settings, including greater involvement of clinical staff in skills-laboratory teaching, dedicated skills laboratory personnel, structured mentorship and competency checklists, expanded capacity building activities, patient navigation systems, clinical protocols, outreach programmes, and strengthened simulation-based learning. The exchange also resulted in opportunities for continued collaboration and mentorship, including potential academic contributions in palliative care and cardiac nursing, as well as opportunities for clinical orientation and knowledge sharing in areas such as acute oncology and Peripherally Inserted Central Catheter (PICC) line care.

Despite these potential benefits, much of the literature on international nursing faculty exchange has focused on programme development, implementation, and participant perceptions, with comparatively limited evidence examining what lecturers actually experience during international exchanges and how these experiences influence their professional learning and perspectives (Crites et al., 2023). Although faculty generally perceive international exchange initiatives as valuable, they may also experience challenges associated with adapting to different educational systems, professional roles, clinical environments, organizational structures, and cultural contexts (Li et al., 2023). Furthermore, exposure to practices in a high-resource healthcare and academic environment does not automatically translate into their adoption within another context. Understanding what lecturers observe, learn, value, and perceive as transferable is therefore essential for determining the educational and professional contribution of international exchange programmes.

For institutions in resource-constrained settings, documenting lecturers' experiences of international exchange may provide important insights into how international exposure can contribute to nursing education, faculty development, clinical teaching, and institutional collaboration while informing contextually appropriate improvements (Tscherne, 2026). The exchange report itself identified the value of exposure to an alternative healthcare and education system in helping participants identify strengths and gaps in nursing academic and clinical education at UNZA. It further recommended continued institutional support for exchange programmes and the development of a formal institutional approach to supporting lecturers' participation in such opportunities. Nevertheless, there remains a need to understand these experiences from the lecturers' perspective rather than relying solely on programme outputs or institutional reports. Exploring lecturers' experiences can highlight the professional, educational, cultural, and institutional dimensions of international exchange and identify lessons that may be transferable to nursing education and practice in Zambia. Therefore, this paper aimed to describe lecturers' experiences during an international nursing education and clinical exchange programme.

2. Materials and Methods

This manuscript reports a capacity-strengthening academic exchange programme implemented through the Strengthening Health Professional Workforce Education Programs for Improved Health Care in Zambia (SHEPIZ) initiative. The experiences of three faculty members from the University of Zambia, School of Nursing Sciences, who participated in an international capacity-strengthening exchange programme under the Strengthening Health Professional Workforce Education Programs for Improved Health Care in Zambia initiative where documented. The programme was undertaken through collaboration between the University of Zambia (UNZA) and Birmingham City University (BCU), United Kingdom, with the aim of strengthening faculty capacity to support postgraduate education in Oncology Nursing and Palliative Care, Critical Care Nursing, and Trauma and Emergency Nursing.

The exchange incorporated academic orientation, faculty engagement, simulation-based learning, structured professional meetings, and observational clinical placements within National Health Service (NHS) institutions. The study visit took place in the United Kingdom between August and September 2024, with the report documenting placements undertaken from 12 August to 8 September 2024. The activities provided participants with exposure to postgraduate nursing education, simulation and skills-laboratory approaches, clinical education systems, multidisciplinary practice, patient pathways, clinical protocols, and advanced nursing roles.

The exchange involved faculty members from the UNZA School of Nursing Sciences participating in specialist nursing education and clinical observation activities. The participants were exposed to three principal areas of postgraduate nursing practice: oncology and palliative care, trauma and emergency nursing, and critical care nursing. The programmme was designed as a reciprocal learning and capacity-development activity, enabling UNZA faculty to observe established educational and clinical practices in the UK and identify approaches that could potentially be adapted to the Zambian context.

At BCU, participants received orientation to the Faculty of Health, Education and Life Sciences, postgraduate nursing curricula, nurse education, simulation facilities, and the NHS healthcare system. Faculty networking sessions were also undertaken with senior academic and clinical personnel. Simulation and skills-laboratory activities included basic life support and choking management, while additional academic sessions addressed areas relevant to emergency and critical care practice, including sepsis recognition and management, burns management, neurological management, drug administration, electrocardiogram interpretation, and paediatric cardiac care. English-language testing was also undertaken for faculty participating in postgraduate certificate-related activities.

Clinical exposure was undertaken across several NHS facilities and was observational in nature. In oncology and palliative care, participant visited Queen Elizabeth Hospital Birmingham (QEHB), Wolverhampton, Walsall, and Birmingham Hospice. Activities included orientation to oncology services and patient pathways, observation of stem-cell transplantation and harvesting, apheresis, chemotherapy, PICC-line care, pre-chemotherapy assessment, chemotherapy administration, radiotherapy pathways and treatment planning, acute oncology services, haematology pathways, hair cooling, oncology research, and hospice care. The oncology placement also provided exposure to the roles of pharmacists and nurse researchers in chemotherapy and clinical trials.

For trauma and emergency nursing, observational activities were undertaken in accident and emergency departments at QEHB and other NHS hospitals. Exposure included emergency department organisation and patient navigation, immediate needs assessment, patient stabilisation, pain management, emergency resuscitation, sepsis management, airway management, burns, myocardial infarction, blood-gas sampling, paediatric emergency care, triage, emergency preparedness, and referral pathways. Participants also observed the roles of emergency nurses and multidisciplinary teams in managing acutely ill and injured patients.

Critical care placements were undertaken at QEHB, Royal Wolverhampton/New Cross Hospital, Heartlands Hospital and Walsall Hospital. Observations focused on the role and autonomy of critical care nurses, management of critically ill patients, advanced monitoring and ventilation, continuous renal replacement therapy, complex medication management, weaning from mechanical ventilation, haemodynamic monitoring, management of patients with raised intracranial pressure, infection prevention, and multidisciplinary clinical review. Participants were also exposed to advanced equipment and technologies, including extracorporeal membrane oxygenation, ventricular assist devices, advanced ventilators, infusion systems, and temperature-management equipment.

The exchange used experiential and observational learning to facilitate comparison between the UK and Zambian academic and healthcare environments. Learning occurred through structured meetings, clinical orientation, observation of clinical practice, simulation activities, discussions with academic and clinical personnel, and exposure to institutional policies, protocols, checklists, patient pathways, and clinical education practices.

Particular attention was given to systems that support quality and continuity of care. These included multidisciplinary working, structured patient pathways, clinical protocols, patient navigation, mentorship, simulation-based education, emergency preparedness, and quality improvement approaches. In critical care, participants observed the use of standardised protocols and checklists for procedures and equipment, multidisciplinary board reviews following ward rounds, and critical care outreach services.

Following the observational experiences, participants identified educational and clinical practices that could potentially be adapted within UNZA and the Zambian healthcare context. In oncology and palliative care, identified areas included pre-chemotherapy assessment, PICC-line insertion and care, acute oncology services, oncology protocols and rotas, apheresis, stem-cell services, electronic patient information systems, hospice care, and nurse-led clinical research.

For trauma, emergency, and critical care nursing, potential adaptations included strengthening simulation and skills-laboratory teaching, introducing structured mentorship and competency checklists, improving emergency preparedness, strengthening critical-care protocols and checklists, establishing critical-care outreach teams, incorporating quality-improvement assignments into master's-level education, and strengthening advanced clinical reasoning, decision-making, and clinical autonomy among specialist nurses.

The exchange activities and learning experiences were documented through structured placement schedules and an exchange mission report. The documentation captured participating institutions, clinical departments, educational activities, areas of clinical observation, and lessons identified for potential application in Zambia. The report also documented broader outcomes of the programme, including strengthened professional networks and collaboration, increased faculty capacity, exposure to alternative academic and healthcare systems, and opportunities for future joint research, exchange programmes, and resource sharing. The exchange was subsequently rated highly by the participating team because of its educational value and its contribution to preparing lecturers to support the specialist nursing programmes. The report specifically identified the experience as valuable for recognising strengths and gaps in nursing academic and clinical education at UNZA.

The clinical component of the exchange was observational, and participants were not required to provide direct nursing care during the oncology and palliative care, trauma and emergency and critical care nursing placements. The activities therefore primarily involved observation, academic engagement, simulation, professional discussions, and exposure to established clinical and educational systems. Any additional ethical approval, institutional permissions, participant consent procedures, or formal research governance processes should be reported separately if they were obtained for the evaluation or publication of the exchange.

3. Results

The lecturer exchange programme achieved its intended objectives, with all three participating lecturers gaining exposure to diverse academic, clinical, and healthcare environments. The exchange provided opportunities to observe and participate in classroom-based learning, simulation activities, skills laboratory sessions, curriculum orientation, clinical education, and professional networking. Exposure to these alternative educational and healthcare systems broadened the lecturers' understanding of approaches to nursing education and clinical practice and provided opportunities to identify strengths, gaps, and practices with potential relevance to the Zambian context.

The lecturers were exposed to innovative teaching approaches, simulation-based learning, structured skills laboratory activities, and postgraduate nursing education. At BCU, activities included

orientation to the skills laboratory, basic life support and choking training, nurse education, an overview of the National Health Service, oncology curriculum orientation, and academic networking with senior university staff. These experiences strengthened the lecturers' appreciation of simulation and skills-based education as complementary approaches to classroom teaching. The exchange also highlighted opportunities for strengthening nursing education at the UNZA. Identified areas included greater involvement of clinicians in skills laboratory teaching, dedicated staffing for skills laboratories, more comprehensive assessment through fewer but more integrated Objective Structured Clinical Examination (OSCE) stations at master's level, structured mentorship and competency checklists in clinical areas, and increased capacity-building activities in emerging areas of oncology, emergency, and critical care nursing.

The oncology and palliative care component involved observational visits to oncology and palliative care services, including radiation therapy, chemotherapy, apheresis, stem cell transplantation, acute oncology, and hospice care. The lecturers also observed chemotherapy pre-assessment, PICC-line insertion and care, chemotherapy administration, patient pathways, oncology research, and the role of pharmacists and nurse researchers. The experience provided insight into the organisation and layout of oncology services and the coordination of multidisciplinary care across different stages of the cancer care continuum. A key finding was the importance of multidisciplinary care and clearly established patient pathways in improving coordination and continuity of cancer care. The exchange further identified several practices with potential for contextual adaptation, including pre-chemotherapy assessment, acute oncology services, oncology rotas and protocols, PICC-line services, electronic management of patient information, hospice care, nurse-led clinical trials, and patient navigation systems.

The emergency and trauma placements provided exposure to accident and emergency departments, intensive care units, simulation centres, and classroom teaching. The lecturers observed patient navigation, primary and secondary patient assessment, emergency preparedness, ambulatory care, patient monitoring, resuscitation, sepsis management, pain management, airway management, and management of critically ill and injured patients. Exposure to different emergency departments also provided insight into the organisation of emergency services, patient flow, clinical protocols, and the multidisciplinary roles involved in emergency care.

The experience demonstrated the value of structured patient pathways, standardised protocols, simulation-based preparation, and multidisciplinary teamwork in emergency and trauma care. It also identified potential areas for strengthening local practice, including basic life support training before students' first clinical placement, improved emergency preparedness, use of checklists, and strengthened patient navigation systems.

The critical care component exposed the lecturers to the roles of critical care nurses, advanced monitoring systems, ventilatory support, complex drug therapies, renal replacement therapy, infection prevention practices, and critical care protocols across several hospitals. The observations demonstrated a high level of nursing autonomy in selected critical care activities, supported by specialised knowledge, clinical competence, mentorship, and structured professional development.

Standardised protocols and checklists were observed for several critical care procedures and processes, including sepsis management, mechanical ventilation weaning, early mobilisation, emergency preparedness, and equipment management. Multidisciplinary board discussions following ward rounds were also observed as a mechanism for reviewing patients and coordinating care. In addition, a structured critical care outreach programme demonstrated how specialist nursing expertise could extend beyond the intensive care unit to support patients and clinical teams elsewhere in the hospital.

These observations informed several areas for potential adaptation within the Zambian context, including strengthening critical care education in clinical reasoning, critical thinking and decision-making; introducing quality-improvement assignments for master's students; establishing critical care outreach teams; developing and monitoring nursing quality indicators; introducing structured mentorship; and strengthening the availability and use of clinical protocols and checklists.

Across the three areas, the exchange highlighted the importance of multidisciplinary collaboration across the continuum of care. The lecturers reported that exposure to different academic and clinical systems encouraged reflection on existing nursing education and clinical practice at UNZA and generated ideas for contextual adaptation rather than direct replication of international practices. The experience also strengthened professional confidence, cultural awareness, peer learning, and exchange of pedagogical and clinical ideas.

The exchange resulted in strengthened relationships with BCU and other participating institutions. The report identified opportunities for continued collaboration, including online palliative care teaching, further collaboration in master's-level cardiac nursing, and potential orientation of Ministry of Health staff in PICC line insertion and acute oncology. These relationships were identified as potential platforms for future research, staff exchange, sharing of expertise, and capacity building.

Overall, the findings indicate that the lecturer exchange programme provided meaningful academic and clinical exposure while identifying specific opportunities for strengthening nursing education and practice in Zambia. The experience particularly emphasised multidisciplinary teamwork, structured patient pathways, simulation-based learning, clinical mentorship, standardised protocols, patient navigation, and continuing professional development as important components for improving the quality and relevance of nursing education and healthcare delivery.

4. Discussion

This study described lecturers' experiences **documenting transferable best practices** during an international academic and clinical exchange involving oncology and palliative care, trauma and emergency nursing, and critical care nursing. Overall, the findings suggest that international faculty exchange can function as a valuable capacity-strengthening strategy by exposing nurse educators to alternative approaches to postgraduate education, simulation, clinical practice, multidisciplinary care, mentorship, clinical protocols, and professional collaboration. The findings are consistent with literature suggesting that internationalization of higher education can broaden academic perspectives, facilitate knowledge exchange, and contribute to professional and institutional development (Tight, 2021; Rumbley et al., 2023). They also support previous findings that lecturers participating in international exchanges may experience professional, intellectual, cultural, and personal development (Enskär et al., 2011).

A prominent finding was that the exchange enabled lecturers to compare their existing educational and clinical practices with

those observed in an alternative healthcare setting. Rather than simply acquiring new technical knowledge, participants identified strengths and gaps in their own educational and clinical environments and generated ideas for possible contextual adaptation. This finding is important because the value of internationalization extends beyond physical mobility; meaningful international engagement can facilitate reflection on existing practices and stimulate institutional learning (Tight, 2021; Rumbley et al., 2023).

The exchange combined university based learning, simulation, academic networking, and observational clinical placements. At Birmingham City University, participants were exposed to skills laboratory activities, basic life support training, postgraduate nursing education, curriculum orientation, and engagement with academic leaders. These activities enabled participants to observe how academic and clinical education were integrated across settings. The exchange report similarly identified the experience as valuable for recognizing strengths and gaps in nursing academic and clinical education at the University of Zambia. These findings are consistent with Enskär et al. (2011), who reported that international exchange experiences can broaden lecturers' perspectives and contribute to professional and personal development. They also complement evidence that international faculty knowledge sharing can contribute to improvements in local academic capacity and teaching practices (Li et al., 2023). However, the present findings suggest that knowledge sharing may be most meaningful when exchange participants are subsequently able to reflect on what they observed and identify practices that are feasible within their own institutional and healthcare context.

The lecturers' exposure to simulation and skills-laboratory education emerged as an important educational learning experience. Participants identified opportunities for greater involvement of clinicians in skills-laboratory teaching, dedicated skills-laboratory personnel, and strengthened simulation-based education at UNZA. The exchange also highlighted the potential value of more integrated assessment approaches at postgraduate level, including fewer but more comprehensive OSCE stations. The emphasis on simulation is supported by evidence demonstrating that simulation-based education can contribute to knowledge acquisition, psychomotor development, confidence, and critical thinking when appropriately integrated into nursing curricula (Cant and Cooper, 2010, 2017). More recent evidence also suggests that simulation can support clinical decision-making among nursing students, particularly by providing opportunities to practise situations that may not be encountered frequently in routine clinical placements.

The relevance of this finding to the present exchange is that the lecturers were not simply exposed to simulation as a teaching technology; they observed how skills-laboratory activities formed part of a broader educational system involving clinical education and professional preparation. Consequently, the potential lesson for UNZA may be less about acquiring sophisticated simulation equipment and more about strengthening the educational processes surrounding simulation, including faculty preparation, structured assessment, integration with clinical learning, and involvement of practising clinicians. Such an approach may be particularly relevant in resource-constrained settings where sustainable educational innovation requires contextual adaptation rather than direct replication of high-resource models.

The oncology and palliative care experience provided exposure to a broad continuum of cancer services, including chemotherapy, radiotherapy, apheresis, stem-cell transplantation, acute oncology, PICC-line care, pre-chemotherapy assessment, hospice care, and oncology research. The lecturers particularly identified multidisciplinary care and clearly established patient pathways as important features of cancer service organization. This finding highlights an important dimension of international clinical exchange: participants gain insight not only into individual procedures but also into how services are organized around patient journeys. The observation of multidisciplinary patient navigation and structured pathways enabled the lecturers to consider potential approaches for strengthening coordination and continuity of cancer care in Zambia. The report subsequently identified patient navigation, acute oncology services, oncology protocols, pre-chemotherapy assessment, PICC-line services, electronic patient information systems, hospice care, and nurse-led clinical research as areas for potential adaptation. The finding is particularly relevant to low- and middle-income settings, where strengthening specialist services may require attention to organization, coordination, referral pathways, and multidisciplinary practice alongside investment in infrastructure and equipment. However, contextual differences must be considered. Evidence from South Africa demonstrates that implementation of integrated palliative care is influenced by local organizational and health-system context (Krause et al., 2024). Thus, the exchange should be understood as generating ideas for contextual adaptation rather than providing a model for direct transplantation into the Zambian healthcare system.

The emergency and trauma component exposed lecturers to different emergency department structures, patient navigation processes, triage, primary and secondary assessment, resuscitation, sepsis management, pain management, airway management, emergency preparedness, and multidisciplinary teamwork. The experience also highlighted the role of simulation and structured protocols in preparing healthcare professionals for acute clinical situations. These observations led participants to identify several educational and clinical priorities for the Zambian context, including basic life support training before students' first clinical placement, improved emergency preparedness, use of checklists, structured patient pathways, and patient navigation. These proposed adaptations are consistent with the broader principle that competency-based health professional education should integrate knowledge, technical skills, clinical reasoning, and preparedness for complex clinical situations (Baker et al., 2021).

An important implication is that international exchange can help faculty recognize educational needs that may be less visible when teaching and clinical practice are viewed only from within one institutional system. Exposure to different models of emergency care enabled participants to critically examine patient flow, preparedness, clinical organization, and educational approaches. Nevertheless, these findings represent lecturers' observations and proposed adaptations rather than evidence that implementation of the identified practices would improve emergency outcomes in Zambia. Future work should therefore evaluate the feasibility, acceptability, cost, and educational effectiveness of specific adaptations.

The critical care placements generated particularly strong observations regarding nursing autonomy, specialized knowledge, mentorship, protocols, checklists, and multidisciplinary practice. Participants observed critical care nurses undertaking complex patient monitoring and participating in advanced aspects of patient management. The exchange report attributed this level of autonomy to strong knowledge and skills supported by structured training and professional development. The finding reinforces the importance of postgraduate specialist education that extends beyond theoretical knowledge to advanced clinical reasoning,

decision-making, and professional accountability. Participants subsequently identified strengthening critical care education in critical thinking, clinical reasoning and decision-making, introducing quality-improvement assignments for master's students, establishing critical care outreach teams, strengthening clinical protocols and checklists, and introducing structured mentorship as priorities for the Zambian context.

The emphasis on mentorship is supported by evidence that structured faculty mentorship can contribute to professional development and should incorporate clearly defined goals, appropriate mentors and institutional support (Crites et al., 2023). In the present context, mentorship may therefore represent a relatively feasible strategy for strengthening specialist nursing education and clinical practice, particularly when combined with competency-based assessment and opportunities for reflective practice. The observed critical care outreach model was also notable. Participants observed a structured outreach programme led by critical care nurses and identified the potential establishment of similar services as an area for local consideration. Such an approach could potentially extend specialist nursing expertise beyond the intensive care unit; however, its feasibility in Zambia would depend on staffing levels, specialist preparation, institutional organization, referral systems, and available resources. The present study therefore supports further investigation rather than direct implementation based solely on the exchange experience.

Across all three specialties, multidisciplinary collaboration emerged as a cross-cutting feature of the exchange. In oncology, participants observed multidisciplinary approaches across chemotherapy, radiotherapy, acute oncology and palliative care. In emergency and critical care, they observed multidisciplinary assessment, clinical reviews, board discussions and collaborative management of complex patients. The exchange report emphasized multidisciplinary care as particularly important across the cancer-care continuum and highlighted structured patient pathways as an important feature of coordinated care. This finding reinforces the understanding of nursing education as extending beyond individual technical competencies to include communication, teamwork, coordination and professional roles within complex health systems. International collaboration can provide nurse educators with opportunities to observe these relationships in practice and subsequently incorporate interdisciplinary perspectives into teaching. The reported exposure to nurse researchers, clinical educators and other healthcare professionals also illustrates how international exchange can broaden lecturers' understanding of the roles of different professionals in patient care. The exchange further identified patient comfort and pain management, appropriate use of personal protective equipment, patient navigation and clearly defined clinical pathways as potential areas for local strengthening. These observations suggest that participants interpreted the exchange through a patient-centred lens, rather than focusing exclusively on technology and advanced clinical equipment.

One of the most important implications of the findings is that international exchange should be viewed as a process of contextual learning rather than direct transfer of practices from high-resource to lower-resource settings. The participants observed advanced equipment and services, including sophisticated critical care technologies and specialized oncology services, but the adaptations they identified were not limited to expensive technologies. They also identified relatively system-oriented practices such as protocols, checklists, mentorship, patient pathways, simulation, clinical involvement in teaching, quality improvement, and patient navigation. This distinction is important because internationalization can risk becoming a one-directional transfer of knowledge if local context is not considered. The participants' identification of practices for adaptation suggests a more reciprocal and reflective model in which international exposure stimulates critical appraisal of local needs and resources. Such an approach is consistent with the broader literature on internationalization, which emphasizes the importance of meaningful engagement and context-sensitive approaches rather than mobility alone (Rumbley et al., 2023; Tight, 2021). The findings also indicate that contextual adaptation requires institutional mechanisms. The exchange report recommended continued institutional support for lecturer exchange and highlighted the importance of a formal policy to consistently support staff participation. Thus, the benefits of international exchange may be maximized when institutions provide opportunities for participants to disseminate learning, integrate relevant lessons into curricula, establish collaborations, and evaluate subsequent implementation.

The exchange generated relationships with Birmingham City University, Queen Elizabeth Hospital Birmingham, Birmingham Hospice and other participating institutions. The report identified opportunities for continuing collaboration through online teaching, further postgraduate nursing collaboration, clinical orientation, research, staff exchange and resource sharing. These outcomes demonstrate that international exchange can extend beyond a time-limited visit and become a platform for longer-term institutional partnerships. This finding is consistent with literature describing internationalization as a mechanism for knowledge sharing, institutional networking and professional development (Li et al., 2023; Wei and Sumettikoon, 2024). Importantly, the sustainability of such partnerships depends on institutional commitment, funding, reciprocal engagement and clearly defined objectives. The report's recommendation for continued institutional support therefore has practical significance. Without mechanisms to maintain relationships and translate learning into educational or clinical initiatives, the benefits of a short-term exchange may remain largely individual rather than becoming embedded within the institution.

The findings have several implications for postgraduate nursing education in Zambia. First, international exchange can support faculty development by exposing educators to alternative approaches to curriculum delivery, clinical education, simulation, mentorship and specialist practice. Second, exchange experiences can stimulate curriculum review by identifying areas where postgraduate programmes could place greater emphasis on clinical reasoning, decision-making, quality improvement and advanced practice. Third, exposure to multidisciplinary models can strengthen the integration of teamwork, patient pathways and care coordination into nursing education. Fourth, the findings suggest that exchange programmes should incorporate structured mechanisms for knowledge transfer after participants return. Participants could be expected to conduct seminars, curriculum-review sessions, skills demonstrations, clinical mentorship activities or quality-improvement initiatives based on relevant lessons from the exchange. Finally, institutions should consider formal policies that support faculty participation in international exchange while requiring appropriate dissemination and evaluation of learning. These approaches could help transform individual mobility into institutional capacity strengthening.

The findings should be interpreted in light of several limitations. The exchange involved three lecturers from one institution and was based primarily on written accounts, structured placement

documentation and observational experiences. The clinical placements were observational rather than hands-on, and therefore the findings should not be interpreted as evidence of direct acquisition of clinical competence or improvement in patient outcomes. The study also did not include systematic pre- and post-exchange measures of knowledge, attitudes, teaching practice or clinical performance. Consequently, the identified benefits primarily represent perceived learning, reflection and potential opportunities for adaptation. In addition, the exchange occurred within a high-resource healthcare and higher education environment, and differences in infrastructure, staffing, financing, technology and health-system organization may limit direct transferability of some practices. Nevertheless, the strength of the experience lies in its capacity to generate contextually relevant questions and potential improvement strategies rather than to provide a prescriptive model for the Zambian setting. Future studies should examine how exchange-derived innovations are implemented after participants return, whether they are sustained, and whether they result in measurable changes in faculty teaching, postgraduate student competencies, clinical practice and patient-care processes.

5. Conclusion

The findings demonstrate that international faculty exchange can provide a meaningful platform for professional learning, reflection, networking and capacity strengthening in nursing education. Exposure to oncology, palliative care, emergency, trauma and critical care services enabled lecturers to identify educational and clinical practices with potential relevance to the Zambian context, particularly simulation-based education, structured mentorship, clinical protocols and checklists, patient navigation, multidisciplinary collaboration, quality improvement and advanced clinical reasoning. The central contribution of the exchange was therefore not simply exposure to a different healthcare system, but the opportunity for lecturers to critically compare systems, identify gaps and strengths, and generate contextually relevant ideas for strengthening nursing education and practice. Sustaining these benefits will require institutional support, structured knowledge translation, continued international partnerships and evaluation of adaptations after implementation. Future research should move beyond documenting exchange experiences to examining how international faculty mobility translates into sustainable improvements in nursing education and healthcare delivery.

ACKNOWLEDGEMENT

Funding for this exchange was supported by the Fogarty International Center of the National Institutes of Health, U.S. Department of State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy (S/GAC) and the President's Emergency Plan for AIDS Relief (PEPFAR) under the Award Number R25 TW011219 under the project title: Strengthening Health Professional Workforce Education Programs for Improved Quality Health Care In Zambia (SHEPIZ) Project. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

REFERENCES

[1] Arias-Casais, N., Garralda, E, López-Fidalgo J, *et al*. (2019). *Brief manual health indicators monitoring global palliative care development*. Houston: IAHPC Press 9.

[2] Baker, C., Cary, A. H., & da Conceicao Bento, M. (2021). Global standards for professional nursing education: The time is now. *Journal of Professional Nursing*, *37*(1), 86-92.

[3] Cant, R. P., & Cooper, S. J. (2010). Simulation-based learning in nurse education: systematic review. *Journal of advanced nursing*, *66*(1), 3-15.

[4] Cant, R. P., & Cooper, S. J. (2017). Use of simulation-based learning in undergraduate nurse education: An umbrella systematic review. *Nurse education today*, *49*, 63-71.

[5] Crites, G. E., Ward, W. L., Archuleta, P., Fornari, A., Hill, S. E., Westervelt, L. M., & Raymond, N. (2023). A scoping review of health care faculty mentorship programs in academia: implications for program design, implementation, and outcome evaluation. *Journal of Continuing Education in the Health Professions*, *43*(1), 42-51.

[6] Enskär, K., Johansson, I., Ljusegren, G., & Widäng, I. (2011). Lecturers' experiences of participating in an international exchange. *Nurse education today*, *31*(6), 541-546.

[7] Görücü, S., Türk, G., & Karacam, Z. (2024). The effect of simulation-based learning on nursing students' clinical decision-making skills: Systematic review and meta-analysis. *Nurse education today*, *140*, 106270.

[8] Krause, R., Gwyther, L., & Olivier, J. (2024). The influence of context on the implementation of integrated palliative care in an academic teaching hospital in South Africa. *Palliative care and social practice*, *18*, 26323524231219510.

[9] Lee, E., Hamelin, T., & Daugherty, J. (2018). Globalization of health service: sharing of best practices in perianesthesia nursing care, a case study of cross-border institutional collaboration. *Journal of PeriAnesthesia Nursing*, *33*(2), 209-219.

[10] Li, S., Khatibi, A., & Tham, J. (2023). The Impact of International Faculty Knowledge Sharing on Enhancing the Teaching Quality of Local Staff in Higher Education Institutions. *Eurasian Journal of Educational Research (EJER)*, (107), 98.

[11] Raghavan, S. (2025). Global Advancements in International Nursing Science and Healthcare Innovation: Trends, Challenges, and Future Directions. *Journal of Comprehensive Nursing Research*, *1*(2).

[12] Rumbley, L. E., Altbach, P. G., Reisberg, L., & Leask, B. (2023). Trends in global higher education and the future of internationalization: Beyond 2020. In *The handbook of international higher education* (pp. 3-22). Routledge.

[13] Shah, S., Khan, A. A., Al Meqbaali, M., Syed, R., Khan, A., Ali, M., & Al Sinani, M. (2026). Simulation-Based Education Versus Traditional Teaching for Nursing Students: A Systematic Review. *Health Science Reports*, *9*(7), e72731.

[14] Tight, M. (2021). Globalization and internationalization as frameworks for higher education research. *Research Papers in Education*, *36*(1), 52-74.

[15] Tscherne, U. (2026). Role of Mobility in Advancing Nursing Education: Opportunities and Constraints. In *Reshaping Nursing Practice Through Cross-Border Partnerships* (pp. 23-46). IGI Global Scientific Publishing.

[16] Ul Hassan, M., Murtaza, A., & Rashid, K. (2025). Redefining higher education institutions (HEIs) in the era of globalisation and global crises: A proposal for future sustainability. *European Journal of Education*, *60*(1), e12822.

[17] Wei, L., & Sumettikoon, P. (2024). Influences of International Exchange Programs and Research Engagement on Faculty Development in Higher Education Institutions. *Pakistan Journal of Life & Social Sciences*, *22*(1), 297.

[18] Yatsu, H., & Saeki, A. (2022). Current trends in global nursing: A scoping review. *Nursing open*, *9*(3), 1575-1588.

Author contacts

Contact

1. Victoria Mwiinga-Kalusopa*

ORCID 0000-0002-9086-750X Scholar

* Correspondence

Declarations

Generative AI

No generative AI was used for analysis or results.

Funding

Funding for this exchange was supported by the Fogarty International Center of the National Institutes of Health, U.S. Department of State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy (S/GAC) and the President's Emergency Plan for AIDS Relief (PEPFAR) under the Award Number R25 TW011219 under the project title: Strengthening Health Professional Workforce Education Programs for Improved Quality Health Care In Zambia (SHEPIZ) Project. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Competing interests

The authors declare no conflict of interest.

Data availability

Not applicable for this article.

Ethics approval

No ethics committee approval was required for this article type.

Consent

Not applicable for this article.

Trial registration

Not applicable.

Subject Index

Technical concepts and key subjects are indexed at their verified discussion pages.

KEY SUBJECTS Burnout • Child Abuse • Clinical Placements • Cognitive Impairment • Solitary Plasmacytoma • Child Care • Compassion Fatigue • Critical Care

A

Academic and Clinical 27–31
Acute Oncology 27–32
AI-Assisted Manuscript Preparation Disclosure 20
Attitudes 1–2, 15, 33

B

Benefits and Outcomes 11
Birmingham City University 27–31
also: BCU
Burnout 17–21

C

Campina Grande PB 4–6, 8
Care Nursing 17, 21, 27–30
CARES \ Dementia 5-Step Method for Hospitals 15
Case Presentation 23
Cases of Physical Abuse 1, 4–6
Center for Improvement in Healthcare Quality 15
also: CIHQ
Center of Excellence Designation for US Hospitals 15
Child Abuse 1, 3–8
Child Care 1, 3
Children and Adolescents 1–2, 6–7
Clinical Education 28–29, 31–32
Clinical Placements 27–28, 31
Clinical Practice 27, 29–33
Clinical Protocols 27–30, 33
Clinical Reasoning 27, 30–32
Cognibility \ Hospital Dementia Accreditation 11, 15
Cognitive Changes 11–15
Cognitive Impairment 11, 15
Community Health Worker 4
also: CHW
Compassion Fatigue 17–21
Compassion Satisfaction 17–21
Conclusions 24
Confirmed Cases 3–4, 6
Critical Care 17, 19–21, 27–33

D

Data Analysis 2
Data Collection and Measures 18
Dementia 11–16
Dementia Care 11–15
Dementia DREAMM Team 11, 14
Dementia Training 11, 14
Dialogue 6

E

Education Simulation 27–29, 32
Eligibility Criteria 2
Emergency and Trauma 27, 30–31
Emergency Department Nurses . . . 17, 20–21
Emergency Preparedness 29–31
Ethical Clearance 2
Ethical Considerations 18
Experiences 2, 7, 11–12, 17, 27–33
Extramedullary Plasmacytoma 23–25

F

Family Health Strategy 2
also: FHS
Free and Informed Consent Form 2, 10
also: FICF

H

Healthcare Professionals . . . 2, 5–6, 11, 17, 31–32
Healthcare Staff Education and Training 15
Healthcare System 11, 31, 33
High Compassion 17–20
Higher Education 27, 30, 33–34
Hospice Care 27–31
Hospital Care 11, 14
Human Development Index 2
also: HDI

I

Immunohistochemistry 23–24
International Exchange 27–28, 31–32, 34
International Myeloma Working Group 23
also: IMWG

K

Key Objectives 11
Knowledge, Attitudes 1, 33

L

Living with Cognitive 11–13, 15
Living with Dementia 11–12, 14
Logistic Regression 17–20

M

Material and Methods 2
Materials and Methods 17, 28
Mission 11, 27, 29
Multi-Specialty Faculty 27
Multiple Myeloma 23–24

N

Nasopharyngeal Neoplasm 23
National Health Service 27–29
also: NHS
Number of Suspected 6
Nursing 15, 17–21, 27–34
Nursing Education 27–34

O

Objective Structured Clinical Examination 30–31
also: OSCE
Observations 27, 29–32
Oncology 27–33
Oncology and Palliative Care 27, 29–32
Oncology Services 28–32
Outcomes 1, 3, 11, 13, 15, 17–21, 25, 28–29, 31–33

P

Palliative Care 27–33
Patient Advocacy 11
Patient Navigation 27–33
Patient Pathways 27–32
Peripherally Inserted Central Catheter . . . 27–31
also: PICC
Physical Abuse 1–6
Physical Abuse in Children 4–6
Physicians and Nurses 1–2
Plasma Cell Disorder 23
Population 2, 13, 17, 23
Postgraduate Nursing 27–29, 32
Practices of Primary Health Care Professionals 1
Primary Health Care 1–3, 6–7
also: PHC
Pro QOL-5 Scoring 18
Professional Experience 1, 3–4, 6–7
Professional Learning 27–28, 33
Professional Quality of Life 17–20

Q

Queen Elizabeth Hospital Birmingham . . . 29, 32
also: QEHB
Questionnaire and Data Collection 2

R

Radiotherapy 23–24, 27–29, 31–32
Reported Cases 1–2, 4, 6
Responding to Suspected Child Physical Abuse 1

S

Sample and Sampling 17
Secondary Traumatic Stress 17–19, 21
Simulation and Skills-Laboratory 27–29, 31
Simulation-Based Education 27–29, 31, 33
Simulation-Based Learning 27–30, 33
Solitary Plasmacytoma 23–25
Solitary Plasmacytoma of the Torus Tubarius 23
Standardized Screening for Cognitive Impairment 15
Standards of Quality of Care During Admission 16
Statistical Analysis 18
Strengths and Limitations 20
Structured Mentorship 27–30, 32–33
Suspected Cases 1–8
Suspected Cases of Physical 1, 4–6
Suspected or Confirmed 3–4, 6

T

Torus Tubarius 23

V

Validity and Reliability 18
Virtual Dementia Tour (Second Wind Dreams) 15

Z

Zambia 17–18, 21–22, 27–33, 35

Author Guidelines

Global Journal of Medical Research

Submit in your own format

Send your manuscript in the standard format you already use, such as Word, LaTeX, PDF, RTF or ODT, according to the options in the submission form. We will typeset your manuscript. The optional author template is a simplified version of our internal production template. The journal prepares the MetaCover and the final publication layout separately.

Prepare your manuscript and supporting files

Provide an informative title, an abstract, keywords and sections suited to your article type. State your objective, describe the approach, report the main findings and explain their implications and limitations. Confirm author names, order, affiliations and corresponding-author email. Follow any instructions from your journal on preparing an anonymised review copy. Include the original graphics, editable source if available and any supplementary files needed to understand the work.

Tables, figures and equations

Number tables and figures in order of first mention and refer to each by number in the text. Place table titles above editable tables and put notes and source credits below. Use headings with units and explain abbreviations, symbols and significance marks. Use superscript letters for cell-specific notes. Place figure captions below the graphics. Explain panels, scales, symbols and error bars where relevant. Supply clear original artwork, and credit adapted or reproduced material with any required permissions. Provide editable equations, define their symbols and number the equations you cite.

Footnotes, cross-references and citations

Use your editor's footnote feature for short explanatory notes. Refer to an item by its type and number, for example Figure 2, Section 3 or Appendix A, using automatic cross-references where possible. Cite external sources at the relevant passage. Match each citation to a complete reference entry and use the journal's citation style consistently. Include persistent links, such as DOIs or repository records, when available. Check that links resolve and that supplementary files are named and cited consistently.

Complete your Researcher Dashboard

Open your submission in the Researcher Dashboard. Confirm the author details, complete the contribution matrix with each author's CRediT roles, and provide any requested contribution statements. Complete the applicable declarations, such as funding, competing interests, ethics approval, consent, and data or code availability. The journal uses the details you provide in the Dashboard for the publication record. Keep the facts that explain the study, including applicable ethics and consent details, in the relevant methods or study description.

Revise in Self Edit

When the editorial office makes the typeset manuscript available, use the Self Edit access provided for your article. Make and save revisions in response to reviewer and editorial feedback. Check the saved version and, when requested, explain what changed in a point-by-point response. During proof review, check author details, tables, figures, equations, citations, links and declarations, and raise substantive corrections with the editorial office.

Submit your manuscript Online author guidelines and journal policies

GLOBAL JOURNAL

of Medical Research: K

Interdisciplinary



Save our Planet

globaljournals.org



Online ISSN 2249-4618

