# INPLASY

#### INPLASY202490095

doi: 10.37766/inplasy2024.9.0095

Received: 22 September 2024

Published: 23 September 2024

# **Corresponding author:**

Estella Boateng-Osei

estellboat@gmail.com

#### **Author Affiliation:**

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY.

# ASSESSING THE DETERMINANTS OF INJURIES AMONG STREET HAWKERS: A SYSTEMATIC REVIEW

Boateng-Osei, EA; Dzomeku, VM; Enuameh, Y; Boamah Mensah, AB; Mock, C; Donkor, P.

### ADMINISTRATIVE INFORMATION

**Support -** This study was supported by grant D43 TW007267 from the Fogarty International Center at the US National Institutes of Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202490095

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 September 2024 and was last updated on 23 September 2024.

# **INTRODUCTION**

Review question / Objective What are the key determinants of injuries among street hawkers, and how does the geographical and methodological diversity of existing data inform actionable recommendations for enhancing their safety and well-being?

**Rationale** Understanding the substantial hazards street vendors confront in this unregulated industry requires evaluating the factors that contribute to their injuries through a comprehensive review. Street hawking frequently entails dangerous working circumstances that can result in injuries, which affect the hawkers and the larger community. Finding the precise causes of these incidents will close information gaps and guide focused measures meant to enhance health and safety. Policymakers and other stakeholders who

want to create laws that safeguard street vendors and improve their working circumstances without condoning the business itself will find this research to be extremely important to identify key factors influencing injury rates among street hawkers in Africa and Asia.

**Condition being studied** Determinants of major injuries among street hawkers in Africa and Asia.

# **METHODS**

Search strategy A comprehensive search which employed multiple databases including PubMed, Google Scholar, Science Direct, Research Gate and ProQuest, from 22nd August, 2024 to 25th August, 2024 to identify determinants of injuries among street hawkers. The search strategy involved pairing primary keywords such as "Street Vendors", "Injuries", "Accidents", "Occupational

1

Injuries", "Determinants", "Risk Factors", "Causes" and "Predictors". These keywords were used to form the various search strings using the Boolean operators "AND" and "OR" for the various databases consulted.

**Participant or population** The population for the study was street hawkers from Africa and Asia.

Intervention None applicable.

Comparator None applicable.

**Study designs to be included** Qualitative, quantitative, or mixed-method studies, including observational studies, case studies, and surveys published in peer-reviewed journals.

**Eligibility criteria** Data collected focused on street hawkers particularly those in the informal sector and in the urban areas. Articles exploring factors contributing to injuries among street hawkers (socioeconomic, gender, environmental, etc.) were considered. Studies published before 2014 where rejected and only articles published in English were considered.

**Information sources** PubMed, Google Scholar, Science Direct, Research Gate and ProQuest.

**Main outcome(s)** The literature search covered 6976 articles of which 36 where further selected for full text document assessment. Out of the 36 articles, only 14 were found to be eligible. Nigeria accounted for majority of the studies conducted within Africa, constituting 6 out of the 14 studies considered for the review. This was followed by Ghana, where only 2 studies were conducted on a national scale. The African country with the least was Ethiopia which had 1. On the other hand, out of 4 studies found in Asia, India accounted for the majority (3 out of 4) while Myanmar accounted for only 1 study.

Injury types identified in the study: Injuries resulting from physical abuse, sexual abuse, environmental factors, and accidents were identified in the study. Among these, accidental injuries accounted for 26.5% of the studies, followed by environmental and ergonomic injuries.

Determinants of injuries: Socioeconomic factors were the major determinants of injuries among street hawkers, accounting for 21.60%. This was followed by extreme weather conditions, risky behaviors of the street hawkers and vehicular traffic respectively.

The studies revealed that the absence of legal recognition for street hawkers by the government exposed them to harassment from municipal authorities, often resulting in physical injuries. Additionally, evidence from the studies showed that most street hawkers were unaware of road traffic regulations, and this posed a high risk to them.

Additional outcome(s) The study revealed a steady number of publications on the subject matter from 2014 to 2019. There was only 1 study each within 2014 to 2019 except for 2015 where there was no publication that met the review's inclusive criteria. There was however a slight increase in the number of publications to 2 in 2020. Moving into 2021 and 2022, the number of publications declined back to 1 in each of the years. In addition, there was an exponential increase in the number of publications to 4 publications in 2023.

**Data management** The selection and inclusion criteria outlined by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) were followed. All articles identified in the search were stored in designated folders, with duplicates placed in a separate folder. After assessing eligibility, any rejected articles or those not included in the analysis were moved to another folder. Relevant information from the accepted articles was extracted and organized into sections in an Excel spreadsheet.

Quality assessment / Risk of bias analysis Two people conducted the data extraction, followed by comparisons. After addressing any issues encountered, a final review was performed before submitting the document to the authors.

**Strategy of data synthesis** The data extracted from the studies were synthesized both quantitatively and qualitatively to identify common themes and determinants of injuries among street hawkers. The quantitative part of the analysis dealt with the general statistical distribution of the studies based on the study jurisdictions, year of publication etc. while the qualitative part dealt with various themes gathered from the data pertaining to the types and determinants of injuries among street hawkers.

**Subgroup analysis** The data was split into sections and in some cases sub-sections were created and analysed.

Sensitivity analysis The retrieved parameters and research topic were clear-cut and concise. However, to make sure the outcome was acceptable, a second examination of the data was conducted.

# Language restriction No.

#### Country(ies) involved Ghana.

**Keywords** street vending; accidental injuries; socio-economic factors; road traffic; physical abuse.

**Dissemination plans** Through my institutional research platforms, presentations at relevant workshops/meetings and conferences, professional platforms and social media handles.

#### **Contributions of each author**

Author 1 - Estella Boateng-Osei -Conceptualization, methodology, investigation, resources and original draft preparation. Email: estellboat@gmail.com Author 2 - Veronica Dzomeku - review and editing, supervision, formal analysis. Email: vmdzomeku@gmail.com Author 3 - Enuameh Yeetey - writing, formal analysis, and Conceptualization. Email: yeetey@yahoo.com Author 4 - Adwoa Boamah Mensah - methodology, investigation, and writing. Email: bbemahc2000@gmail.com Author 5 - Mock Charles - investigation, writing, review and editing, formal analysis. Email: cmock@uw.edu Author 6 - Donkor Peter - writing, review and editina, supervision. Email: petadonkor@yahoo.com

3