Profile of Injuries Among Under-Five Children in Rural Areas of Khordha District, Odisha-A Community-Based Cross-Sectional Study

Original Article

Volume 62, Pages 356-360, May 2025

Mythry Ravichandran¹ · Arvind Kumar Singh¹ · Prajna Paramita Giri¹ · Priyamadhaba Behera¹ · Binod Kumar Patro¹

¹Department of Community Medicine and Family Medicine, All India Institute of Medical Sciences Bhubaneswar, Odisha 751019, India

Correspondence to: Binod Kumar Patro, patrobinod@gmail.com; Mythry Ravichandran, mythryravichandran@gmail.com; Arvind Kumar Singh, cmfm_arvind@aiimsbhubaneswar.edu.in; Prajna Paramita Giri, cmfm_prajna@aiimsbhubaneswar.edu.in; Priyamadhaba Behera, cmfm_priyamadhaba@aiimsbhubaneswar.edu.in

Received: 15 August 2024 / Accepted: 28 January 2025 / Published online: 9 April 2025

https://doi.org/10.1007/s13312-025-00036-2

ABSTRACT

OBJECTIVES

To estimate the prevalence, patterns, and risk factors for injury among under-five children.

METHODS

A community-based cross-sectional study was conducted in the rural areas of Khordha district among 600 underfive children. A multistage sampling technique was used to assess the prevalence, patterns, and factors associated with injuries using a semistructured questionnaire, followed by an environmental hazard assessment of the built environment of the selected participants.

RESULTS

Childhood injury prevalence was 44.6% (95% CI 40.6, 48.7). Falls were the commonest injuries; 87% falls occurred at home. Only 19% of the major injuries received formal healthcare. The child's age, parental awareness, and environmental hazard risk were associated with the occurrence of injuries.

CONCLUSIONS

The built environment plays a significant role in childhood injuries in the rural areas of Odisha. Public health measures such as a safe built environment for households and neighborhoods should be promoted.

Keywords: Childhood · Environmental Hazard · Injuries · Prevalence

REFERENCES

 Institute for Health Metrics and Evaluation. Accessed on Jun 19, 2023. Available from: <u>http://vizhub.healthdata.org/gbd-compare</u>
National Crime Records Bureau. Statistics. Ministry of Home Aff airs, Government of India. Accessed on Nov 29, 2023. Available from: https://ncrb.gov.in/statistical-branch.html

How to access full text of this article for IAP members?

The full text of articles published in the Indian Pediatrics from Jan 2025 onwards will be accessible freely only to the members of the Indian Academy of Pediatrics (IAP). Please follow the following steps to access the articles

Steps

 Go the Indian Academy of Pediatrics (IAP) website (<u>https://iapindia.org/</u>)
Login as member using your registered mobile

number/ email and your password (https://iapindia.org/member-login.php).

3. You will now be directed

to https://iapindia.org/singlelogin/index.php

4. Scroll down to Indian Pediatrics Current Issue and click the icon. You will be directed

to https://link.springer.com/journal/13312

5. You will be able to access the desired article

6. In case you have forgotten your password, it can be reset using an OTP sent to your registered mobile number or email address.

7. In case of any difficulty, kindly contact the central office at <u>centraloffice@iapindia.org</u> or Phone: (022) 27710857

8. You may also write

to ip.subscription@iapindia.org or jiap@iapindia.org

3. Tracy ET, Englum BR, Barbas AS, et al. Pediatric injury patterns by year of age. J Pediatr Surg. 2013;48:1384–8.

4. Gururaj G. Injury prevention and care: an important public health agenda for children's health, survival and safety. Indian J Pediatr. 2013;80:100–8.

5. Sharma SL, Reddy NS, Ramanujam K, et al. Unintentional injuries among children aged 1–5 years: understanding the burden,

risk factors and severity in urban slums of southern India. Inj Epidemiol. 2018;5:41.

6. TEACH-VIP 2: User's Manual. Accessed on Jun 28, 2024. Available from: <u>https://www.who.int/publications/i/item/teach-vip-2-user-s-manual</u>

7. World Health Organization. Injury Surveillance Guidelines. Accessed on June 28, 2024. Available from: https://www.who.int/publications/i/item/9241591331

8. Nooyi SC, Sonaliya KN, Dhingra B, et al. Descriptive epidemiology of unintentional childhood injuries in India: an ICMR Taskforce multisite study. Indian Pediatr. 2021;58:517–24.

9. Paul S, Mehra S, Prajapati P, et al. Unintentional injury and role of different predictors among 1–5 years children: a community based cross-sectional study in a rural population of a developing country. Int J Inj Contr Saf Promot. 2019;26:336–42. 10. Snodgrass AM, Ang A. Unintentional injuries in infants in Singapore. Singapore Med J. 2006;47:376–82.

11. Mutto M, Lawoko S, Nansamba C, et al. Unintentional childhood injury patterns, odds, and outcomes in Kampala city: an analysis of surveillance data from the national pediatric emergency unit. J Inj Violence Res. 2011;3:13–8.

12. Mathur A, Mehra L, Diwan V, et al. Unintentional childhood injuries in urban and rural Ujjain, India: a community-based survey. Children. 2018;5:23.

13. Bhuvaneswari N, Prasuna JG, Goel MK, et al. An epidemiological study on home injuries among children of 0–14 years in South Delhi. Indian J Public Health. 2018;62:4–9.

14. Inbaraj LR, Rose A, George K, et al. Incidence and Impact of unintentional childhood injuries: a community-based study in rural South India. Indian J Pediatr. 2017;84:206–10.