Abstract #: 2.009_NCD

Factors Associated with Child Passenger Motorcycle Helmet Use in Cambodia

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Background: Cambodia has the highest motorcycle death rate in South East Asia. Helmets are effective at decreasing injuries and mortality, but their use in children has been found to be very low in Cambodia. To gain insight into how we might increase childpassenger helmet use and protect children from head injury and death, we sought to analyze several risk factors associated with child-passenger helmet use in five provinces in Cambodia.

Methods: Roadside observations in five Cambodian provinces were conducted periodically between July, 2010 and May, 2014. We used a multiple logistic regression model to calculate adjusted odds ratios for the association between child passenger helmet use and driver helmet use, number of passengers on a motorcycle, number of children on a motorcycle, province, day of the week, and time of day.

Findings: During the 4-year study period, 55,747 motorcycles were observed to have at least one child passenger. There were 65,819 child passengers in total. Due to missing data, 3780 children were excluded (5.7%) and the final analysis included 62,039 children. Overall, 1,369 (2.1%) of child passengers were observed to be wearing a helmet. Children were 6 times more likely to wear a helmet if the driver was wearing a helmet (OR 6.2; 95% CI 5.1-7.5). Compared to Phnom Penh, children observed in Kampong Speu (OR 0.51; 95% CI 0.39–0.68), Siem Reap (OR 0.70; 95% CI 0.59–0.83), and Kampong Cham (OR 0.33; 95% CI 0.26–0.44) all had lower odds of child passenger helmet use. Compared to Sunday, child passengers were also found to have significantly lower helmet use on Tuesday (OR 0.82; 95% CI 0.67–0.99), Friday (OR 0.79; 95% CI 0.64–0.98) and Saturday (OR 0.63; 95% CI 0.49–0.81).

Interpretation: Child passenger helmet use is extremely low in these five provinces of Cambodia. Increasing both driver and passenger helmet use should be a priority for Cambodia through newly implemented passenger helmet laws. Data from this study may be useful for targeted enforcement and public education campaigns, to increase helmet use and decrease injuries and death.

Source of Funding: Bloomberg Philanthropies.

Abstract #: 2.010_NCD

Understanding How Home Health Services Can Be a Resource for Somali Older Adults and Their Families

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Background: Home health care (HHC) refers to the delivery of health and personal care services in the home by paid health professionals and/or paraprofessionals. Somali older adults face a number

of challenges that impede their access to HHC services, but there is promising evidence indicating that HHC services can improve their health outcomes. Further exploration of Somali families' perceptions of these services can demonstrate what is needed to improve their access and experience with HHC. The purpose of the study was to explore and describe Somali older adults' and their families' perceptions of and experiences with the services offered by adult HHC.

This study used a community-engaged, qualitative descriptive approach with the participation of Refugees Helping Refugees (RHR), a non-for-profit organization in a northeastern US city. A total of 14 Somali families who had received HHC services for an older adult participated. Data collection included 15 home visits, 17 semi-structured interviews and 16 debriefing sessions. Data analysis began early and continued throughout the project using qualitative content analysis.

Findings: Somali families recognized HHC services were needed and believed having services in the home eliminated barriers and facilitated learning. Families' experiences and perceptions of HHC depended on whether they trusted the person coming to their home. Somali families value HHC but wanted it to be supportive of their traditional beliefs and family structure, and were particularly interested in better access to consumer-directed programs. Families believed better understanding of HHC services was needed, and HHC agencies should work with the Somali community to improve cultural understanding of HHC professionals and HHC experiences for Somali families.

Interpretation: Somali older adults and their families' descriptions of HHC suggest it can play a role in improving their health and their health literacy. Future research and health policy initiatives should explore how models of HHC can be used to impact the health literacy and health outcomes of these culturally and linguistically diverse populations, keep them safe and in the community, and how best to support HHC agencies to be able to provide this care.

Source of Funding: University of Rochester School of Nursing The Transcultural Nursing Society.

Abstract #: 2.011_NCD

Improving Indoor Air Quality in Rural Honduras, One Stove at a Time

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Background: Indoor air pollution (IAP) increases the risk for acute and chronic respiratory disease and is a major issue in developing countries where biomass fuels are commonly used. A 2012 survey by Le et al. in a region of rural Honduras served by VCU's Global Health & Health Disparities Program (GH2DP) revealed a high prevalence of respiratory illness linked to improperly installed cook stoves. Subsequently, improved cook stoves were installed throughout the region.