

Assessing the Impact of Durable Flooring Structures on Refugee Sleep Quality and Duration

Summary Paper

Thomas James Greene PhD, MPH

The University of Texas Health Science Center at Houston, School of Public Health, Department of Biostatistics, Houston, TX, USA

and

GlaxoSmithKline

Clinical Statistics

Collegeville, PA, USA

jay.greeneiv@gmail.com

Christina Ann Chao MScGH

Johns Hopkins Bloomberg School of Public Health, Department of Epidemiology, Baltimore, MD, USA

cchao13@jhu.edu

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1 TARGET AUDIENCE

Humanitarian organisations in need of low-cost flooring interventions to improve resident health outcomes; individuals and organisations focused on improving refugee health; and individuals and organisations living and/or working in any temporary housing.

2 BACKGROUND

Overall refugee health outcomes are difficult to measure objectively and are influenced by a number of factors including transient, and often inadequate, housing conditions. Currently, thousands of displaced individuals around the world live in temporary shelters without formal flooring. These individuals are often forced to sleep in direct contact with the ground that does not provide a comfortable sleeping environment, and lacks protection against potentially harsh environmental conditions.

3 PURPOSE

The purpose of this study is to assess how the installation of durable flooring can affect sleep quality and duration among displaced refugees who were previously living in shelters with only dirt flooring.

4 METHOD

In October 2016 households from two informal tented settlements in northeastern Lebanon

were selected to participate in a study to determine how installation of a durable flooring system, the Emergency Floor (EF), affected their quality of life. EF was installed in the shelters of all 34 households (150 total subjects) inhabiting the camps. A follow-up survey was conducted in April 2017 to compare sleep quality and duration before and after EF installation. Seven households could not participate in the follow up survey, yielding an analytic sample of 27 households (120 total subjects). Sleep quality and duration were considered as the primary outcomes of interest and were assessed using formal statistical testing.

5 RESULTS

The sample population primarily consisted of young individuals who had been living at their respective informal tented settlements for two or more years. Survey results indicated a significant increase in sleep duration, as well as a significant improvement of sleep quality after installation of the Emergency Floor. Furthermore, respondents commonly reported feeling more comfortable, warmer, safer, and cleaner when sleeping in a shelter with the floor installed, and 48.1% of households reported using less fuel after EF installation. Savings from decreased fuel expenditure enabled the households to allocate more money towards food and medicine.

6 IMPLICATIONS FOR TARGET AUDIENCES

This research shows that there is an increase in quality and duration of sleep among EF users and suggests an increase in overall wellness. These obvious quality of life improvements and potential financial savings will hopefully lead to more widespread adoption of durable flooring installation in temporary refugee shelters. Since EF is low cost and easy to assemble, this intervention could also be useful to a wide range of organisations focusing on temporary housing development. Future interventions could also implement more types of flooring, for example adding of a medical grade, puncture resistant coating, for military forward surgical hospitals.