

EDITORIAL

Human trafficking and labor exploitation: Toward identifying, implementing, and evaluating effective responses

Ligia Kiss*, Cathy Zimmerman^{ID}*

Department of Global Health and Development, London School of Hygiene & Tropical Medicine, London, United Kingdom

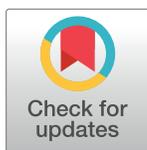
* Ligia.Kiss@lshtm.ac.uk (LK); cathy.zimmerman@lshtm.ac.uk (CZ)

Global estimates suggest that about 25 million people are subjected to “modern slavery” in the form of forced labor or human trafficking [1]. These men, women, and children are often migrant workers who are exploited in diverse sectors, such as agriculture, mining, fishing, factory work, domestic work, and forced sex work [1,2]. Although the eradication of modern slavery is among the 2030 Sustainable Development Goals [3], development of effective responses for trafficking prevention and assistance for victims remains elusive in this nascent field of health research. We believe that intensified efforts against trafficking require a greater understanding of modifiable factors and the causal pathways that lead to trafficking in different contexts and for individual populations.

Human trafficking frequently involves multiple forms of abuse, including deception, coercion, extortion, threats, and, for many, physical or sexual violence. A growing body of research shows that survivors of extreme exploitation often suffer severe and enduring health consequences [4–7]. Trafficking is associated with physical injuries including fractures, lacerations and lost limbs [5,8], chronic pain and headaches, significant weight loss [7,9], and symptoms of infectious and chronic diseases [8]. Sexual and reproductive health problems are common among women who are sexually exploited and abused while trafficked [4,9]. For trafficking survivors, persistent health problems include mental health consequences, especially symptoms of post-traumatic stress disorder, depression, anxiety, and suicidality [4,5,9,10].

Despite the significant health burden of human trafficking, only recently have health professionals begun to engage in responses to trafficking [2,11]. Findings from the study of violence against women suggest that healthcare providers are often a first nonfamily point of contact for victims of abuse. Recognizing that a healthcare setting can be a unique opportunity for well-trained providers to identify, assist, and refer trafficking survivors to necessary services [8,12,13], some governmental and intergovernmental agencies have begun to develop guidance. For example, the United Kingdom Department of Health has invested in research to support medical responses [9], whereas the United States Department of Health and Human Services recently launched the SOAR (i.e., Stop, Observe, Ask, Respond) training course [8,14], and international training tools are available to support healthcare providers to care for trafficked persons [13].

From a policy perspective, there has been disappointingly little engagement with modern slavery as a health concern by government health departments, such as health ministries, or by international agencies, including WHO. Evidence for prevention strategies is still scarce—particularly intervention-focused research and evaluations [13–16]. Given the scale of the problem and concomitant harms, human trafficking and modern slavery should be treated as a



OPEN ACCESS

Citation: Kiss L, Zimmerman C (2019) Human trafficking and labor exploitation: Toward identifying, implementing, and evaluating effective responses. *PLoS Med* 16(1): e1002740. <https://doi.org/10.1371/journal.pmed.1002740>

Published: January 29, 2019

Copyright: © 2019 Kiss, Zimmerman. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: The authors received no specific funding for this work.

Competing interests: I have read the journal's policy and the authors of this manuscript have the following competing interests: CZ is a member of the Editorial Board of PLOS Medicine.

Provenance: Commissioned, not externally peer reviewed.

global health concern. Prevention and intervention approaches should, therefore, draw on and learn from approaches and methods used in the evaluation of other population health risks such as violence, smoking, and obesity.

In the first generation of research on human trafficking and modern slavery, efforts focused primarily on law enforcement initiatives, and research included case studies, in-depth research on surviving victims, and methods to assess global prevalence [17]. This work was important in the identification, definition, and description of the phenomena. Reports suggested the wide range of sectors that employ trafficked labor, highlighted the suffering of victims, advanced law enforcement responses, and indicated the global magnitude of the problem. However, this work was of little benefit to prevention initiatives—which, from a public health perspective, are badly needed to make substantial population gains in the reduction of labor exploitation and its consequences.

However, investment in obtaining prevention evidence is growing. For instance, emerging findings from the field suggest that there may be limited benefit in “awareness-raising” interventions [16,18] and indicate possible unintended harm from training courses that are not solidly grounded in contextual evidence [19]. These findings confirm the need for a systematic integrated approach across the migration pathway that addresses structural conditions in addition to individual-level behaviors and risks [20–23].

To make genuine progress in prevention, we must begin by developing more robust evidence on what defines extreme forms of labor exploitation. For instance, various forms of exploitation (under the umbrella terms of “human trafficking” and “modern slavery”) have different population distributions, and each of these phenomena is likely to affect subgroups differently. Similarly, trafficking-related acts are very diverse, ranging from those related to forced sex work to abuses occurring in other sectors using forced and exploited labor, during which severe occupational hazards may occur [1,24].

Researchers urgently need to address intervention-focused questions about modifiable factors in the causal pathways to human trafficking in different contexts and for different populations [2]. Therefore, serious consideration must be given to the structures and practices that enable exploitation and leave individuals with extremely limited ability to alter their circumstances [16]. For example, complex structural factors exist and interact to drive labor exploitation, including growing income inequalities, the increasing power of corporations alongside diminishing power of workers, extortionate labor recruitment practices, and governance structures that favor businesses or employers over workers’ rights.

To begin the second generation of research and evaluation of what works to reduce exploitation, we need to move beyond focusing solely on individual behaviors to incorporate questions about how larger forces contribute to or prevent extreme exploitation. Emerging fields of intervention research include the examination of social protections, such as cash transfer schemes, transparent labor recruitment methods, worker-driven social responsibility reporting (as distinct from existing corporate social responsibility programs), and fairer labor immigration legislation in destination locations.

Trafficking research for prevention is still in the early stages. To achieve meaningful advancements, researchers and practitioners will have to work together to develop intervention frameworks that recognize the genuine complexity and real-world challenges of addressing human trafficking. Intervention and evaluation designs are needed that are grounded in evidence on the complexity of determinants and that specify their targeted populations and intended outcomes. Evaluations are required that monitor and document [25] the effects of interventions over time and across subpopulations and the ways in which these interventions operate toward their intended impact. Moreover, at this early stage in intervention research, investigators and implementers must leave space for regular learning and adaptation to

course-correct programs and prevent unintended consequences. These types of dynamic evaluations can also respond to the appeal of realist evaluation, implementation science, or process evaluation to understand how, why, for whom, and under which circumstances interventions work in real-world settings [25–28].

We welcome the increase in well-intended calls for the use of experimental evaluation methods to address human trafficking. However, before interventions are subjected to resource-intensive evaluations, they will benefit from robust theories and implementation strategies that are grounded in evidence about causal processes and outcomes. Researchers should also consider if randomized trials are feasible, acceptable, and capable of answering questions of effectiveness for each specific intervention at its particular stage of development. Experimental designs may be extremely useful once developers, implementers, and evaluators have gathered sufficient evidence to be confident about the isolated contribution of an intervention to changes in the intended outcomes. Before then, resources need to be invested in the development of basic concepts, intervention theory, harm prevention, and appropriate research methods.

Future reductions in the global burden of labor exploitation will depend on researchers and practitioners working collaboratively to translate global good intentions into evidence-informed intervention designs. In this way, progress can extend beyond superficial patch-type responses to human trafficking and modern slavery in very diverse international settings and populations and address the deeper underlying drivers of this truly complex social problem.

References

1. International Labor Office. *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: 2017.
2. Zimmerman C, Kiss L. Human trafficking and exploitation: A global health concern. *PLoS Med*. 2017; 14(11):e1002437. <https://doi.org/10.1371/journal.pmed.1002437> PMID: 29166396
3. United Nations. Promote inclusive and sustainable economic growth, employment and decent work for all. 2015 [cited 2018 Dec 20]. Available from: <https://www.un.org/sustainabledevelopment/economic-growth/>.
4. Ottisova L, Hemmings S, Howard L, Zimmerman C, Oram S. Prevalence and risk of violence and the mental, physical, and sexual health problems associated with human trafficking: an updated systematic review. *Epidemiol Psychiatr Sci*. 2016; 25(4):317–41. <https://doi.org/10.1017/S2045796016000135> PMID: 27066701
5. Kiss L, Pocock NS, Naisanguansri V, Suos S, Dickson B, Thuy D, et al. Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: an observational cross-sectional study. *Lancet Global Health*. 2015; 3(3):e154–e61. [https://doi.org/10.1016/S2214-109X\(15\)70016-1](https://doi.org/10.1016/S2214-109X(15)70016-1) PMID: 25701993
6. Oram S, Stöckl H, Busza J, Howard LM, Zimmerman C. Prevalence and risk of violence and the physical, mental, and sexual health problems associated with human trafficking: systematic review. *PLoS Med*. 2012; 9(5):e1001224. <https://doi.org/10.1371/journal.pmed.1001224> PMID: 22666182
7. World Health Organization. Understanding and addressing violence against women: human trafficking. 2012. Available from: http://apps.who.int/iris/bitstream/10665/77394/1/WHO_RHR_12.42_eng.pdf.
8. Stoklosa H, Grace AM, Littenberg N. Medical education on human trafficking. *AMA J Ethics*. 2015; 17(10):914. <https://doi.org/10.1001/journalofethics.2015.17.10.medu1-1510> PMID: 26496054
9. Oram S, Abas M, Bick D, Boyle A, French R, Jakobowitz S, et al. Human trafficking and health: a cross-sectional survey of male and female survivors in contact with services in England. *Am J Public Health*. 2016; 106(6):1073–8. <https://doi.org/10.2105/AJPH.2016.303095> PMID: 27077341
10. Kiss L, Yun K, Pocock N, Zimmerman C. Exploitation, violence, and suicide risk among child and adolescent survivors of human trafficking in the Greater Mekong Subregion. *JAMA Pediatr*. 2015; 169(9):e152278–e. <https://doi.org/10.1001/jamapediatrics.2015.2278> PMID: 26348864
11. Judge A, Murphy J, Hidalgo J, Macias-Konstantopoulos W. Engaging survivors of human trafficking: complex health care needs and scarce resources. *Ann Intern Med*. 2018; 168:658–63. <https://doi.org/10.7326/M17-2605> PMID: 29532076

12. Ahn R, Alpert EJ, Purcell G, Konstantopoulos WM, McGahan A, Cafferty E, et al. Human trafficking: review of educational resources for health professionals. *Am J Prev Med.* 2013; 44(3):283–9. <https://doi.org/10.1016/j.amepre.2012.10.025> PMID: 23415126
13. Zimmerman C, Borland R. *Caring for trafficked persons: guidance for health providers.* Geneva: International Organization for Migration; 2009.
14. Office on Trafficking in Persons. *SOAR to Health and Wellness Training.* 2018 [cited 2018 Dec 17]. Available from: <https://www.acf.hhs.gov/otip/training/soar-to-health-and-wellness-training>.
15. Dell NA, Maynard BR, Born KR, Wagner E, Atkins B, House W. *Helping Survivors of Human Trafficking: A Systematic Review of Exit and Postexit Interventions.* Trauma Violence Abuse. 2017. 1524838017692553.
16. Davy D. Anti-Human Trafficking Interventions: How Do We Know if They Are Working? *Am J Eval.* 2016; 37(4):486–504.
17. International Labour Organization. *Hard to see, harder to count: Survey guidelines to estimate forced labor of adults and children.* Geneva: International Labour Organization; 2011.
18. Zimmerman C, McAlpine A, Kiss L. *Safer labour migration and community-based prevention of exploitation: The state of the evidence for programming.* 2016. Available from: <https://freedomfund.org/our-reports/safer-labour-migration-and-community-based-prevention-of-exploitation-the-state-of-the-evidence-for-programming/>
19. Blanchet T, Biswas H, Zaman A, Lucky MA. *From risks to rights: evaluation of a training programme for women aspiring to migrate for work.* Dhaka; 2018.
20. Zimmerman C, Kiss L. *Human trafficking and modern slavery: new insights for policy and programmes.* London School of Hygiene and Tropical Medicine; 2018. Available from: <https://www.lshtm.ac.uk/swift-asia-regional-briefing.pdf>
21. Kiss L, Bosc I. Expert Opinion [Internet]. LSHTM, editor. 2017. Available from: <https://www.lshtm.ac.uk/newsevents/expert-opinion/what-role-can-empowerment-play-preventing-exploitation-migrants>.
22. Jones K. *For a fee: the business of recruiting Bangladeshi women for domestic work in Jordan and Lebanon.* Geneva: International Labour Office; 2015.
23. Crane A, LeBaron G, Allain J, Behbahani L. *Governance gaps in eradicating forced labor: From global to domestic supply chains.* Regulation & Governance. 2017.
24. Davidson JOC. *Modern slavery: The margins of freedom.* Springer; 2015.
25. Pawson R, Tilley N. *An introduction to scientific realist evaluation.* In: Chelimsky E and Shadish WR, editors. *Evaluation for the 21st century: A handbook.* Thousand Oaks, CA: Sage Publications; 1997. p. 405–418.
26. Moore G, Audrey S, Barker M, Bond L, Bonell C, Hardeman W, et al. *Process evaluation of complex interventions UK Medical Research Council (MRC) guidance.* *BMJ.* 2015; 350:h1258. <https://doi.org/10.1136/bmj.h1258> PMID: 25791983
27. Peters DH, Tran NT, Adam T. *Implementation research in health: a practical guide.* Geneva: World Health Organization; 2013.
28. Ridde V. *Need for more and better implementation science in global health.* *BMJ Glob Health.* 2016; 1(2); e000115. <https://doi.org/10.1136/bmjgh-2016-000115> PMID: 28588947