Operational research in humanitarian settings

(Original - NTNU – MARCH 2021
ELBURG VAN BOETZELAER)

Updated for March 2022 by SOHANA SADIQUE

Objectives of this session

After this session you should be able to:

- Define operational research
- Describe the ‘life cycle’ of operational research
- Define and describe the different steps of operational research
- Define and describe the criteria for public health recommendations

Operational research in humanitarian settings

- Seeks to address the gap between research and implementation
- Focuses on making changes to the quality and effectiveness of the performance of health systems, services or disease control programmes
- ‘The science of doing better’

Operational research in humanitarian settings

What should operational research not be?

- Means to publish or boost academic/scientific profiles
- Just to publish ‘some papers’
- Something that takes time away from life saving operations

Operational research in humanitarian settings

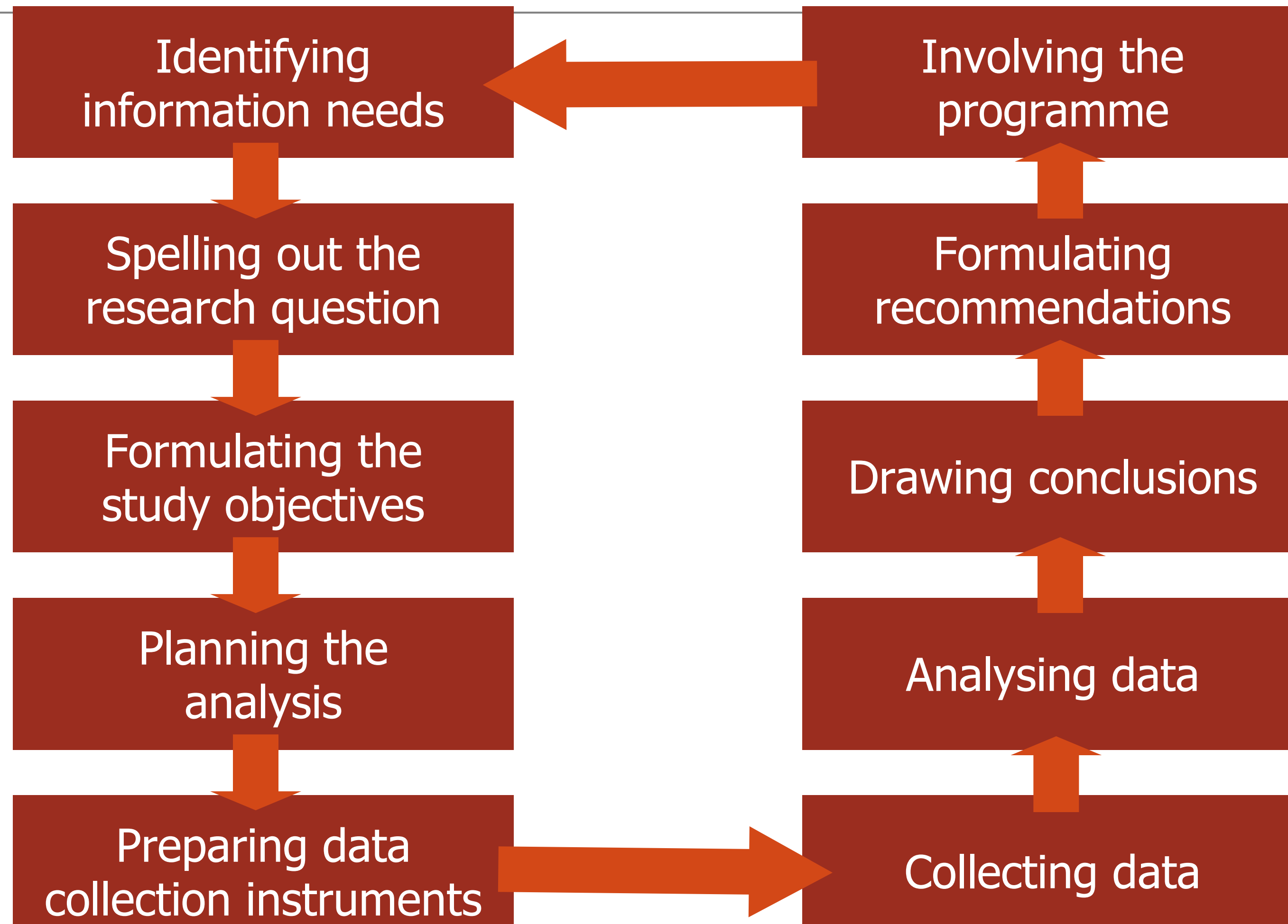
What should operational research be?

- **Data for action**
- Research proposal and objectives – direct link to translation of findings/lessons learned into public health action
- A systematic way of finding and documenting means to better support affected populations
- Redefining implementation strategies
- Using data to document what has occurred (historical accountability through evaluation)

Operational research in humanitarian settings – WHY?

- Serve affected populations better
    - Who are the affected populations?
- Serve our staff better
- Makes data more comparable/consistent
    - Across time and places

Life cycle of operational research



Recommendations for public health action

Public health recommendations should be:

- Evidence based
- Specific
- Feasible
- Acceptable
- Ethical
- Cost effective

Example of operational research & intervention implementation

Practice to inform policy

Improving health, safety and dignity among small-scale factory workers: an example from Dhaka, Bangladesh

- Implementing organization: MSF OCA
- Location: Kamrangirchar, Dhaka, Bangladesh.
- Study period: 2019

Background

Bangladesh is most vulnerable to the effects of climate change:

- Rapid urbanization (from 55 million to 83 million in 2030)
- Migration patterns (e.g. climate refugees)
- Slum and peri-urban areas (one-third of Bangladesh's City population lives in slums)

2012-13

- four major incidents: 1,261 deaths
  (collapse of Rana Plaza garment factory causing:
  1,132 deaths and more than 2,500 injuries [ILO])

Each year

- >1,100 workers had fatal accidents (vs 147 in UK)
- > 2,400 die from work related diseases

Although less visible – structural violence is by far the most lethal form of violence, through causing excess deaths—deaths that would not occur in more equal societies.

Where and when did we start?

- Most crowded peri-slum in Dhaka: 400,000 inhabitants in 3.68 km²

  -OCA conducted a survey inside factories (2013):
  Marginalised working populations
  Poor access to care
  High injury rate and diseases
  Lack of tetanus vaccination/Safety service very limited
  Working > 12 hours a day

- Unknown number of informal small-scale factories: (aluminium, lead, plastic, garments, metal)

Kamrangirchar urban slum

© HanaConnor

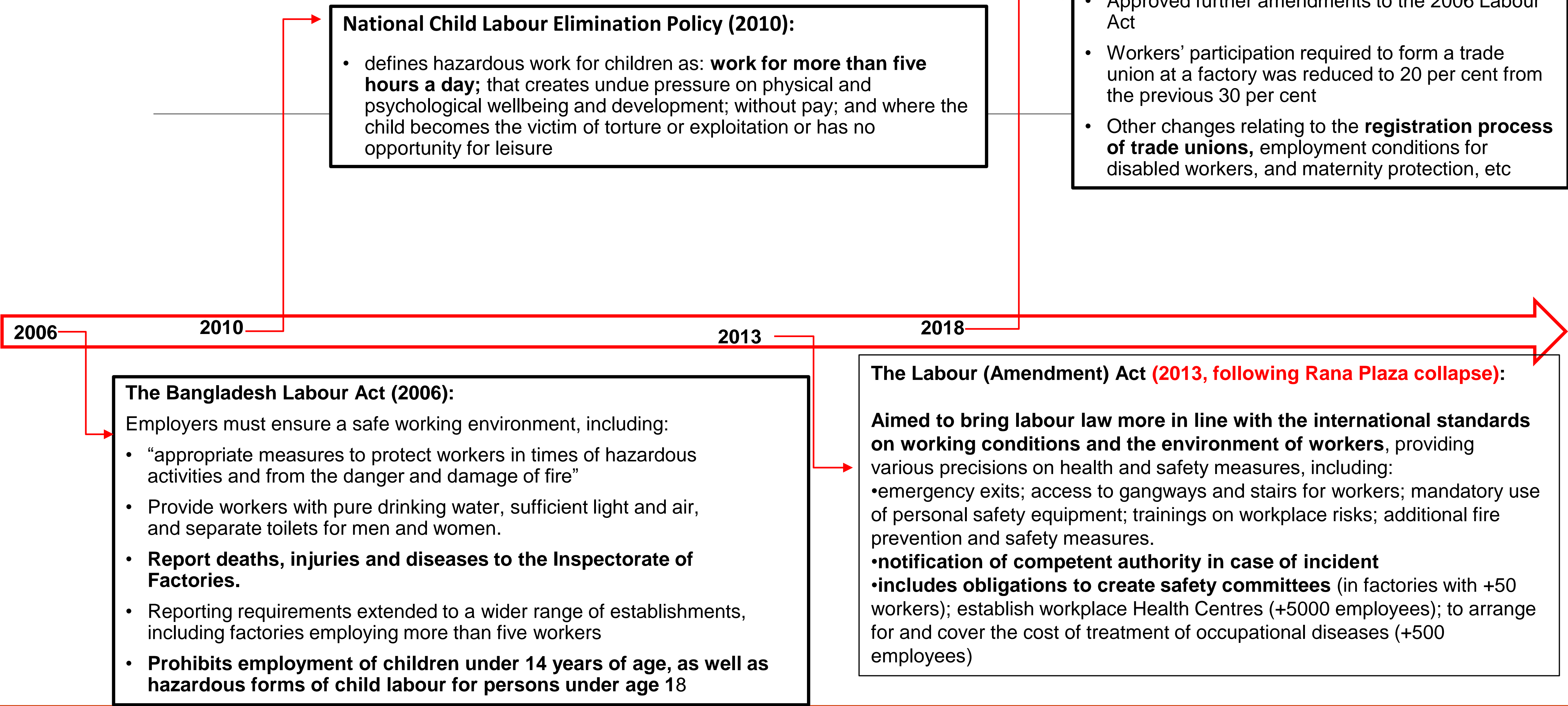
Balloons | Recycling

Plastic

Tanneries (2013)

Metal

Policy (2006-2018)



Policy and implementation gaps

BUT…

Bangladesh has not fully ratified key international labour standards on occupational health and safety policy such as:

- Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)
- Occupational Safety and Health Convention, 1981 (No.155)

Most of current legislation targets garment factories and tanneries, and factories employing over 50 workers. As a result, **metal, plastic and small-scale factories remain without clear legislation**.

The **Bangladesh Labour Act Amendment (2018) amendment is not consistent with the ILO conventions** on trade unions:

- Whilst it reduces the percentage of the workforce needed to form a TU (from 30% to 20%), the ILO Convention states that only 10 workers are needed to form a trade union.

- To form a trade union, the workers from the informal sector need identity card whereas there is no authority to provide them with one

Existing standards remain largely unenforced, in particular, for child labour and small-scale factories.

Gathering the evidence
– to inform practice and policy

Qualitative study

Clinical data analysis

Factory hazard assessment

Injury mitigation study

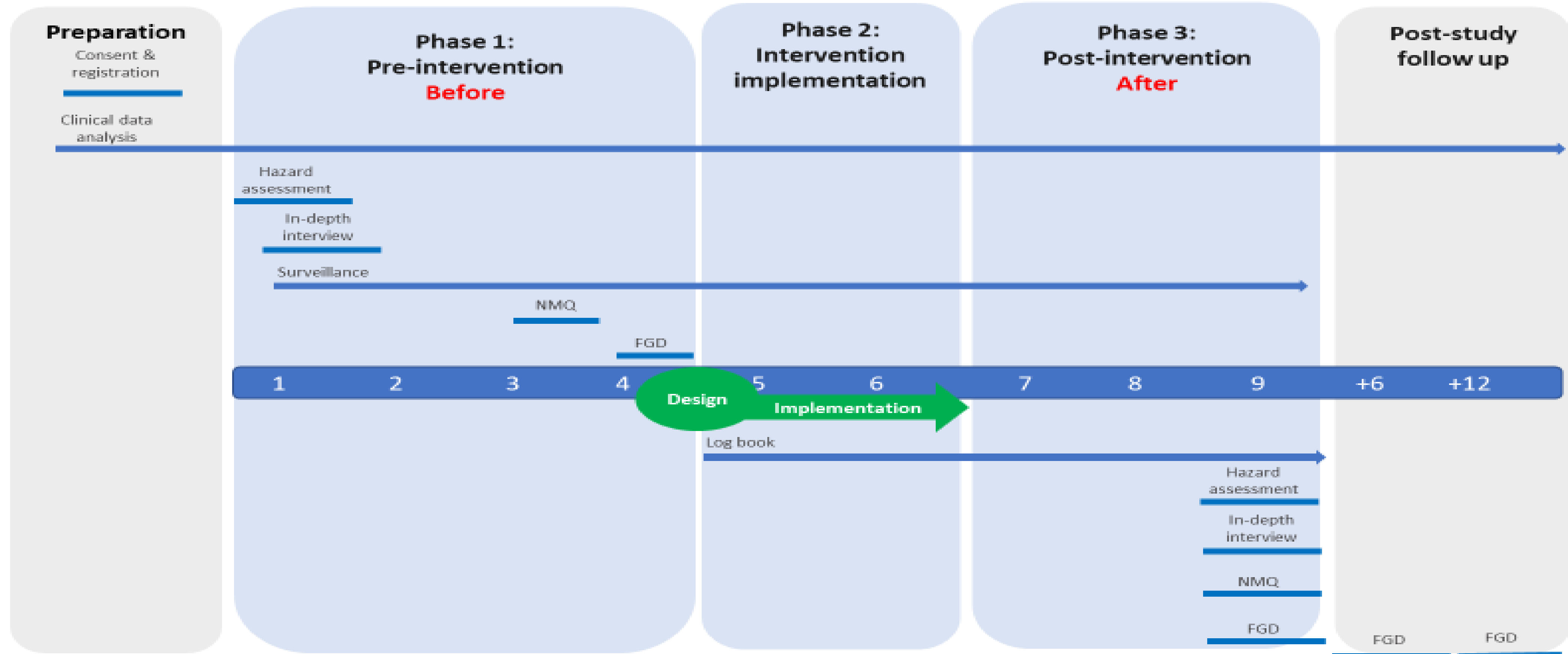
Injury mitigation study

- To assess the feasibility of collaborating with factory owners/workers to co-design and co-implement interventions to improve work safety.
- To inform the development of a model that could be implemented in similar contexts.
- To provide evidence to:
  - Inform policy discussions
  - Influence the application of existing regulations
  - Urge the adoption of international standards
  - Contribute a new perspective to occupational health intervention research
  - Support proximity and restoration of dignity and safety in this marginalised population

Participatory

Inclusive, two-way communication

Timeline over the phases



"Accidents can happen anywhere. Like I put the circles to dry, I can easily trip and fall off the roof and get fractures. Like the kids were just poking each other and suddenly fell off the roof."
[child worker]

“We need masks, gloves, shoes and goggles. When I’m not using them I have various problems. Like if I don’t use a mask, I inhale dust, then I feel respiratory problems. When dust goes in my eyes I also have problems… “ [adult male worker]

“Working with the machine is very risky. When the die comes off and hits others, it can cause death of anyone.”

[adult female worker]

Study Implementation

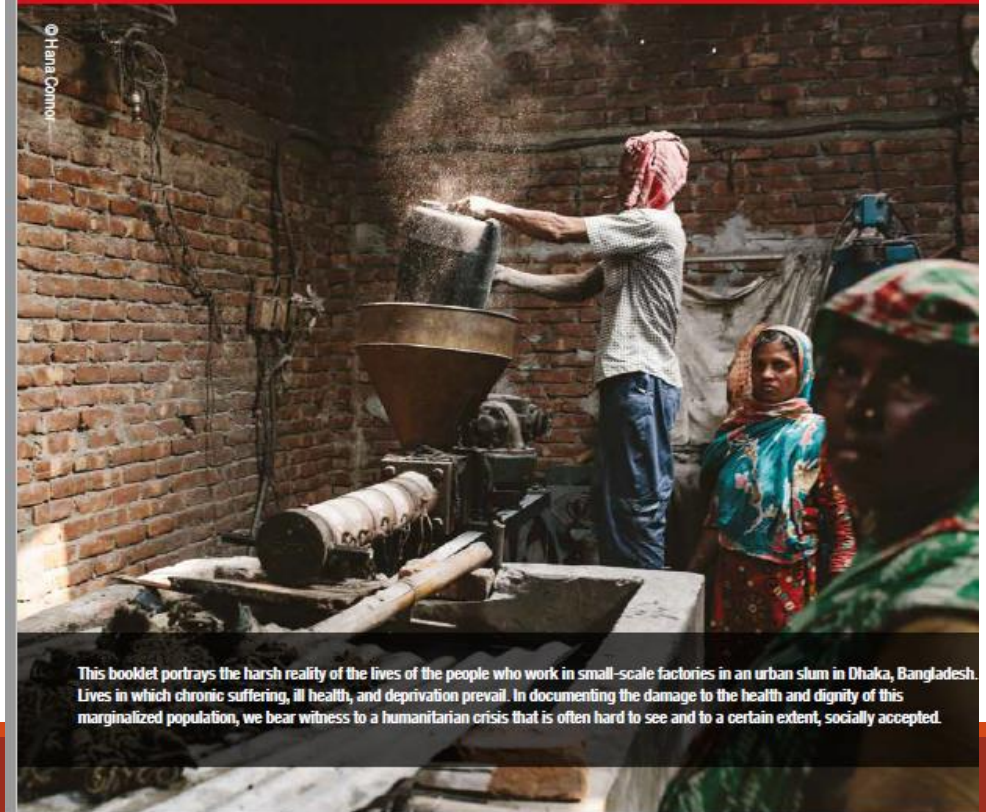
Study Implementation

Platforms to inform practice and policy

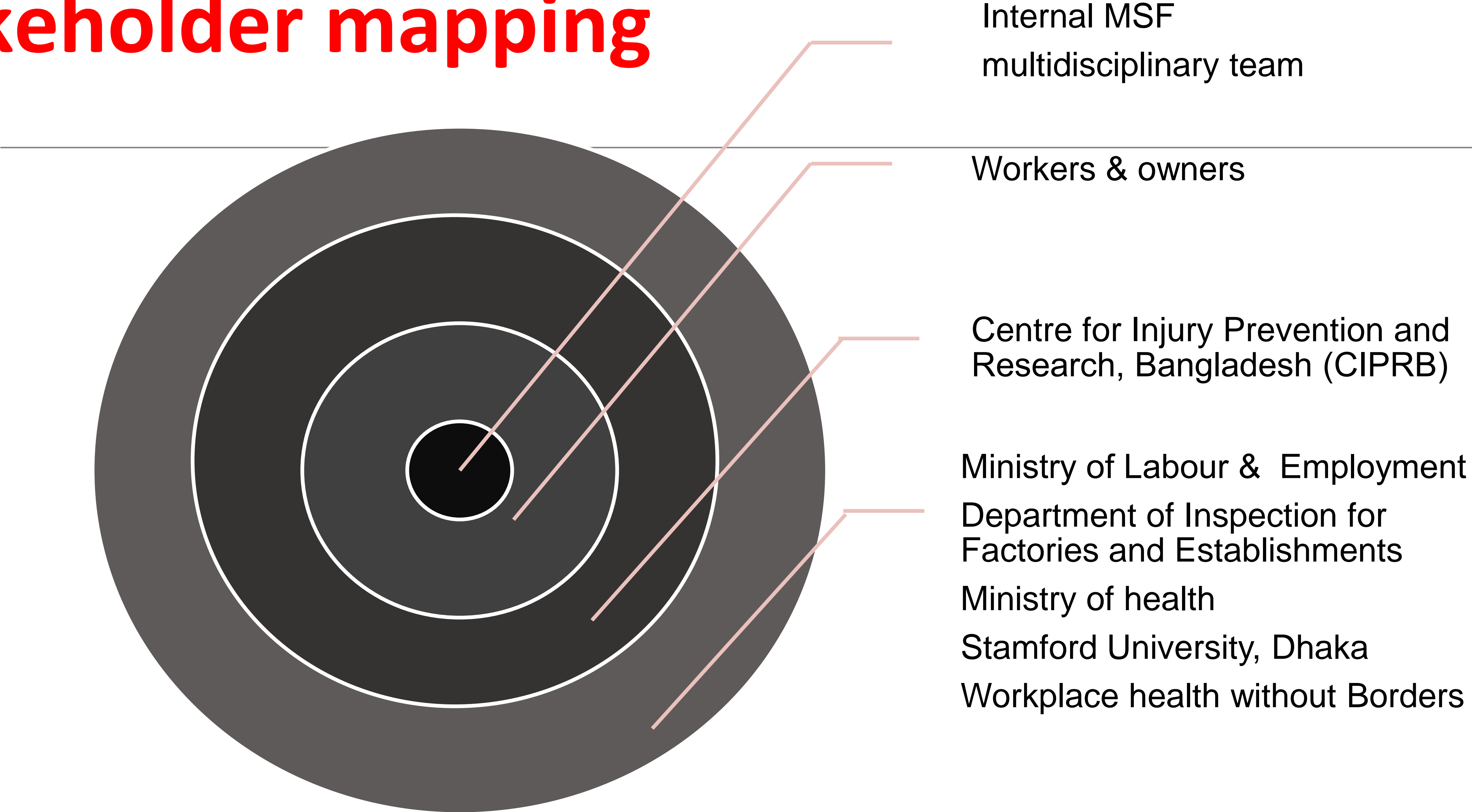
- OH booklet
- Implementation of child package
- Presentations and posters (external and internal)
- Academic manuscripts
- Short diploma in Occupational Hygiene
- Integration of OH in MOHS Hospital “OH corner”
- Stakeholder workshop

Improving health and restoring dignity among slum factory workers in Bangladesh

Key findings from the Médecins Sans Frontières occupational health project in Kamrangirchar and Hazaribagh



Stakeholder mapping



Reflections/challenges on informing and engaging with policy

Internal

Mixed internal buy-in/support for OH policy agenda

Improving linkages internally between project and advocacy

Limits of advocacy given sensitivities of Rohingya context (child labour)

Limited technical expertise in OH

External

- Engagement of local collaborator (+collaboration?)
- Political will/ commitment to change? (conflict of interests)
- How to influence change when working conditions embedded in structural and social inequalities (top down or bottom up?)

Final thoughts

There are harsh realities in urban settings that are difficult to recognise, embedded in structural and social inequalities, and socially accepted.

Our intervention would be relevant only if we recognise and adapt our work to these new realities.

Providing evidence to inform policy is a long road…

Journey Milestones

2013-2014	2015-2016	2017-2018	2019-2020
Review the literature ✓ toxic agents discharged by factories/tanneries **Survey inside factories** ✓ Marginalised working populations ✓ Poor access to care ✓ High injury rate and diseases ✓ Lack of tetanus vaccination ✓ Safety service very limited **Opening of clinics: 3 pillars** ✓ Sexual and reproductive health services (SRH) ✓ sexual and Intimate partner violence (IPV) ✓ Occupational Health (OH) **Agreement with factory owners** ✓ Tetanus vaccinations campaign **Health and safety training (TIFO)** ✓ Outreach inside Factories/tanneries	**Survey in 300 Tanneries** **Mapping tannery production (Toxicologist)** **Medical training on OH for medical staff** **Mapping factories** **Health seeking behaviour study**	**Industrial hygienist** **Hazard assessment in factories** **Retrospective review of medical data** **Integration with other pillars** **Tanneries relocated to a new site**	**Injury risk mitigation: a participatory before and after study** **Mobile clinics/TT vaccinations in the new tanneries**
	Adapted health messages **Recounting of factories**	**Hazard mitigation interventions** **OH booklet** **Negotiation to re-open in tanneries**	

Operational research in humanitarian settings – Main take aways

- Operational research = implementation research
- Operational research should inform public health action. It is not an academic exercise
- Operational research should be driven by field needs
- Constant involvement of and feedback loops with key stakeholders, including affected population
- Adhere to all ethical standards as you would in your own country
- Make your contribution to more effectively meet needs of affected people, decrease morbidity and mortalilty, etc!

Discussion

References

- Blanchet K, Allen C, Breckon J, Davies P, Duclos D, Jansen J, Mthiyane H, Clarke M. (2018) Using Research Evidence in the Humanitarian Sector: A practice guide. London, UK: Evidence Aid, London School of Hygiene and Tropical Medicine and Nesta (Alliance for Useful Evidence)
- Kozuki N, Van Boetzelaer E, Tesfai C, Zhou A. Severe acute malnutrition treatment delivered by low-literate community health workers in South Sudan: A prospective cohort study. *J Glob Health*. 2020;10(1):010421. doi:10.7189/jogh.10.010421
- Sheather J, Jobanputra K, Schopper D, Pringle J, Venis S, Wong S, et al. (2016) A Médecins Sans Frontières Ethics Framework for Humanitarian Innovation. PLoS Med 13(9): e1002111. https://doi.org/10.1371/journal.pmed.1002111
- Van Boetzelaer E, Zhou A, Tesfai C, Kozuki N.Performance of low-literate community health workers treating severe acute malnutrition in South Sudan. Matern Child Nutr. 2019;15 Suppl 1:e12716. 10.1111/mcn.12716
- SPHERE standards: https://spherestandards.org/

Acknowledgements

- Amrish Baidjoe (Norwegian Red Cross, LSHTM, GOARN)
- ECDC – European field epidemiology trainings program (EPIET)
- International Rescue Committee
- MSF - Médecins Sans Frontières