

Research in Occupational Safety and Health

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Why bothering with OSH research?

1. To evaluate existing studies
2. To carry out (and eventually publish) their own high quality research projects and thereby
 - a. enhance knowledge in the field and
 - b. improve working conditions and health of workers (and their families)



Impact of research on health?

1. Study on health of children living in a traditional gold mining town in the North of Chile using a community based approach
2. Study indicated that gold burning inside the household had neurological effects on the kids (not new but it showed the fathers and mothers directly that they were impacting on the health of their kids)
3. Community decision to perform the burning at a few specified places in the town only
4. Exposure of kids reduced -> health improved



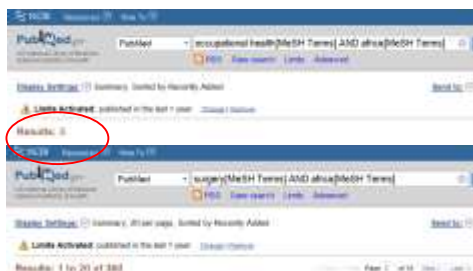
How much OSH research is done?

Europe



How much OSH research is done?

Africa



Why is not much done?

1. Lack of theoretical knowledge in research?
2. Lack of applied knowledge in research?
3. Lack of resources?
4. Too difficult to publish?



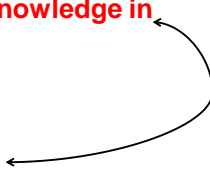
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LMU Potential solution

Project-based training within the CIH^{LMU}



LMU Project-based learning

- Authentic problems, challenging questions
- Inquiry, knowledge building and resolution
- Autonomous work
- Realistic results



LMU Methods

1. Selection of OSH professionals from Latin America
2. Development of a study protocol during a two week onsite course in Latin America
 - Study protocol
 - Assignment of local tutor
 - Study design and questionnaire given
3. Following 12 months to
 - Conduct field work
 - Analyse data
 - Publish / write up a report



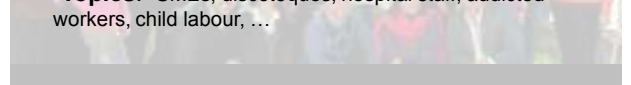
LMU Study design

1. Cross-sectional study on working conditions and health
2. Following the protocol of the European Working Condition survey
3. Additional modules (respiratory health, ergonomics, stress)
4. At least one exposed and one unexposed group of workers
5. Sample size: at least 100 in each group
6. Preferably SMEs



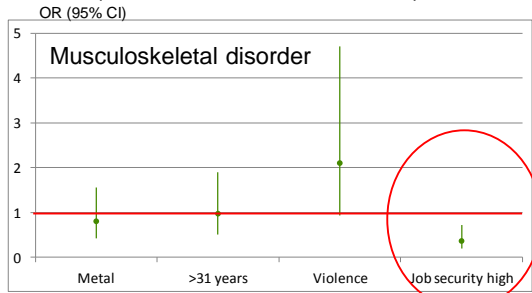
LMU Results

- 2010:**
- 29 protocols developed and approved
 - 20 intended to continue
 - 10 datasets + final reports (some of them pending)
 - Topics:** metal workers, miners, transport, child labour...
- 2011:**
- 24 protocols developed and approved
 - 10 intended to continue
 - 8 ongoing, 1 loss to follow-up, 1 postponed
 - Topics:** SMEs, discoteques, hospital staff, addicted workers, child labour, ...



LMU Example of project results

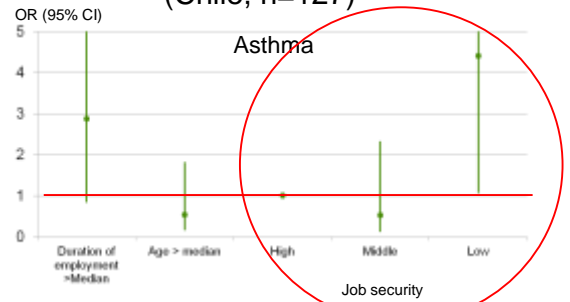
Metal workers/ Carpenters
(SMEs, Lima, Peru, n=198)



CH LVL José Ovalle, 2011

LMU Example of project results

Miners
(Chile, n=127)



CH LVL Tamara Fernandez, 2011

LMU Conclusions

- Project-based learning is one way improving teaching in OSH and advancing research
- Common protocol enables students to compare results and identify common risk factors!
- Large number of tutors needed
- Publishing the results is still a challenge

➤ Master program

CH LVL

LMU International Master of Science in Occupational Safety and Health

-Application in Research and Practice

- Two-year part-time, 60 ECTS
- Graduation with Master of Science (MSc)
- Working languages: Spanish and English



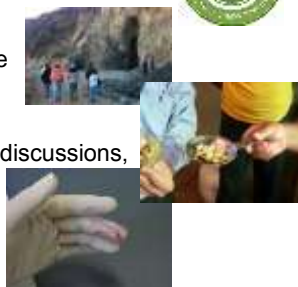
Supported by:



LMU Master program

International and interdisciplinary education based on **blended learning** techniques

- Three short-time modules with compulsory attendance
- Research project work
- Online courses with online discussions, case-based e-learning etc.
- Master thesis



CH LVL www.osh-munich.de

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