Water, Mining and Buruli Ulcer

Lynda Lawson (Centre for Social Responsibility in Mining)
Danellie Lynas (Minerals Industry Safety and Health Centre)
Sustainable Minerals Institute

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Research question

How does the use of water in Artisanal Mining (ASM) effect miners’ health?

Water and Artisanal Mining (ASM):
An indispensable resource in mining
• Stream water used in ASM for gold and mineral processing
• Same water source fundamental to agricultural activities and essential for H&S of communities living and working alongside these water bodies
• Water, sanitation and health issues interlinked
How we explored the research question…

Workshops
Field observations and interviews
Literature review
Multi disciplinary approach
What we found...

Environmental
• Poor sanitation – no access to toilet facilities on mine sites (female)
• Poor water quality – mercury, arsenic,
• Water borne diseases – typhoid
• Vector borne diseases – malaria

Physical
• Fe(male) genital corrosion – salt water
• UTI and GIT - diarrohea
• Tropical skin diseases – Buruli Ulcer
(Bairnsdale Ulcer – Australia)
What next?

ASM is a significant livelihood for over 20 million people globally - it is unlikely ASM mining methods will significantly change, therefore miners will continue to spend long periods of time in water polluted by mercury and made turbid by waste rock and primitive mining and processing methods resulting in a number of health problems, including Buruli Ulcer.

What’s next is:
Focused research on Buruli Ulcer - including better understanding of the transmission of the organism to inform prevention and treatment of those suffering this debilitating disease.
Contact details:

Lynda Lawson    l.lawson1@uq.edu.au
Danellie Lynas   d.lynas@mishc.uq.edu.au

References:
