Barriers to uptake of oxygen therapy in Malawi: a qualitative study
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**Introduction**
Access to oxygen in developing countries is often limited by lack of reliable equipment or electricity. A further issue recognised by the World Health Organisation is patients’ refusal of oxygen. This study explores attitudes to oxygen in Malawi.

**Methods**
Focus group discussions with 86 participants were held in rural and urban communities in Malawi. Discussions were held in Chichewa (local language), and audio recorded. Framework analysis of transcripts identified recurring themes.

**Quotes from participants**
- "When we hear about the machine [oxygen concentrator] we fear for our lives because most patients who use the machine end up dying"
- "That device [oxygen concentrator] is fearsome just by looking at it. When you think of someone inserting this device in the nose or mouth, you may think they want to finish off the life of your child"
- "When they say they want to put him on oxygen it means things are not okay"
- "At the funeral ceremony people are told that the deceased went to the hospital and there he was put on oxygen and he died there, so this message terrifies people"
- "Most people say no to oxygen because of what they hear from fellow patients or guardians"

**Results**
The most significant theme we identified was a fear of oxygen. The reasons participants gave for fearing oxygen are shown in table 1. We found that attitudes towards oxygen were strongly influenced by experience and hearsay. Many participants had observed or heard of patients dying after they had been treated with oxygen, leading them to believe it was ‘dangerous’ or ‘risky’.

**Table 1: Reasons for fear of oxygen**
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<th>Reason</th>
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<td>Belief that oxygen causes harm or death</td>
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<td>Lack of understanding about oxygen</td>
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<td>Appearance and sound of oxygen concentrator</td>
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<td>Oxygen signifying poor prognosis for patient</td>
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<td>Concerns about cost of treatment with oxygen</td>
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<td>Patient mistrust of health care staff</td>
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Participants felt that they did not know enough about oxygen and identified a need for education in local communities and at health care facilities.

**Discussion**
This is the first study to explore reasons for refusal of oxygen in a developing country. We have shown a need for education at a community level and for guidance for health workers seeking to increase the uptake of oxygen.

Research has shown that improving oxygen availability in a developing country can reduce the risk of death for a child with pneumonia by 35%.

Whilst oxygen remains a limited resource, it will be reserved for patients in a critical condition with a high mortality rate, reinforcing the perception that oxygen use is linked with death. Its acceptability as a treatment may improve with increased access and use. This study reinforces the need for improved oxygen delivery systems in developing countries.

**References**