Experiences with use of a pulse oximeter multimodal device in outpatient management of children with Acute Respiratory Infection during Covid pandemic

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Background: While Covid-19 infection rate in children is low, respiratory symptoms are a common mode of presentation which calls for better management of such symptoms. However, ARI case management in primary health settings settings has challenges as health workers lack skills to count respiratory rate and check chest indrawing. To address this multimodal pulse oximeters have been introduced in health and wellness centres of seven states to ease the work of front line health workers. A study was undertaken to understand the usability of the multimodal pulse oximeter during Covid times.

Methods: A qualitative study was conducted with the aid of indepth interviews among a convenience sample of eleven health care workers from ten health and wellness centres. Interviews were conducted and recorded over phone, after obtaining consent. Transcribed interviews were coded and analysed on a qualitative analysis software. Content analysis was conducted.

Results: Total children screened during covid lockdown period (April 1-May 31) is 571, those diagnosed with pneumonia and severe pneumonia is 68 and 2. Health care workers were satisfied with pulse oximeter as it helped in timely diagnosis and treatment, and offered protection from possible infection as it mitigated the need for physical contact.

Conclusion: The multimodal pulse oximeter is well accepted among providers as it is easy to use aiding in timely management of ARI in children. It has an added protection as it's use reduces the need for physical contact. It can be adopted in other HWC and primary health facilities.