Recognition of illness in very young infants by inexperienced health workers

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Abstract:

To determine whether inexperienced health workers can recognize severe infection in infants less than 3 months of age, a study was conducted of 200 infants with cough, fever or 'not feeling well'. The presence or absence of five symptoms: cough, difficulty in breathing, feeding problem, fever or history of convulsions, and ten signs: appearing ill, respiratory rate > or = 60/min, chest indrawing, grunting, cyanosis, wheeze, lethargy, 'too hot', 'too cold' or abdominal distension, were recorded by a health worker, who made a diagnosis of 'ill' or 'mildly ill'. Each infant was then reviewed by an experienced paediatrician who made a diagnosis of 'ill' (pneumonia, sepsis, meningitis or other severe illness) or 'mildly ill'. Using these diagnoses as the 'gold standard', the sensitivity, specificity, and positive predictive values of each parameter were calculated. In 89% of the 200 infants, the health worker made the correct diagnosis. Forty infants were admitted. In 36 instances (90%) the health worker made the correct decision. The most discriminating symptoms and signs were 'not feeding well', 'appears ill', chest indrawing and grunting. A respiratory rate > or = 60/min was 78% sensitive and 69% specific. Our study suggests that inexperienced health workers can recognize severe illness in infants under 3 months of age.