SKIN ICTEROMETRY IMPROVES MATERNAL RECOGNITION OF JAUNDICE BUT NOT CARE-SEEKING IN RURAL SETTINGS IN VIETNAM.

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Background: In Vietnam, only 2.5% of newborns receive routine care before two weeks, generally only for symptomatic illnesses. Late recognition of jaundice delays treatment, increasing risks of bilirubin encephalopathy. We determined whether community-level icterometry improves parental recognition of jaundice and early care-seeking.

Methods: Randomized controlled trial of community-level icterometry by mothers in rural Vietnam. Postpartum mothers were educated about jaundice and cluster-randomized by commune. Cases received icterometers and instructions (education+icterometer, EIG), controls (education only, EOG) education only. We assessed bilirubin knowledge using a 38-item questionnaire postnatally and at home two weeks later. All subjects received mobile telephone calls from days 2-7 to determine maternal recognition and icterometer detection of jaundice (>3.5 on five-point scale). Care-seeking data were obtained during home visits. We excluded mothers without telephones, or whose infants were premature (< 37 wks) or hospitalized >5 days.

Results: We present data on 205 of 264 subjects enrolled to date. Enrollment was 98%; 14 cases were excluded (1 hospitalized, 11 no telephone, 2 refusals). Post-test scores were 14% higher than pre-test ($p=0.000$). We successfully contacted parents on 4.9 (mean) of 6 days. Icterometry increased maternal recognition of jaundice from 20% (both groups) to 66% (EIG). Follow-up care-seeking remained 7% in both groups ($p=0.948$). Only 2% received treatment for hyperbilirubinemia; 3.2% (EOG) vs 0.9% (EIG) ($p=0.237$).

Conclusions: Home-use icterometry increases parental detection of jaundice, but not care-seeking, in rural Vietnam. Perinatal education with telephone follow-up could be a feasible, low-cost way to improve parental recognition of symptomatic newborn illnesses.