

# How Ready are Pediatricians and Family Physicians in Saudi Arabia to Perform Clinical Screening of Developmental Dysplasia of the Hip? [Letter]

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## Dear editor

We read with interest the article by Suqaty et al<sup>1</sup> titled “How Ready Are Pediatricians in Saudi Arabia to Perform Clinical Screening of Developmental Dysplasia of the Hip?”. We applaud their support for the principle of improving the standard of screening for developmental dysplasia of the hip (DDH). In the course of their discussion, they make reference to our 2019 consensus statement,<sup>2</sup> stating that our international group recommended universal ultrasound screening, “although little evidence supports this practice”. In order to help clarify any misconceptions, we would like to draw attention to what in fact amounts to a good deal of evidence in the literature supporting universal ultrasound screening.

Wirth et al<sup>3</sup> reported that their system of universal ultrasound screening had resulted in a dramatic reduction in the rates of surgical procedures, hospitalisation and late presentation of DDH. A further paper from Germany<sup>4</sup> again demonstrated a reduction in the rate of operative procedures for DDH due to what they termed “general” (ie universal) ultrasound screening. In 2011, Tschauner et al<sup>5</sup> reported that babies from the screened population had a 98.9% success rate with closed treatment of DDH (as compared with an 88.7% success rate in a historical unscreened group); they concluded that universal ultrasound had made treatment of DDH shorter, safer and simpler. Thallinger et al<sup>6</sup> reported on a full review of the effects of the Austrian national ultrasound screening system for the years 1992–2008, based on data from the Austrian Ministry of Health. They observed that the rate of late pelvic surgery for DDH had dropped from 1.3 per 1000 to 0.7 per 1000 live births; they also concluded that among Austrian children who have benefitted from the screening programme, the open reduction rate was 0.12 per 1000 live births. Hospital admission rates for DDH had declined from 9.5 to 3.6 per 1000 live births.

Regarding the issue of the cost of a universal ultrasound screening programme, ie whether it is cost-effective, Thaler et al<sup>7</sup> analysed the situation as it had applied in the Austrian province of Tyrol. Once again, they demonstrated a marked reduction in the rate of operative procedures for DDH, but in addition they calculated that the surgery that had been avoided represented a cost saving that more than offset the cost of the screening programme itself.

Sanghrajka et al,<sup>8</sup> based in the UK, reported a review of patients who underwent open reduction in Great Ormond Street Hospital; none had been harnessed under 6 weeks, and none had had neonatal hip ultrasound screening. Only a minority had had a risk factor that should have triggered a scan using a selective ultrasound regime. This review concluded that contemporary screening practices were failing to eliminate the need for open reduction. Along similar lines, a study based in the USA reported by Sink et al<sup>9</sup> looked at skeletally mature patients who underwent surgery for late consequences of DDH; 85.3% of them had not had risk factors that would have triggered a scan in a selective screening programme.

All of the above studies were referenced in our 2019 paper. Meanwhile, while our paper was in preparation, a further study was published from Innsbruck, Austria,<sup>10</sup> which examined a consecutive series of just over 28,000 infants who were screened as part of the universal ultrasound screening programme; from this population there was one open

reduction, and the overall cumulative rate of open surgery was 0.7 per 1000. More recently, a meta-analysis published in 2020<sup>11</sup> has suggested that universal ultrasound screening would result in a statistically significant reduction in the incidence of late-diagnosed DDH.

We hope that the foregoing provides your readers with reassurance that there is ample evidence in the literature to support the principle of universal ultrasound screening for DDH.

## Disclosure

The authors report no conflicts of interest in this communication.

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<https://doi.org/10.2147/JMDH.S443761>