

Effectiveness of a clinic-based newborn hearing screening programme in rural South Africa: Parental perspectives

Abstract

Newborn hearing screening (NHS) has been successfully implemented in developed countries such as the United States of America and the United Kingdom. This is however not the case in developing countries such as South Africa. The challenges impact on the implementation of such programmes include lack of suitably trained personnel, financial resources for staff and equipment, institutional support and political will. The lack of NHS programmes in South Africa has resulted in the late detection of hearing loss in infants and children and subsequently delayed intervention. In order to address the lack of NHS, a rural clinic-based NHS programme was implemented in July 2014 at three primary health care (PHC) clinics in the Limpopo Province. The main aim of the study was to describe the parental/caregiver perspectives regarding the effectiveness of this rural clinic-based NHS programme. The effectiveness of the programme was also evaluated in terms of meeting national (HPCSA, 2007) and international (JCIH, 2007) benchmarks.

A retrospective review of 2 302 audiological records of babies who underwent NHS between July 2014 to June 2015 was conducted. Concurrently, 18 parents of infants who underwent hearing screening as part of the programme were purposefully selected and semi-structured interviews were conducted to explore the parental perspectives regarding the programme.

The results of the retrospective record review revealed that the mean age of the infants screened during the review period was 112 days (2 – 341; \pm 40.26). The overall coverage rate was 87% and the referral rate, 7%. The overall follow-up return rate was 32% and only 15% the infants who failed both the initial and rescreening underwent comprehensive diagnostic assessment to confirm their hearing status. The overall prevalence rate for significant sensorineural hearing loss was 0.4/1000 and 7.8/1000 for middle ear effusion. The parents/caregivers confirmed the perceived effectiveness of the NHS programme. All the participants were satisfied with the programme and confirmed the credibility of the screening programme and screeners. Parents indicated that they were empowered with knowledge

regarding the importance of early detection of hearing loss in infants and young children. Accessibility was both a facilitator and a barrier with travel distance and cost the most often cited obstacles to attending follow-up appointments.

The findings indicate it is feasible to implement clinic-based NHS programmes that effectively meet the needs of parents/caregivers of infants residing in rural areas of South Africa. Although not all the benchmarks were met within the first year of implementation, the high coverage- and low referral rates are the first steps in improving the outcomes of the screening programme. The study highlight the importance of regular monitoring and evaluation of the NHS programmes to keep track of key outcomes and impacts related to the different components of the programme.

Key words: Parental perspectives, satisfaction, newborn hearing screening, rural, South Africa