

psychological, or factors regarding an individual's membership of a species or community and their potential to develop relationships within that group. Although children with profound intellectual disability do not have the necessary cognitive ability to meet the psychological criteria for personhood, I argue that as members of the same species all human have moral status and deserve protection.

By considering children and adults with profound intellectual disability as holders of full moral status, an obligation to protect their rights is conferred. Society has an obligation to ensure that their best interests are met. The law has repeatedly stated that competent adults have a right to refuse treatment; the right to die is inherent in law. In this respect if children with exceptional health care needs have full moral status they do not only have the right to medical treatment but also the right to be protected from unnecessary, futile and potentially painful procedures in the absence of any hope of cure. Thus when considering the best interests of children with exceptional healthcare needs, attempts must be made to ensure that their rights as persons are respected.

## International Child Health/British Association of General Paediatrics

### G115 REHABILITATION OF CHILDREN WITH NEURODISABILITY FOLLOWING BRAIN INJURY IN MALAWI: PERSPECTIVES OF FAMILIES AND HEALTH-WORKERS

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**Aims** Rehabilitation services in Malawi are limited despite the burden of paediatric neurodisability secondary to conditions such as cerebral malaria, meningitis, encephalitis and traumatic brain injury. This hospital-based study aims to explore the perceptions and experiences of parent/carers and health-workers caring for children with neurodisability following brain injury, in order to inform the development of a capacity-building programme to improve rehabilitation services.

**Methods** The study was conducted in the Paediatrics department of an urban tertiary hospital in Malawi and utilised qualitative methodology. Sampling was purposive with recruitment via Paediatrics staff. Fourteen interviews were completed with parents/carers of children affected by recent brain injuries, and ten interviews and four focus-groups with health-workers. Analysis involved a thematic framework approach.

#### Results

**Health-workers** With limited resources, management of acute conditions is prioritised over rehabilitation. Lack of confidence, knowledge, and a sense of 'there's nothing we can do' hampers health-workers' rehabilitation efforts, despite many suggesting that simple things make a difference. Bias exists towards managing physical disability rather than impairments of cognition, speech or behaviour. Concerns were raised about the wider impact of neurodisability on the family, including the risk of child abuse and neglect. Counselling, including information giving, was identified as a priority. Health-workers recognised that effective rehabilitation could not be achieved unless parents/carers first understood and accepted their child's condition.

**Parents/Carers** Reports of poor communication between health-workers and parents/carers were common. Parents often had not

understood or been adequately informed about investigations, diagnosis or management of their child's condition. This contributed to unrealistic expectations about prognosis, misunderstanding about underlying causes, and lack of continued rehabilitation in the community. The burden of caring for a child with neurodisability, and the financial and opportunity costs this entails was strongly evident. Main issues were lack of mobility in their child, feeding, continence and speech difficulties. Religion was a key source of support.

**Conclusion** Limited resources, lack of health-worker training, bias towards physical disability, and poor communication, are key factors inhibiting rehabilitation of children with brain injury in a hospital-setting in Malawi. A programme to improve rehabilitation services should address these issues as priority.

### G116 PROFILE OF DENGUE VIRAL INFECTION AMONG CHILDREN TREATED IN A COMMUNITY HOSPITAL OVER ONE YEAR AND COMPARISON OF EFFICACY OF NS1 ANTIGEN ASSAY WITH MAC-ELISA FOR DIAGNOSIS OF DENGUE

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**Aims** Early diagnosis of Dengue is important to improve patient outcomes and promote timely public health interventions. This study aimed at

1. studying the profile of paediatric Dengue viral infection,
2. comparing efficacy of NS1 antigen assay with MAC-ELISA for diagnosis of dengue, during both acute and convalescent phases and
3. assessing time frame for positivity of these tests.

**Methods** This was a prospective cohort study in the Paediatric department of a community hospital in a tropical developing country, during the period July 2011 to July 2012. The Institutional Review Board approved the study. Written informed consent was obtained from all parents. Clinical features of 178 children who presented with Dengue infection were studied. Dengue NS1 antigen, IgM and IgG ELISA were done on the day of admission irrespective of duration of fever. Other laboratory tests were done as per current protocol. Chi-square test and proportion test were used for analysis.

**Results** Majority of children (37.7%) was in the age group 11 to 15 years. 59.4% were males. The proportion of males was higher in extremes of age groups. Common clinical manifestations were fever (91.6%), rash (35.8%), hepatomegaly (33%), ascites (11.3%), bleeding manifestations (17%) and pleural effusion (3.7%). 21.7% had Dengue Haemorrhagic Fever and 7.5% had Dengue Shock Syndrome. Laboratory findings were thrombocytopenia (77%), leucopenia (24.5%) and raised SGPT (63.2%).

33% of children presented in acute phase ( $\leq 4$  days) and 67% in convalescent phase (5–7 days: 53.8%,  $> 7$  days: 13.2%).

94.3% were positive either for NS1 Ag or IgM antibody or both and 5.7% were clinically treated as dengue fever.

NS1 and IgM ELISA positivity were 88.6% and 51.4% respectively in acute phase and 63.38% and 92.8% respectively in convalescent phase ( $p < 0.001$ ). Time frame for positivity of these tests is shown in table 1. NS1 antigen detection was very good in acute phase of both primary and secondary infections, but low in convalescent phase of secondary infections.

**Conclusions** Early and accurate diagnosis of dengue infection can be made with typical clinical features and laboratory investigations. NS1 Antigen in the acute phase and IgM ELISA in the convalescent phase are good diagnostic tools.