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Risk factors associated with severity of non-genetic intellectual disability (mental retardation) among children aged 2-18 years attending Kenyatta National Hospital

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**Background & Aim:** Many of the non-genetic causal risk factors of Intellectual Disability (ID) can be prevented if they are identified early. There is paucity on information regarding potential risk factors associated with this condition in Kenya. This study aimed to establish risk factors associated with severity of non-genetic Intellectual Disability (ID) among children presenting with this condition at Kenyatta National Hospital (KNH).

**Method:** A hospital-based cross-sectional study was conducted over the period between March and June 2017 in pediatric and child/youth mental health departments of Kenyatta National Hospital (KNH), Kenya. It included children aged 2-18 years diagnosed with ID without underlying known genetic cause.

**Result:** Of 97 patients with non-genetic ID, 24% had mild ID, 40% moderate, 23% severe-profound and 10% unspecified ID. The mean age of children was  $5.6\pm3.6$  years. Male children were predominant 62%. Three independent factors including labor complications [AOR=9.45, 95% CI=1.23-113.29, P=0.036], admission to neonatal intensive care unit [AOR=8.09, 95% CI=2.11-31.07, P=0.002] and cerebral palsy [AOR=21.18, CI=4.18-107.40, P $\leq$ 0.001] were significantly associated with increased risk of severe/profound nongenetic ID.

**Conclusion:** The present study findings suggest that perinatal complications as well as postnatal insults are associated with increased risk of developing severe-profound intellectual disability, implying that this occurrence may be reduced with appropriate antenatal, perinatal and neonatal healthcare interventions.

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