Correspondence

To the Editors

Neonatal screening for important metabolic disorders, loss of follow-up for confirmation test and adjustment requirement for observed incidence

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Dear Editors,

Congenital metabolic disorders are an important group of diseases in paediatrics. Early detection of a metabolic disorder is important for proper case management. Neonatal screening by laboratory investigation is an important secondary prevention mode aimed at early diagnosis and prompt treatment. Here, the authors would like to share ideas on neonatal screening for important metabolic disorders, loss for follow-up for confirmation test and adjustment requirement for observed incidence.

In this setting, the local authority provides neonatal screening for two important disorders congenital hypothyroidism and phenylketonuria (PKU)[1]. Based on available data on neonatal screening for congenital metabolic disorders (TSH and PKU screening) in a rural Indochina setting (GPS: 17.41837141269166,102.92344488074774).

Overall, 38,339 neonates were screened. Filter paper blood collection was done and screening test showed 457 positive cases. From follow-up for confirmation test, only 427 could be recaptured for confirmation tests and final positive confirmation test was detected in 48 cases. Before adjustment for loss of follow-up, the incidence rate was 48: 38,339 or 1: 789. After exclusion for loss of follow-up, the incidence rate was 48: 38,309 or 1: 798. Considering loss of follow up rate, the rate is equal to 0.078%. This means there might be 1 under-detected neonate with metabolic disorder from a total of 1,019,817 screenings.

It is important that there should be a good communication system for recapturing of positive screened neonate for confirmation test. Shortening the period from filter paper blood collection to screening result availability might be useful for reduction of loss of follow-up rate for confirmation test.

References

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