Early Identification of at Risk Population through Service Quality Improvement Project in Paediatric Cardiology Out-patient’s Clinic

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Introduction: As part of a wider programme to early identify children at risk of familial hypercholesterolaemia and/or sudden cardiac death we conducted a pilot qualitative study using adapted version of a previously validated questionnaire\(^1\) in the setting of paediatric cardiology outpatient’s clinic.

Methods: Parents of 120 patients attending general paediatric outpatient’s clinic in a tertiary referral centre between October and December 2014 were asked to fill in a questionnaire.

Results: We received 89 (74%) fully filled questionnaires from 31 newly referred patients (palpitations, dizziness, chest pain, murmur) and 58 follow-up patients (structural congenital heart disease). Clinically important information was received from parents of 19 (61%) new referrals related to family history of high blood cholesterol levels, sudden or premature death and/or cardiomyopathy. Information of similar importance was obtained from 30 (52%) families of follow-up patients. Out of 34 questionnaires (13 from new referrals and 21 from follow-up patients) where family history of hypercholesterolaemia was mentioned, 26 (76%) families satisfied Simon Broome diagnostic criteria\(^2\) for further evaluation to exclude familial hypercholesterolaemia as per NICE (United Kingdom) guidelines\(^3\). New information about family history of sudden death was received in 10 cases (11% of all questionnaires returned).

Conclusions: Our pilot study using an adapted version of a previously validated questionnaire brought up additional potentially important clinical information in the majority of families seen in the setting of general paediatric cardiology outpatient’s clinic. Surprisingly high number of families fulfilling criteria published by NICE (United Kingdom)\(^3\) for familial hypercholesterolaemia screening were identified. Further evaluation of the suspected at risk families by specialised familial hypercholesterolaemia and sudden cardiac death services is mandatory.

\(^3\)www.nice.org.uk/guidance/cg71 (last review on 10th December 2014).