

ABSTRACT

An evaluation of the detection and support facilities available for women of child-bearing age with haemoglobinopathies at the antenatal clinic of a hospital in Kingston, Jamaica and their impact on these clients.

The haematology laboratory can be regarded as playing a pivotal role in the delivery of quality health care. Accuracy and early detection of many genetically transmitted diseases hinge on the reliability of screening tests, their interpretation and the liaison between nurse/clinician, the laboratory and their clientele.

This project evaluated the laboratory services offered for screening haemoglobinopathies among persons attending the antenatal clinic of the University Hospital of the West Indies, Kingston, Jamaica.

A case control study was conducted during the months December 1996 through July 1997 by means of accessing laboratory records, patients' docketts and the administering of questionnaires to mothers with the haemoglobinopathies (cases) and those without, (controls).

Findings analysed from the docketts and questionnaires reveal that the antenatal clinic accounts for approximately one third of the requests made to the laboratory by the hospital for haemoglobin electrophoresis

The relative frequencies of haemoglobinopathies was consistent with that of other studies AS 10%; AC 3%; SS $\leq$ 1%; SC $\leq$ 1%.

The screening test used was fairly reliable for preliminary screening but needs to be followed by

diagnostic tests which are not being done at this time; for confirmation of genotypes.

Both groups were similar in age distribution but differed in respect of knowledge of sickle cell status of self, family members and sickle cell disease.

Among the case group greater than 60% of the times they did not know their husbands'/partners's sickle status or that of his family members. Only 82% of respondents knew their **correct** sickle status (74% of cases; and 90% of the controls).

The study groups differed with regard to educational level, race of fathers and union status. More subjects with a haemoglobinopathy than those in the control group attained college and university level and this may be responsible for the impact on level of awareness. Race of both groups were similar except that fathers in the case group was significantly less likely to be black when compared to the control group. Women in the control group were more likely to be married or in common-law union than those in the case group.

Plans for having children were similar in both groups and showed that the "high-risk" women either had no regard for, or are ignorant of the implication for transmitting the sickle cell gene.

There is a direct relationship between educational level and knowledge of sickle cell status; as when education level of study groups was cross tabulated with knowledge of sickle cell status it showed that all respondents who attained college or university level correctly knew their sickle status.

The knowledge-scores exercise included in the questionnaire, indicates that very little is known about sickle cell disease despite the frequent public educational programmes promoted by the Sickle Cell Unit. Communication links between staff of the laboratory, clinic and antenatal mothers (cliente) need to be strengthened to facilitate dissemination of information.