

Title Screening of pregnant women aged 40 years old and above for cardiac abnormalities using electrocardiography (ECG)

to prevent maternal mortality.

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Aim

To reviewed evidence on the effectiveness, costeffectiveness and safety on the use of ECG to screen cardiac abnormalities in pregnant women age 40 years old and above to prevent maternal mortality.

Conclusions and results

There was no retrievable scientific evidence on the safety and cost-effectiveness on the use of ECG to screen cardiac abnormalities in pregnant women aged 40 years old and above.

There was one cross-sectional study conducted by Akinwusi et al. among healthy pregnant Nigerian women and non-pregnant women. The author reported cardiovascular and electrocardiographic changes found in these healthy pregnant Nigerian women. The study showed that, there were some distinctive ECG features which may help to differentiate cardiac disease in pregnancy from normal cardiac findings in our practice area. However, this is considered as fair level evidence which warrants high quality clinical research.

Recommendations (if any)

Based on the review, ECG is not recommended for screening of pregnant women aged 40 years old and above to detect cardiac abnormalities until evidence is available to support the use of ECG for such purpose.

Methods

Literatures were searched through electronic databases specifically PubMed, Medline, Cochrane, Ovid, Horizon scanning databases and from non scientific database - Google search engine. In addition, a cross-referencing of the articles retrieved was also carried out accordingly to the topic. Relevant articles were critically appraised and evidence graded using US/Canadian Preventive Services Task Force.

Further research/reviews required

Research is warranted to provide high quality scientific evidence to support the use of ECG to screen cardiac abnormalities in pregnant women age 40 years old and above to prevent maternal mortality.

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