

- Title** Hepatitis B and Hepatitis C Screening Among High Risk Groups
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Aim

To assess the effectiveness, safety and cost-effectiveness of hepatitis B and hepatitis C screening among high risk groups

Conclusions and results

Effectiveness

Hepatitis B screening

There was fair level of retrievable evidence to suggest that universal hepatitis B screening in pregnant women was associated with almost complete vaccination coverage for newborn infants.

Hepatitis C screening

Non-integrated HCV screening programs vs. integrated screening

There was good level of retrievable evidence to suggest that integrated screening programs for HCV infection screened a larger number of individuals than did non-integrated screening programs in low HCV-prevalence countries. Programs with pre-screening selection based on HCV risk profile or migrant status were associated with high HCV prevalences in intermediate to high HCV-prevalence countries, and in programs in psychiatric clinics. In contrast, low HCV prevalences were associated with programs that targeted health care workers and pregnant women. Effectiveness of each screening program strategies or characteristics was undetermined as the studies were highly heterogenic and had no comparison group.

Targeted hepatitis C screening vs. universal screening in pregnant women

With regards to screening for pregnant women, limited fair level of retrievable evidence suggested that universal screening did not detect significantly more women with HCV infection than did targeted screening. Nevertheless, HCV infection would be missed by targeted screening group in pregnant women without known risk factors.

Hepatitis B and C screening

Limited fair level of retrievable evidence to suggest that hepatitis B and C screening in the shelters had higher screening completion rate than referral to screening centres for underprivileged people.

Safety

No retrievable evidence on the safety of hepatitis B and hepatitis C screening in high risk groups.

Cost-effectiveness

Based on the systematic review and cost-analyses, hepatitis C screening of PWID and universal hepatitis B screening of pregnant women and migrants were cost-effective interventions. On the other hand, HCV screening of pregnant women and comprehensive screening of all STD-clinic attendees was probably not cost-effective. In relation to substance users and other groups with a high proportion of substance users, HCV screening and treatment with pegylated interferon in combination with ribavirin compared with no screening had widely varying results, ranging from dominant to \$US144 875 per QALY.

Organizational issues

Guidelines

WHO, CDC Atlanta and Ministry of Health, Malaysia have issued guidelines recommending screening for hepatitis B and hepatitis C in high risk groups.

Recommendation

Based on the above review, high risk approach screening for hepatitis B and hepatitis C is recommended in Malaysia

Methods

Literature search was done to search for published articles to assess the effectiveness, safety and cost-effectiveness of hepatitis B and hepatitis C screening among high risk groups. The following electronic databases were searched via OVID Interface: MEDLINE (1946 to present), EBM Reviews-Cochrane Database of Systematic Reviews (2005 to November 2017), EBM Reviews-Cochrane Central Register of Controlled Trials (October 2017), EBM Reviews-Database of Abstracts of Review of Effects (1st Quarter 2016), EBM Reviews-Health Technology Assessment (4th Quarter 2016), NHS economic evaluation database (1st Quarter 2016), Pubmed and INAHTA database. The last search was run on 1st November 2017.

Further research/reviews required

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