Evaluation of the HCV-MOSAIC risk score for identifying HIV-positive men who have sex with men at risk for Hepatitis C, at the STI clinic of Amsterdam

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Background
- Since the early 2000s, outbreaks of sexually transmitted Hepatitis C virus (HCV) infections have been reported among HIV-positive MSM.
- Early detection and treatment of infections to prevent further transmission.
- Development of the HCV-MOSAIC risk score to identify HIV-positive MSM at risk for HCV.
- In response to the increasing HCV prevalence, the sexually transmitted infection (STI) clinic in Amsterdam introduced routine HCV testing for HIV-positive MSM and implementation of the HCV-MOSAIC risk score alongside.

Method & Results
Interviews with nurses to assess acceptability and feasibility
Short and long-term nurses were asked about their experience incorporating the HCV-MOSAIC risk score questions into practice.

Acceptability
Long-term nurses were directly positive, but the affective attitude of the short-term nurses shifted from intense and perceived as personal in the initial phase, to positive at time of the interviews.

The majority of the nurses mentioned that the questions took them by surprise.

The nurses understand the risk score and find it a useful tool for doing a risk assessment. The HCV-MOSAIC risk score also serves as a tool for creating HCV risk awareness and creates a possibility to talk about risk reduction.

Barriers of the HCV-MOSAIC risk score included, asking for information that is already know and having to ask even more questions.

Practicality of the risk score
By means of preparing the client on the intensity of the questions, all nurses introduce the risk score questions, mostly by explaining why these questions are asked.

The specific content of the questions is not clear to all nurses and not all questions are asked the way they are formulated.

Some information is asked double and most nurses already fill in the questions when information is known, or present in the patient file.

Overall, clients do not remember precisely when an HCV associated risk event took place or which specific STI they had, especially when it happened more than 6 months ago.

Conclusion
- First time prospective validation of the HCV-MOSAIC risk score, results are similar to the development study.1
- The overall experience of the nurse with the HCV-MOSAIC risk score is positive and acceptability is high.
- However, the practicality of the questions seems far from optimal, and certain changes are deemed necessarily.

Discussion & Recommendation
- We would recommend to continue using the HCV-MOSAIC risk score when routine HCV screening of HIV+ MSM at the STI clinic.
- The HCV-MOSAIC risk score can detect 85% new HCV infections, lowering the number of MSM needed to be tested with 46.9%, saving test costs.
- Discrepancies in the formulation of the questions and recall bias can give unreliable answers, influencing the performance of the risk score.
- Risk score questions and answers need to be clarified to increase reliability and limit recall bias.