# ADVANCES IN THE HANDLING OF TOXIC ALCOHOL POISONINGS – IMPACTS ON REMOTE AND RESOURCE LIMITED AREAS

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Following decades of methanol poisoning in various countries, much is known about the mechanisms of methanol toxicity. Treatment protocols ensure efficient handling of patients if the diagnosis is established early and the various treatment modalities are available. However, even though striving towards these guidelines makes sense in many regions, international standards are of less relevance if they cannot efficiently be implemented in methanol-endemic countries. Introducing an "as good as it gets"-strategy does not only seem realistic, but could also be a cost-beneficial way of improving patient handling and survival. This is particularly important when a high number of patients with high dependency levels occur in settings with significant resource constraints, as we often see during methanol outbreaks.

Focus should therefore be directed towards:

1) **Increased awareness through basic knowledge and training**: Development of various training programs using both local and non-local resources (including clinical toxicologists, poison control centres and non-governmental organisations like e.g. Medecins sans Frontieres/Doctors without Borders). This can be utilized with on-site trainings, development of posters to be distributed to endemic areas, instruction videos/online services like the Getup Project by ACMT (1) etc.
2) **Simplification of the diagnostic process**: Development of simple, bedside diagnostic tools (2) that easily can be distributed to all regions regardless of former knowledge and laboratory facilities.
3) **Simplified treatment protocols** adapted to local circumstances ("use what you have"-model). Availability of fomepizole would greatly simplify the treatment, and the recent addition to the WHO Essential Medicine List could prove helpful. However, the present lack of production facilities and high acquisition cost represent severe obstacles.
4) Development of local, regional, national and international **warning systems and networks for support**: Examples of models to be used, includes "active case finding" (3), open-access internet-based websites like WikiTox (4), use of NGOs like Médecins Sans Frontières /Doctors without Borders etc.

To change the global practice of handling methanol poisonings, the main focus should be where these are most commonly seen. One should specifically address challenges around toxicity, awareness, diagnostics and adapted treatment protocols. Increasing basic skills and awareness along with developing simplified, bedside diagnostics are likely the improvements that can prove most helpful. Developing international standards that address the factual - and not only the ideal - situation would represent a further leap forward. To address the magnitude of the problem, better reporting of outbreaks should be strongly encouraged to bring focus on the global burden.