



Alcohol – foe or friend?

'Here I stand, I cannot do otherwise,' said Martin Luther in his speech at the Diet of Worms. Luther was a biblical scholar, linguist and founder of the 16th-century Protestant Reformation. Also attributed to him is the quotation, 'Who loves not wine women and song, / Remains a fool his whole life long.' Perhaps he was influenced by the biblical quote from Psalms, 'Wine that maketh glad the heart of man.' John Milton, the great poet of the English language who lived in the 17th century, described the eternal contradiction of wine: 'Bacchus, that first from the purple grape, / Crushed the sweet poison of misused wine.' Wine, the most celebrated of alcoholic beverages in literature, continues to evoke strong reactions for and against its use. What is the scientific evidence to support or condemn it? Diane Blackhurst and David Marais, who have done interesting work on wine in the laboratory and elsewhere, provided a thoughtful review for the *SAMJ* (p. 648).

South African drinkers consume among the highest amount of alcoholic beverages in the world. Alcohol abuse is one of our top 10 health and social problems. The highest prevalence of fetal alcohol syndrome in the world occurs in the Western Cape (studies in this field by Professor Denis Viljoen and his colleagues are significantly funded by the liquor industry, which wishes to promote responsible social drinking).

Wine essentially comprises water, ethanol, organic acids, aldehydes, ketones, esters and many different phenolic compounds. Red wines contain about 5- 10-fold more phenols than white wines. Much of the metabolism takes place in the liver.

In 1926 the first finding of a U-shaped association between all-cause mortality and the consumption of alcoholic beverages was reported. Subsequently, a large number of epidemiological studies have also demonstrated this U- or J-shaped association, indicating that moderate daily alcohol consumption results in a significant reduction in mortality compared with abstinence or excessive consumption. However, it is difficult to prove a causal relationship for many reasons. For example, wine consumption tends to be associated with a higher intake of healthy food such as fruit, vegetables, fish and olive oil. Wine drinkers have been found to have higher IQs, to smoke less, to exercise more, to be better educated and to have higher economic status than beer or spirit drinkers.

To Horace (65 - 8 BC), we owe the following: 'No poems can live long or please that are written by water drinkers.'

Childhood pesticide poisoning

The World Health Organization estimates that between 1 and 5 million cases of pesticide poisoning occur annually, with approximately 200 000 fatalities. South Africa is no exception, and paediatric organophosphate poisoning in a rural hospital is reported by Dippenaar and Diedericks (p. 678). The accompanying editorial by Leslie London (p. 673) further emphasises the vulnerability of children to pesticides.

Dippenaar and Diedericks documented and reported the presentation and course of organophosphate poisoning in 23 children and recorded the frequency of atropine toxicity during treatment. Poisoning by ingestion occurred in 61% of cases. A distinct seasonal predominance was found that coincided with the summer harvest. Evidence of atropine toxicity occurred in 8 of the 18 cases treated with atropine. They conclude, *inter alia*, that legislation has failed to limit unnecessary exposure.

Laparoscopic antireflux surgery in infants and children

Gastro-oesophageal reflux disease is a common problem in infants and children. Non-operative treatment is the first line of treatment in almost all cases, and most often symptoms resolve with medical management. Van Niekerk, Visser and Venter report on 172 patients who underwent laparoscopic Nissen funduplications for reflux (p. 675).

Indications for surgery included respiratory compromise, medically refractory reflux and heartburn, failure to thrive and vomiting, ENT pathology and stricture formation. The complication rate was low and recovery was quicker than with the open procedure. Complications and operating time decreased significantly with the learning curve.

These findings can be extrapolated to any new and complex procedures and strengthens the case for them to be undertaken only where there are sufficient numbers of patients, appropriate training, and specialised units undertaking such procedures.

Children and adolescents in HIV-1 vaccine trials

Researchers have been accused of taking advantage of lax laws and surveillance in developing countries to carry out clinical trials that would have difficulty in passing more stringent controls in developed countries. However, there are often unique situations in developing countries that would enable them to provide answers to important research questions.

Jaspan and colleagues address the question of the scientific justification of children and adolescents in HIV-1 vaccine trials in South Africa (p. 685). They note that there is complex interplay between age and immune function, which will make responses to vaccine difficult to predict. Adolescence is also a time of rapid physiological change posing potential immunological changes. Almost every vaccine category has an example of an age-dependent response.

The ethical-legal framework for adolescent HIV vaccine trials was considered by a consultative forum whose findings are reported by Slack *et al.* (p. 682). They found that the environment posed many complexities and contradictions for researchers and suggest how this could be improved to simultaneously promote critical research and the welfare of the participants.

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