

Drinking habits and related clinical findings in the Seychelles

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Major alcohol related health problems in general and alcohol related cardiomyopathy in particular have long been recognized in the Seychelles.

In the Seychelles, alcohol consumed comes from a variety of sources including commercially produced beer (containing 5% of alcohol), imported liquors (45%) imported wines (11%), and home brews. The latter consist of fermented sugar cane or "baka" (containing in average 10% volume alcohol), fermented coconut palm juice or "kalou" (9%) and fermented juice of various fruits and vegetables or "lapire" (12%).

Drinking habits were obtained incidentally from a detailed diet questionnaire administered to all participants of a survey initially aimed at determining cardiovascular risk factors in the Seychelles. 1081 residents (508 men, mean age = 45.3 years; 563 women, mean age = 46.3 years) attended the survey from a randomly selected age- and sex-stratified sample of 1251 Seychellois aged 25 to 64 years.

In addition, various clinical features were also compared between male drinkers who drank more than 50 g of alcohol per day (n = 199; mean (\pm SD) age = 45.8 ± 11.0 years; average alcohol consumption = 141 ± 112 g) and non drinkers (n = 128; 45.6 ± 12.1 years; average alcohol consumption = 0).

Subsequent comparison of the total annual beer consumption as calculated from the questionnaire data (3.8 MI) with known sales figures (4.8 MI) gave a fair correlation and hence, it is assumed there is some accuracy, maybe an underestimate, for the figures obtained for the other drinks.

Most of the results are presented above (see Tables 51–57 and Figures 41–42). Male and female drinkers consumed respectively 76 g and 27 g of alcohol per day in average. Home brews accounted for 57% and 56% of the total alcohol intake for men and women respectively. As much as 18% of men (but only 2% of women) consumed more than 100 g of pure alcohol per day, the higher age-specific percentage being noticed in the age group 45–54 for both men and women (27% and 5% respectively).

66% of men (23% of women) reported to drink regularly beer, 26% (9%) spirit, 4% (3%) wine, 24% (6%) kalou, 22% (4%) baka and 8% (1%) lapire. These percentages did not consistently vary with age although slightly higher percentages of male consumers were recorded in the younger age groups (25–45 years) for beer and in the middle age group (45–54 years) for home brews.

Male beer drinkers drank an average daily amount of beer corresponding to 28 g of alcohol (10 g per female beer drinkers). These figures were respectively 19 g (9 g) for spirit drinkers, 6 g (5 g) for wine drinkers, 53 g (32 g) for kalou drinkers, 52 g (51 g) for baka drinkers and 74 g (41 g) for lapire drinkers. In men, consumption of beer was higher among the younger beer drinkers while consumption of all 3 home brews was found to be the highest among the middle-aged home brew consumers. All alcohol drinks combined, middle aged drinkers (45–54 years) drank the highest amount of alcohol (84 g) while younger drinkers (25–34) drank the lowest amount of alcohol (46 g); the same pattern applied for women with however lower consumption figures (14 g for drinkers aged 45–54; 5 g for drinkers aged 25–34).

These figures equate to an average annual consumption of 15.2 liters of alcohol (26.4 for men and 3.5 for women) per head of total population aged 25–64. These rates are among the highest in the world (see Table 57).

Mean diastolic blood pressure was significantly higher in drinkers than in non drinkers (90 ± 13 vs 86 ± 15 mm Hg), while systolic blood pressure was not significantly different (136 ± 20 vs 133 ± 25 mm Hg). Cigarette smoking was significantly more frequent in drinkers (64%) than in non drinkers (2%).

Mean corpuscular volume (MCV) was significantly higher in drinkers than in non drinkers (91 ± 9 vs 87 ± 7 fl), while hemoglobin was similar in both groups (14.3 ± 1.8 vs 14.4 ± 1.7 g/l). Significantly different blood levels between drinkers and non drinkers were found for total cholesterol (4.9 ± 1.0 vs 5.2 ± 1.2 mmol/l), HDL-cholesterol (1.60 ± 0.61 vs 1.22 ± 0.33 mmol/l). Triglycerides differed non significantly (1.12 ± 1.29 vs 0.98 ± 0.59 mmol/l). Lipid levels did not change substantially when controlled for smoking. There was significantly more unskilled manual workers in drinkers than in non drinkers (54.3% vs 43.7%).

In conclusion, alcohol consumption is high in the Seychelles compared to other countries. Men consume alcohol in both higher percentage and higher amount than women. Home brews count for more than half of the total amount of alcohol consumed in the Seychelles, the higher amount of it being drunk by middle-aged men. As drinking habit is much part of the local tradition and home brew easily produced at no cost, health education will be the cornerstone of measures aimed at reducing the problem.