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Poster Presentation

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Substance use in the WA HIV Cohort Study: 2002-2008

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Introduction

HIV associated immune dysregulation is linked with an increased risk of HIV and non-HIV related cancers^{1,2}. Substance abuse, particularly alcohol, can increase the risk of cirrhosis and the likelihood of liver related death. The high rate of smoking in people with HIV is of concern against a background of immunodeficiency. In this study we describe alcohol and drug use in the WA HIV Cohort over a five year period and current statistics on smoking in order to guide multidisciplinary, preventive health measures in our hospital setting.

Methods

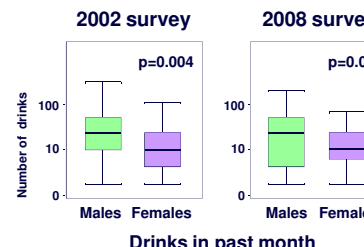
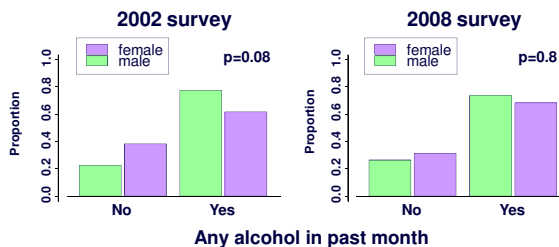
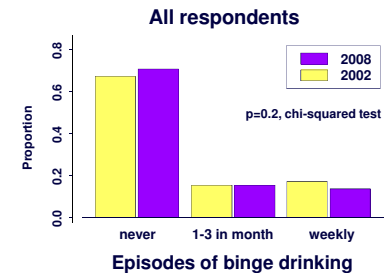
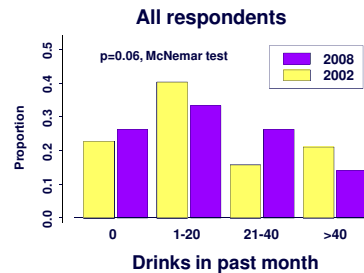
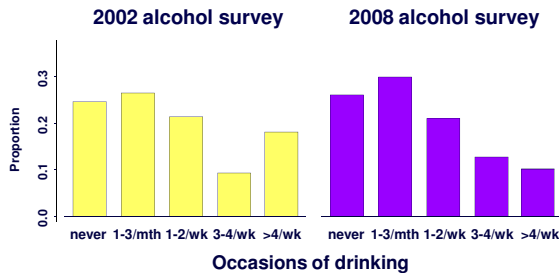
In 2002 and 2008 patients completed a self-report questionnaire on **alcohol intake**: use in the last 30 days; number of drinks/day and number of drinks in a row; and **drug use**: marijuana, cocaine, heroin, amphetamines, ecstasy, and benzodiazepines. In 2008 a survey of smoking habits was conducted by a nurse who had undergone training as a Smoking Cessation Facilitator. Self reported **smoking status** (current smoker yes/no); number of cigarettes/day, history of stopping, whether patients had sought or would seek advice about quitting and/or reducing risk of heart disease/cancer from a health professional, was collated. A short information sheet containing information about the risks of smoking for people with HIV and the health benefits of quitting accompanied the questionnaire.

Demographics

388 patients (85% male) attending the RPH Immunology Outpatient Clinic in 2002 and 2008 completed the **drug and alcohol surveys** (2002: n=215, 2008: n=158, both: n=60). Gender distribution: **2002**: n=215; 181 (84%) male, 34 (16%) female; mean (±SD) age = 43 (±11) years; **2008**: n=158; 137 (87%) male, 21 (13%) female; mean (±SD) age = 48 (±11) years.

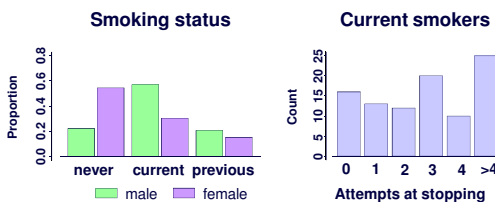
The survey of **smoking habits** in 2008 included 187 pts; 154 (82%) male and 33 (18%) female. 84 patients had also completed the 2008 drug and alcohol questionnaire.

Results



Indulging in any binge drinking was associated with younger age (p=0.004, 2003; p=0.01, 2008), but not with gender (p>0.1).
Amongst those responding to both alcohol surveys (n = 60), mean (±SE) difference in number of drinks over past month: males: -7.8 (±5.0), p=0.1 vs females: 2.8 (±7.4), p=0.7. Changes were not associated with age, p>0.2

Smoking Habits



Never smoked: n=52 (28%), Current smoker: n=98 (52%)
Previous smoker: n=37 (20%)

More males than females were current smokers (p=0.004). Being a current smoker was associated with younger age amongst males (p=0.02) but not amongst females (p=0.3).

67% of current smokers were thinking of stopping. Those thinking about stopping were more likely to be interested in talking to their doctor about doing so (p<0.0001) or about ways of reducing their risks of heart disease and cancer (p=0.0004).

Recent drug use (in 2008) more prevalent amongst current smokers (p=0.05).

Smoking/drug habits	Recent user in 2008	
	no	yes
Current smoker	37	8
yes	19	20

Drug habits	Recent user in 2008	
	no	yes
Recent user in 2003	33	5
yes	4	18

Drug	2002		2008	
	Ever used?	Last 6 mths?	Ever used?	Last 6 mths?
marijuana	121/209 (58%)	59/198 (30%)	91/157 (58%)	35/147 (24%)
amphetamines	67/209 (32%)	25/211 (12%)	55/156 (35%)	12/155 (8%)
cocaine	39/210 (19%)	7/207 (3%)	30/155 (19%)	1/155 (1%)
heroin	19/209 (9%)	2/210 (1%)	22/155 (14%)	2/156 (1%)
ecstasy	53/211 (25%)	17/213 (8%)	Not measured	
benzodiazepines	Not measured		53/150 (35%)	22/149 (15%)

Use of any drug in past 6 months: no evidence of change in user status from 2003 to 2008 (p>0.9)
Marginally decreased usage of amphetamines (p=0.1) and marijuana (p=0.2)

Conclusion

The surveys demonstrate the high rate of multi-substance use in HIV infected West Australians over the last 5 years. Widespread use of antiretroviral treatment has transformed HIV into a chronic disease³. Individuals have the potential to lead active, productive lives and even expect a normal life span. However epidemiologic studies show that cancer is now accounting for one third of all deaths and more than half are from non AIDS defining malignancies^{1,2}. There is also a significant link between substance use and HIV transmission⁴. Smoking abstinence has been associated with reduced HIV related symptom burden and, arguably, quality of life⁵. This audit indicates that by offering advice and information that smoking cessation, cardiovascular and cancer disease risk assessments may be welcomed by patients. A multidisciplinary approach is needed to formulate and integrate preventive health interventions into routine HIV clinical care.

References: 1) Engels et al, AIDS 2006; 2) Bonnet et al, Clin Infect Dis 2009; 3) Palella et al, NEJM 1998; 4) Shuper et al, AIDS Behav 2009; 5) Vidrine et al, AIDS Patient Care and STDs 2007.
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