Soz Präventivmed 1991; 36: 202–203

0303-8408/91/030202-02 1.50 + 0.20/0

Correspondence

Are young practising Catholics less at risk of AIDS?

The possible influence on morbidity and mortality of the active practice of a religion has been the subject of a number of studies[1,2] which focused upon whether attitudes toward the consumption of toxic substances (tobacco, alcohol, drugs) and sexual behaviour might be modified by religious attitude[3,4,5].

The use of injectable drugs, and promiscuous sexual activity, are known to be direct risk factors for AIDS, while the consumption of soft drugs, alcohol and tobacco are believed to favour risk behaviours since they cause loss of inhibition and thus neglect of certain precautions[6,7,8] and are often precursors of habituation to stronger toxic substances[9,10,11,12], including tobacco[9].

In the course of a study investigating the state of health of adolescents in the canton of Tessin (the Italian-speaking part of Switzerland)[13] we endeavoured to assess whether there was a relationship between their religious practices and certain risk factors (the use of alcohol, tobacco and drugs and promiscuous sexual behaviour) for HIV infection. The study population consisted of a representative sample of 1423 students and apprentices from 13 to 20 years of age.

In the spring of 1989 a questionnaire, to be filled in anonymously by the study participants themselves, was distributed through intermediaries in their schools. The response rate was 99%. The questions concerning religious practices and consumption of tobacco, alcohol and drugs were the same for all of the students, but the youngest (13–15 years) were not questioned about sexual behaviour.

999 questionnaires completed by Catholics only were used in the analysis of these variables in relation to religious practice. Boys were 55% and girls 45% of the study population.

The distribution of practising and non-practising Catholics according to age is shown in table 1. A statistically significant reduction of practising Catholics as a function of increasing age ($p < 0.001$) can be observed.

Table 2 shows attitudes toward alcohol, tobacco, drugs and sex in relation to religious practices in the population studied, standardized by age and sex. 27% of the practising Catholic students and 42.9% of the non-practising consume alcohol daily, between meals, and/or during the weekends. 30.3% of the practising students and 50% of the non-practising had been inebriated at least once. The most frequently consumed alcoholic drink was beer (80.4%), followed by wine (47.6%) and spirits (35.3%). 5.8% of the practising and 20.1% of the non-practising smoke regularly. 2.7% of the practising and 9.6% of the non-practising consume drugs occasionally or regularly (94.5% cannabis, 10% psychotropica, 7.5% cocaine and 4.5% heroin). 23.8% of the practising and 45.7% of the non-practising have sexual intercourse on a regular basis. Although the figures are not statistically significant, they show that, the use of condoms among practising Catholics is slightly higher then amongst non-practising Catholics despite firm condemnation of such contraceptive practice by the Vatican[14].

The results show that practising Catholics consume significantly less alcohol, tobacco, and drugs, and engage less frequently in sex than do the non-practising Catholics. In addition, practising Catholics do not denounce the use of condoms, and appear to use them slightly more frequently than their non-practising peers. Control of behavioral risk factors is at present the only effective means to avoid the spread of HIV infection. If the behaviours studied here constitute, directly or indirectly, potential risk factors for the virus' transmission, it could be concluded that practising Catholic adolescents are less at

Tab. 1. Percent rate distribution of practising and non practising catholic students according to age.

Age (yrs)	13–15	16–17	18–20
N	344	327	328
Practising	72.3%	55.6%	40.9%
Non-practising	27.6%	44.3%	59.1%

Tab. 2. Religious practises and attitudes potentially related to risk for HIV infection (controlled for age and sex).

	Practising	Non-practising	
"Recreational" regular consumption of alcohol	27.7%	42.9%	$p < 0.001$
Inebriety (at least once)	30.3%	50%	$p < 0.001$
Regular consumption of tobacco	5.8%	20.1%	$p < 0.001$
Occasional or regular consumption of drugs	2.7%	9.6%	$p < 0.001$
Regular sexual intercourse*	23.8%	45.7%	$p < 0.001$
Condom users**	76%	70%	N.S.

* Only for ages from 16 to 20 years (N = 655).
** Only for those who have had sexual intercourse.
N.S. = Not significant.

risk for AIDS than the non-practising adolescents of the same religion.
Even though the number of practising adolescent Catholics constantly decreases as a function of their increasing age, given the numerical importance (900 million) of the Roman Catholic church throughout the world[14], these data could have significant epidemiological implications.

Gianfranco Domenighetti[1], Claude France Carrel[1], Manuela Perucchi[1] Peggy Lopipero[1,2]

[1] Sezione sanitaria, Dipartimento Opere Sociali, CH-6500 Bellinzona
[2] Department of Biomedical and Environmental Health Sciences, School of Public Health, University of California at Berkeley, Berkeley CA

References

1 *Levin JS, Schiller PL.* Is there a religious factor in health? J Rel and Health 1987; *26*: 9–36.
2 *Jarvis GK, Northcott HC.* Religion and differences in morbidity and mortality. Soc. Sci. med. 1987; *25*: 813–824.
3 *Parfrey PS.* The effect of religious factors on intoxicant use. Scand.J. Soc. Med. 1976; *4*: 135–140.
4 *Hermann D, Lotze J.* Drogenkonsum unter Schülern einer norddeutschen Kleinstadt. Münch. med. Wschr. 1972; *114*: 393–397.
5 *Schlegel RP, Sanborn MD.* Religious affiliation and adolescent drinking. J. Stud. Alcohol 1979; *40*: 693–703.
6 *Stall R, McKusik L, Wiley J, Coates TJ, Ostrow DG.* Alcohol and drug use during sexual activity and compliance with safe sex guidelines for AIDS: The AIDS behavioral research project. Health Educ. Q. 1986; *13*: 359–371.
7 *Coates TJ, Stall RD, Catania JA, Kegeles SM.* Behavioral factors in the spread of HIV infection. AIDS 1988; *2* (suppl. 1): S239–S246.
8 *Siegel K, Mesagno FP, Chen JY, Christ G.* Factors distinguishing homosexual males practising risk and safer sex. Soc. Sci. Med. 1989; *28*: 561–569.
9 *Kandel D.* Stages in adolescent involvement in drug use. Science 1975; *190*: 912–914.
10 *Hartsough CS, Lambert NM.* Pattern and progression of drug use among hyperactives and controls: a prospective short-term longitudinal study. J. Child Psychol. Psychiatry 1987; *28*: 543–553.
11 *Hays R, Stacy AW, DiMatteo MR.* Covariation among health-related behaviors. Addictive Behaviours 1984; *9*: 315–318.
12 *Soeken KL, Bausell RB.* Alcohol use and its relationship to other addictive and preventive behaviors. Addictive Behaviours 1989; *14*: 459–464.
13 *Lopipero P, Domenighetti G.* La salute dei giovani ticinesi. Department of social affairs, Cantonal health office, Bellinzona, Switzerland, december 1989.
14 *Pallin B.* Vatican firm on condoms. Independent 1990; Jan. 3: 13.
15 Vatican statistical office, personal communication (1990).