heart disease and major coronary events. Compared with those who had never consumed tea during the past 12 months the multivariable adjusted hazard ratio (HR) of daily tea drinkers was 0.92 (95% CI: 0.88-0.95) for ischaemic heart disease and 0.90 (95% CI: 0.82-0.99) for major coronary events.

Of those who drank tea daily most drank green tea. Similar assocations for tea consumption were seen for both green tea and non-green tea.

Increasing the frequency of drinking tea to more than once a day did not reduce the risk further.

The protective effect of drinking tea appeared to be stronger for both outcomes among participants who reported longer years of tea consumption and for those who resided in rural regions. Tea had a stronger protective effect with respect to major coronary events in those with a body mass index < 24 kg/m^2, and a stronger protective effect against ischaemic heart disease in those who did not have diabetes at baseline.

There are plausible reasons for tea to be potentially protective against cardiac disease. Tea contains flavonoids, which have been experimentally demonstrated to inhibit oxidation reactions caused by free radicals and prevent or delay atherosclerosis. Flavonoids have also been shown to have anti-thrombotic and anti-inflammatory properties and may reverse endothelial dysfunction.

The authors conclude: 'Data from this largest prospective cohort of Chinese adults showed that daily tea consumption was associated with a decreased risk of ischaemic heart disease incidence. Given the observational nature, this study alone could not establish a causal relationship. Further randomised studies may be needed to confirm the protective effect of tea consumption on ischaemic heart disease.'

DR PETER SAVILL

Li X, Yu C, Guo Y et al on behalf of the China Kadoorie Biobank Collaborative Group. Tea consumption and risk of ischaemic heart disease. *Heart* 2017;103:783-89

Sexual health

Chlamydia and HIV testing for young people in primary care

Young men and women would be happy to be offered chlamydia screening, contraception and HIV tests from GPs, a UK study has shown.

A total of 30 patients, 21 female, aged 16 to 24 were recruited from face »



to face interviews from practices in different areas of England to provide a mix of deprivation, ethnicity and urban/rural locations.

The interview schedule was based on previous research on attitudes to chlamydia screening and included: attitudes to being offered chlamydia screening, contraception, condoms and HIV tests; perceived attitudes of staff and friends; perceived barriers and behavioural control; and opinions on receiving the service. Interviews lasted 20-30 minutes and were recorded and transcribed verbatim. The data were analysed using a thematic framework.

None of the participants objected to any of the questions and all the interviews were completed. Most would be happy to discuss contraception with their GP, although some would prefer to get condoms from a shop.

The key factor related to taking tests was convenience i.e. proximity to the location. Virtually all participants would be happy to undergo chlamydia screening at their practice and did not mind being offered the test in an unrelated consultation. Most would not mind taking an HIV test as part of new patient registration, investigation for illnesses or in the context of a sexual health discussion. Young people also thought the tests should be offered routinely.

There were some concerns about embarrassment, for example, walking around the GP surgery with a urine sample or the appropriateness of discussing sexual health in an unrelated consultation or the possibility of their parents finding out.

The problem of taking time away from the reason for visiting the GP was also raised if sexual health discussions and screening took place in a consultation for an unrelated matter.

Participants suggested it would help to publicise sexual health services that the GP surgery provides. Some said they would be pleased if GPs offered all the sexual health services.

Although some felt they had enough trust in their GPs to be able to discuss their sexual health concerns, others also felt the confidentiality of consultations need to be highlighted, particularly for those concerned about their parents finding out.

The study authors state: 'Normalising the offer of chlamydia screening, contraception, condoms and HIV tests by emphasising that the offer is routine and given to all patients within the demographic would facilitate patients' understanding of why they are being offered the test.'

Many GPs already offer chlamydia and HIV testing, contraception and free condoms in their practice. Sexual health services in general practice need to be emphasised as some participants did not realise these services were available.

Young people would appear to welcome the contraception, free condoms, and chlamydia and HIV testing service where appropriate, from their GP, providing it was confidential.

DR RICHARD MA

Jones LF, Ricketts E, Town K et al. Chlamydia and HIV testing, contraception advice, and free condoms offered in general practice: a qualitative interview study of young adults' perceptions of this initiative. *Br J Gen Pract* 2017; https://doi.org/10.3399/b jgp17X691325

Addiction

Gambling linked to mental health problems

Patients with depression and those who drink at risky levels are more than twice as likely to report gambling problems, a UK primary care study has shown.

A total of 1,058 patients attending 11 general practices in the Bristol area were recruited from practice waiting rooms. They were asked to complete anonymous questionnaires that covered mental health problems, addictive behaviours together with the gambling-related questions. Patients reporting gambling were asked to complete the Problem Gambling Severity Index (PGSI). The practices included four from areas of high deprivation, two from areas of low deprivation, three from areas of moderate deprivation, one student health service and one for the homeless.

Overall 0.9% of patients screened were assessed as having significant gambling-related problems (PGSI ≥ 5) while a further 4.3% were found to have low to moderate severity gambling problems. Furthermore, 7.2% of patients surveyed identified gambling problems in a relative.

Patients screening positive for depression on the questionnaire were twice as likely to report gambling problems: odds ratio (OR) 2.08 (95% CI: 1.15-3.94); those with at-risk alcohol use almost three times as likely OR 2.78 (95% CI: 1.60-4.89); and those who used drugs five times more likely OR 5.03 (95% CI: 2.78-8.99).

Overall there were particularly high rates of reported gambling-related problems in young males aged 18-24 years, with a problem gambling rate of 25.4% (95% CI: 15.6-38.2%).

Those patients from high deprivation areas, including the homeless service, and those attending the student health service appeared to have higher rates of gambling problems compared with practices in moderate or low deprivation areas, but these observations did not reach statistical significance in this small study.

While for many gambling is harmless fun, problematic gambling has been increasingly highlighted as a public health concern in the UK. Harmful gambling for some can become pathological with features of dependent behaviour.

Problem gambling is associated with anxiety disorders and with suicidal thoughts and behaviour. Gamblers are twice as likely to see their GP for mental health symptoms than those who don't have a gambling problem.

Given that around one in 20 patients routinely attending general practice report some degree of gambling-related problems, GPs and other primary care staff need to be vigilant for gambling problems, particularly among young men and those who are depressed, drink excessively, or who misuse substances. Ideally, they should be able to signpost patients towards resources to support these problems. The authors say that current resources for addressing gambling problems are 'grossly inadequate' and need further development.

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Cowlishaw S, Gale L, Gregory A et al. Gambling problems among patients in primary care: a cross-sectional study of general practices. *Br J Gen Pract* 2017; https://doi.org/10.3399/bjgp17X689905