Background Smoking prevention programmes that aim to reach adolescents before they start to experiment with tobacco may contribute to reducing tobacco use. ASSIST (A Stop Smoking in Schools Trial) is a peer-led, school and social network based, smoking prevention programme that encourages the dissemination of non-smoking messages among 12–13 year olds in the UK. To date, evaluation of ASSIST has focused on delivery within schools only. This study sought to address this gap by using qualitative social network research to map the social networks of peer supporters to explore the extent, nature, content and perceived impact of message diffusion beyond the school year.

Methods Qualitative, face to face interviews conducted in school with 16 young people aged 12–13 incorporating the creation of ‘egocentric sociograms’ to collect network data. Sociograms were then used to create a qualitative narrative to explore the extent, and perceived impact, of message diffusion in the wider social networks of peer supporters. Computer packages UCINET and NVivo were used to conduct analysis.

Results Peer supporter networks were fairly large with a total of 155 people. Network composition was weighted slightly more toward family members than friends. Peer supporters recalled having conversations about smoking with 103 people. Over half (53% n=55) of these conversations were with people out with their school year (e.g. parents, siblings, other family members, family friends and neighbours). Thematic analysis of conversation content revealed three types of conversation: protecting non-smokers from starting to smoke; encouraging smokers to stop; and protecting people in wider social networks. Perceived impact was noted for 37 people in peer supporter networks, with examples of positive and negative impact, focusing on the dynamics of a child speaking to an adult.

Conclusion Smoking prevention message diffusion was not limited to school year, reaching in to the wider networks of peer supporters. This creates learning opportunities for the future delivery of ASSIST or other similar peer-led interventions for smoking prevention, and the role of social network interventions in prevention.
A POPULATION BASED STUDY: ASSESSING MALE LONELINESS, LIVING ARRANGEMENTS AND EMOTIONAL SUPPORT AS PREDICTORS OF SUICIDALITY: A 7 YEAR FOLLOW-UP OF THE UK BIOBANK COHORT

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Background Between 1997 and 2017 the number of middle-aged people living alone in the UK increased by 53% and loneliness is now recognised as an important policy area. We aimed to understand the interrelationships between loneliness, living arrangements and emotional support in predicting suicidal thoughts and behaviours.

Methods Between 2006 and 2010 sociodemographic and health data were collected from 5 000 000 participants, aged 40–69, in UK Biobank. These data were linked to hospital admission records for self-harm and suicidal ideation until March 2015, and records for death by suicide until February 2016. Additionally, in 2016–2017, 1 50 000 participants completed an online questionnaire which probed thoughts of self-harm, self-harm behaviour and attempted suicide. Exposures assessed were baseline measures of self-reported loneliness, living arrangements and emotional support (frequency of confiding). Deaths by suicide and hospital admissions were investigated with Cox proportional hazards models and logistic regression was used for self-report outcomes. Analyses were adjusted for socio-demographic factors including deprivation and employment, and multimorbidity.

Results In adjusted analyses loneliness was the risk most consistently related to all outcomes including death by suicide, (hazard ratio (HR) 1.75, 95% CI 1.22 to 2.51), hospital admissions (HR 4.41, 95% CI 2.50 to 7.76) and self-reported suicide attempts (HR 5.38, 95% CI 3.35 to 8.63). After adjustment, not living with a partner was associated with increased risks of hospital admissions and dying by suicide, but not with the self-report measures of suicidality. Not living with a partner had a stronger relationship with death by suicide for men (HR 2.08, 95% CI 1.36 to 3.18) than for women (HR 1.16, 95% CI 0.59 to 2.31). After adjustment, emotional support was associated with the self-report but not administrative measures of suicidality. For example, when people with the least emotional support were compared to those with the most, the odds ratio was 3.00 (95% CI 1.71 to 5.28). Statistical interactions indicated that people who were lonely despite living with a partner had the highest risk of contemplating self-harm and that loneliness eliminated the protective effects of living with a partner for deaths by suicide.

Conclusion Loneliness was the strongest predictor of suicide risk irrespective of living arrangements and emotional support and loneliness explained the relationships between living