OP40 **ASSOCIATIONS BETWEEN ADOLESCENT OBESITY AND BOTH INDIVIDUAL AND GROUP-LEVEL SOCIAL STATUS**

HN Sweeting,* R Young *MRC Social and Public Health Sciences Unit, Medical Research Council, Glasgow, UK*

10.1136/jech.2011.143586.40

Background During adolescence there is an emergence of groupings sharing the same identity and reflecting social status (such as popular, academic or athletic 'crowds'). Studies have demonstrated gender differences both in the importance of appearance for adolescent status and in associations between overweight and attractiveness ratings. There is also evidence that overweight/obese females are less likely to be nominated by others as friends.

Objectives To examine: (1) how both individual self-report measures of school-based social status and group-level data derived via social network analysis are associated with adolescent obesity; and (2) whether there are gender differences in these associations.

Methods We obtained data from 15-year olds (N=3,194; 81% of those eligible) in a representative sample of 22 schools. We defined obesity using UK90 criteria, based on measured height and weight. Pupils rated their own social status, compared to their school year-group via images of 10-rung ladders. Analyses suggested three subjective social status dimensions: 'peer', 'scholastic' and 'sports' (saved as factor scores). Pupils also named up to six friends. We imported friendship data (based on reciprocated links) into the social network analysis software (SNA) Ucinet 6 and Netdraw software packages. A partitioning algorithm identified discrete groups. We inspected the resulting school sociograms (charts of friendship relations) in conjunction with participant descriptions of their group, and corrected obvious misclassifications. We categorised groups as isolate (1 member), dyad (2), small (3-5), average (6-11) or large (12+). At the group-level, we represented gender as all-female, mixed, or all-male and socio-economic status as the percentage from non-manual backgrounds. Group-level peer-, scholastic- and sports-status were the average of each of these dimensions across all group members. Multilevel regression analyses adjusted for individual gender, social class, family structure and parental care/control.

Results 15% of the sample were obese. In mutually adjusted analyses, obesity was lower among females, those in mixed (compared with all-male) groups (OR=0.68; 95% CI=0.45 to 1.05) and those with greater peer (OR=0.88, 95% CI=0.75 to 1.02), scholastic (OR=0.83; 95% CI=0.71 to 0.97) and particularly sports (OR=0.62; 95% CI=0.53 to 0.72) status. Obesity was not associated with group size, but was lower among those in groups with greater peer (OR=0.84; 95% CI=0.67 to 1.05) and sports (OR=0.81; 95% CI=0.64 to 1.04) status, and higher among those in groups with greater scholastic status (OR=1.23; 95% CI=0.98 to 1.55). There were no significant interactions between gender and either individual or group social status.

Conclusions These results suggest that adolescent obesity may impact on adolescent social status, with possible consequences for assortative friendships and longer-term social marginalisation.