

examined and compared treatment of Māori (Indigenous) and non-Māori New Zealanders with colon cancer.

**Methods:** From the New Zealand Cancer Registry we identified a population-based cohort of 629 patients diagnosed with colon cancer between 1996 and 2003. We reviewed medical notes and compared surgical and oncology treatment in Māori and non-Māori patients. We adjusted treatment differences for tumour characteristics, patient comorbidity and treatment facility type.

**Findings:** Māori and non-Māori patients received similar rates of surgical resection although Māori patients were less likely to have extensive lymph node clearance (relative risk (RR) 0.25, 95% CI 0.13 to 0.50 for removal of 30 or more nodes) and were more likely to die in the post-operative period (RR 5.31, 95% CI 1.54 to 18.32 for death following elective surgery). In patients with stage III disease Māori were significantly less likely to receive chemotherapy (RR 0.69, 95% CI 0.53 to 0.91) and more likely to experience delay of at least eight weeks to start chemotherapy (RR 1.98, 95% CI 1.23 to 3.16). Treatment disparities were not accounted for by patient comorbidity or treatment facility type (public cancer centre, public non-cancer centre and private facility) although differences within facility types remain a potential explanatory factor.

**Interpretation:** Māori and non-Māori patients with colon cancer receive similar surgical treatment but Māori are less likely to receive adjuvant chemotherapy and may experience a lower quality of care. Attention to health-system factors is needed to ensure equal access and quality of cancer treatment.

#### 014 SOCIOECONOMIC DIFFERENCES IN STATIN USE AFTER DEREGULATION OF SIMVASTATIN IN THE UK: THE WHITEHALL II PROSPECTIVE COHORT STUDY

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**Objective:** To examine socioeconomic differences in statin use after deregulation of simvastatin in adults with moderate or high risk of coronary heart disease.

**Design:** Prospective cohort study.

**Setting:** 20 civil service departments in London.

**Participants:** 3631 men and women (mean age 62.7 years) with moderate or high 10-year risk of CHD according to Framingham risk score.

**Main Outcome Measures:** Statin use, both prescribed and over the counter; recall of personal CHD risk.

**Results:** Based on medical screening, 2451 participants were at high CHD risk and 1180 at moderate risk. Of the high-risk participants, 54% reported using prescribed statin. This rate did not differ between employment grades (an index of socioeconomic position) after adjusting for age and sex; South Asian participants, however, were more likely to report using prescribed statin than White participants (odds ratio 1.73, 95% CI 1.28 to 2.36). Three percent of high-risk participants reported using over the counter statin with participants from low (OR 0.11, 95% CI 0.01 to 0.88) and middle (OR 0.54, 95% CI 0.29 to 1.00) employment grades being less likely users than those from high employment grades. Among moderate-risk participants, 8% reported using over the counter statin; we found no variation by employment grade or ethnicity in this group. 37% of high-risk participants recalled their CHD risk. After adjusting for age, sex and cognitive function, South Asians were significantly less likely to recall than White participants (OR 0.65, 95% CI 0.46 to 0.93) and middle (OR 0.74, 95% CI 0.61 to 0.89) and low (OR 0.52, 95% CI 0.37 to 0.74) employment grades participants less likely to recall than those from high employment grades.

**Conclusion:** Reported use of statin is considerably lower than need in all social groups although our data suggest that use of statin has largely remained socially equitable after recent changes in availability.

However, most high-risk participants are unaware of their risk, despite being informed of their risk by the study. Ethnic minorities and lower socioeconomic position groups, who are most at risk of heart disease, are significantly less likely to be aware. This is likely to impact on ability to participate in self-management and may partly explain poorer clinical outcomes.

#### 015 SOCIO-DEMOGRAPHIC PREDICTORS OF UPTAKE OF MMR IMMUNISATION IN THE LIFEWAYS COHORT STUDY

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**Objectives:** To investigate the uptake of the first dose measles, mumps and rubella (MMR) vaccine and factors associated with not receiving this vaccine.

**Design:** Cross-Generational Cohort Study with prospective linkage to primary care and hospital health records.

**Setting:** Urban and rural settings in Ireland recruited in 2001–2003 with five years follow-up.

**Participants:** 749 singleton children with immunisation information collected from the Health Service Executive (HSE). These are 70% of the original cohort who could be matched to HSE data.

**Main Outcome Measures:** Children immunised or not with the first dose of MMR by 2007.

**Results:** MMR uptake was 88.8% overall, with 91.6% in the East of Ireland (urban) and 83.8% in the West (rural). Odds ratios, adjusted for the other factors and the cluster affect of region, for the child not receiving MMR were significant for the following independent factors; having a mother who had ever visited an alternative practitioner, OR 2.65 (1.76 to 3.98), a degree level educated mother OR 1.48 (1.07 to 2.04), an unmarried mother OR 1.97 (1.09 to 3.36), a mother who was a smoker OR 1.32 (1.04 to 1.69) or a lone parent OR 1.14 (1.13 to 1.15). Families that had 3 or more children in the household before the birth of the cohort child, OR 2.64 (1.42 to 4.91), had an income of less than £300/week OR 1.60 (1.35 to 1.91), who lived in the West of Ireland, OR 2.7 (2.47 to 2.96), or had a male child, OR 1.76 (1.74 to 1.78) were also significant factors.

**Conclusions:** These novel prospective data confirm that in addition to factors associated with disadvantage, other health practices and beliefs may influence immunisation uptake. Furthermore, the determinants are heterogeneous. In light of the controversy around the MMR vaccine, attitudes of parents are highly relevant. This information can be used to design more focused parent information and immunisation services to target differing families whose children are at increased risk of measles infection. More work is needed to investigate parental beliefs as to why boys are less likely to receive the MMR. Specific interventions are vital if the target of 95% uptake of MMR is to be reached and measles is to be eradicated from the European region by 2010.

#### 016 FOOD POVERTY AND DIETARY QUALITY: IS THERE A RELATIONSHIP?

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**Background:** Food poverty is intrinsically linked to inadequate income, poor dietary and lifestyle habits, and health inequalities,