symptoms (RR 0.25 (0.10 to 0.60)) of C30 questionnaire. Emotional support was negatively associated with global health in women aged under 60 years (RR 0.65 (0.50 to 0.85)).

Conclusions In this population social environment is positively associated with QOL; this effect is greatest in elderly women.

P2-80   EARLY COMPLICATIONS OF BREAST CANCER TREATMENT AND QUALITY OF LIFE IN BRAZILIAN WOMEN

[1]D B Ferreira,* [1]R Koifman, [2]A Bergmann. [1]National School of Public Health, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil; [2]National Cancer Institute, Rio de Janeiro, Brazil

Introduction Post-operative complications are a major cause of morbidity in women with breast cancer. The aim of this study was to evaluate the association between quality of life (QOL) before treatment for breast cancer and early post-operative complications in the National Cancer Institute-Brazil.

Methods Participants were women with unilateral breast cancer, requiring oncological treatment in National Cancer Institute-Brazil between June 2009 and March 2010. QOL before treatment was assessed using EORTC QLQ-C30 and BR23 module. Information about early post-operative complications (axillary web syndrome, pain and subjective symptoms related to early oedema in the upper limbs) were obtained by physical examination 30 days after surgery, collected using a standardised form. Bivariate analyses of dichotomous variables and independent variables were carried out and ORs, with 95% CIs present.

Results 181 women were studied. Women who reported good health overall were 57% less likely to experience early subjective oedema (95% CI 0.20 to 0.96). Symptoms scale of BR23 was negatively associated with pain (OR=0.11; 95% CI 0.21 to 0.73). Patients with good functionality-C30 were less likely to experience pain (OR 0.66 95% CI (0.15 to 0.75)). There was no statistically significant association with axillary web syndrome.

Conclusions In this study pre-treatment QOL in women with breast cancer was a useful predictor of early post-operative complications.

P2-81   THE IMPACT OF SOCIAL ENVIRONMENT ON EARLY COMPLICATIONS IN WOMEN WITH BREAST CANCER IN A REFERENCE CENTRE IN BRAZIL

[1]D B Ferreira,* [1]R Koifman, [2]A Bergmann. [1]National School of Public Health, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil; [2]National Cancer Institute, Rio de Janeiro, Brazil

Introduction Studies suggest that good social support is associated with a reduction in post-treatment complications in breast cancer. The aim of this study is to evaluate the association between pre-treatment social support and early complications after surgery (pain and subjective symptoms related to early oedema in the upper limbs) in women with breast cancer.

Methods Participants were women with breast cancer and that presented to the Brazilian National Cancer Institute between June 2009 and March 2010. MOS-SSS was used to assessment of social support before oncology treatment. Information about early post-operative complications were obtained by physical examination 30 days after surgery and collected in a standardised form. Bivariate analysis between dichotomous outcome and selected independent variables were conducted and RRs with 95% CIs were presented.

Results 181 eligible women were studied. Patients with good emotional and affective support had a 76% (95% CI 0.10 to 0.57)

reduced risk and 62% (0.12 to 0.64) reduced risk of pain respectively. Better material support was associated with a 73% (0.11 to 0.623) reduction in the risk of pain. No significant association with early oedema was observed.

Conclusions Good social support was associated with reduced risk of post-operative complications in women undergoing treatment for breast cancer.

P2-82   PREGNANCY, EXPOSURE TO PESTICIDES AND INFANT LEUKAEMIA IN BRAZIL

[1]J D Ferreira,* [1]A C Couto, [2]M do Socorro Pombo-de-Oliveira, [1]S Koifman. [1]National School of Public Health, Oswald Cruz Foundation - Fiocruz, Rio de Janeiro, Brazil; [2]National Institute of Cancer - Inca, Rio de Janeiro, Brazil

Infant Leukaemia is a rare haematological neoplasm associated with MLL gene rearrangements. Maternal exposure during pregnancy to pesticides, hormones, dipyrone, and topoisomerase-II DNA inhibitors and birth weight were associated risk factors. This is a hospital-based multicenter case-control study, and were interviewed mothers of 252 IL cases and of 423 controls. Data were obtained regarding environmental maternal exposure during periconceptional, pregnancy and breast-feeding periods, including exposure to pesticides. Unconditional logistic regression was performed and ORs on the association between maternal pesticides exposure and IL, including their 95% CIs, were ascertained after adjustment to hormonal intake during pregnancy, mother's age, mother's level of education, birth weight and infant's skin colour. An adjusted OR, 2.39, 95% CI 1.63 to 3.51 was observed for the association between IL and maternal exposure to pesticides during pregnancy, being higher for acute myeloid leukaemia (adjusted OR 3.50, 95% CI 2.01 to 6.11). The use of pyrethroids during pregnancy revealed an OR 2.18 (95% CI 1.44 to 3.29), while the use of other pesticides showed an OR 3.61 (95% CI 1.69 to 7.73). The reported household use of pesticides revealed an adjusted OR 2.25 (95% CI 1.48 to 3.43), and agriculture exposure showed an adjusted OR 9.26, (95% CI 2.82 to 30.4). Mixed exposure to different pesticides showed an adjusted OR, 3.83 (95% CI 1.33 to 11.0) and the exposure to different chemical classes revealed an adjusted OR, 8.87 (95% CI 1.55 to 50.6). The observed results seem to support the hypothesis that mothers' household use of pesticides and other contaminants may be involved in the aetiology of infant leukaemia.

P2-83   ENVIRONMENTAL EXPOSURES AND CHILDHOOD LEUKAEMIA: AN EXPLORATORY ANALYSIS IN BRAZIL

[1]J D Ferreira,* [1]A C Couto, [2]M do Socorro Pombo-de-Oliveira, [1]S Koifman. [1]National School of Public Health, Oswald Cruz Foundation - Fiocruz, Rio de Janeiro, Brazil; [2]National Institute of Cancer - Inca, Rio de Janeiro, Brazil

The aim of this study was to explore the unapparent relationships that several factors related to environmental exposures and individual characteristics existing in our environment seem to be involved with childhood leukaemia. From a database of clinical and epidemiological data obtained from hospital-based multicenter case-control study on risk factors for childhood leukaemia, exploratory multivariate analysis was performed the principal component and factor analysis. Further, an unconditional logistic regression was carried out aiming to ascertain the magnitude of association between the selected factors, and their composing variables, with childhood leukaemia. The model displaying the highest power explained 52% of the total variance, including three factors, each one

of the showing factors loadings higher than 0.6: "conditions related to chemical exposure during pregnancy", which explained 20% of the variance; "lifestyle exposures", such as smoking and hair dyes and hair cosmetics use during pregnancy, explaining 17% of the total variance; and "consumption of health services during pregnancy", such as x-rays and delivery type (cesarean or vaginal delivery), explaining 15% of the total variance. Logistic modelling revealed statistically significant association between childhood leukaemia and chemical exposure during pregnancy (OR=1.36; 95% CI 1.16 to 1.59), and also with consumption of health services during pregnancy (OR=1.27; 95% CI 1.08 to 1.49). The observed results are suggestive of the contribution of environmental exposures to childhood leukaemia development, not just individually, which has been supported by the literature according to carcinogenesis in general, and to leukaemogenesis in particular, as resulting from several mutations triggered by joint environmental exposures.

P2-84 CHRONIC CONDITIONS AND MAJOR DEPRESSION IN COMMUNITY-DWELLING OLDER ADULTS

[1]K Fiest,* [1,2]S Currie, [1]J Williams, [1]J Wang. [1]University of Calgary, Calgary, Alberta, Canada; [2]Alberta Health Services, Calgary, Alberta, Canada

Objectives To estimate (1) the prevalence of long-term medical conditions and of comorbid major depression, and (2) the associations between major depression and various chronic medical conditions in a general population of older adults (over 50 years of age) and in persons who are traditionally classified as seniors (65 years and older).

Methods Data from the Canadian Community Health Survey-Mental Health and Wellbeing (CCHS-1.2) were analysed. For the purposes of these analyses the dataset was restricted to those aged 50 and over (n=15 591). Chronic health conditions were assessed using a self-report method of doctor diagnosis. The World Mental Health-Composite Diagnostic Interview was used to assess major depressive episodes based on DSM-IV criteria.

Results The overall prevalence of having at least one chronic condition in those over 50 years of age was 82.4%, compared to 62.0% in those under 50. The prevalence of a major depressive episode in those over 50 with one chronic condition was 3.7%, compared with 1.0% in those without a long-term medical condition. The top 3 chronic health conditions in seniors aged 65 or older were arthritis/rheumatism, high blood pressure and back problems. Chronic Fatigue Syndrome, fibromyalgia and migraine headache had the highest comorbidity with major depression in the senior population.

Conclusions Differences were found between rates of chronic conditions and major depression between the general population, older adults and seniors in this study. Primary and secondary prevention efforts should target seniors who exhibit symptoms of depression or highly prevalent chronic health conditions.

P2-85 DIABETES SELF-CARE: *"NO WAY TO DO EVERYTHING"*

[1]R Figueiredo,* [2]A Hernáez, [1]M de Fátima Diniz, [1]S Barreto. [1]UFMG, Belo Horizonte, Minas Gerais, Brazil; [2]Universidad Rovira i Virgili, Barcelona, Catalunya, Spain

Introduction Individuals' opinions, believes and experiences with diabetes influence how they implement the regime prescribed for the disease in their daily lives. Very often, the prescribed regime imposes changes and disciplines that are not feasible or do not fit to individual's routines and possibilities, compromising their adherence to self-care behaviours and diabetes control.

Objectives To uncover the explanatory models of diabetes built by patients and to understand how these models relate to their attitudes and thoughts regarding their diabetes regimes.

Methods We conducted two focus groups with patients with diabetes, both Type 1 and Type 2, in two different health services in the city of Belo Horizonte - Minas Gerais. The number of participants ranged from 4 to 7, two females and five males. The analytical strategy is rooted in the Grounded Theory. Atlas-ti software, version 6,was employed.

Results Five themes emerged from the analysis regarding participants' perceptions: "Diabetes: shock, anger, sadness," "emotional state and diabetes: cause and effect", "managing diabetes: a sacrifice", "diet: the greatest dilemma" and "insulin: ignorance and fear". It is possible to grasp a bidirectional relationship between emotional disorders and diabetes. Compliance with the prescribed diet is the most challenging aspect of diabetes care and we see great dissatisfaction with the use of insulin, mainly by associating its use with the worsening of the disease and with hypoglycemia.

Conclusion We noticed that participants struggle to integrate self-care activities in their everyday life. How they react to this integration process varies according to their psychological barriers.

P2-86 EDUCATION AND SURVIVAL OF NON-HODGKIN LYMPHOMA IN DENMARK

[1]B L Frederiksen,* [2]P de Nully Brown, [3]S O Dalton, [3]M Stedding-Jessen, [1]M Osler. [1]Research Centre for Prevention and Health, Glostrup University Hospital, Capital Region of Copenhagen, Glostrup, Denmark; [2]Department of Haematology, Copenhagen University Hospital, Copenhagen, Denmark; [3]Institute of Cancer Epidemiology, Danish Cancer Society, Copenhagen, Denmark

Introduction This study examined socio-economic inequalities in survival after non-Hodgkin lymphoma, and to what extent any disparities were explained by differences in comorbidity, disease severity at the time of diagnosis, and the treatment given.

Methods Registry-based nationwide cohort study based on 5738 persons diagnosed 2000-2008 from the Danish national lymphoma database and linked for individual socioeconomic information in Statistics Denmark.

Results Long-term mortality was highest in patients with a short education as compared to those higher educated. The social difference among patient ≤80 years was increasing over time ($p_{interaction}$=0.01). Thus, in the period 2000−2004 the HR among the short educated compared with the higher educated was 1.47 (95% CI 1.34 to 1.61) and increased to HR=1.70 (95% CI 1.37 to 2.11) in 2005−2008. However, no educational differences were seen among the oldest patients of 81 years and above. The educational gradient was attenuated by including comorbidity in the models, and further slightly attenuated by including lymphoma-specific prognostic factors (stadium, elevated lactatdehydrogenase, extranodal involvement). However, the educational gradient was still significant, as was the interaction with calendar period ($p_{interaction}$=0.03). No socio-economic differences were found with respect to treatment with chemotherapy, radiation, or immunotherapy.

Conclusion Differences in survival among NHL patients with different socio-economic position are partly caused by differences in comorbidity and the severity of disease at the time of diagnosis, while no differences in treatment were found. The increasing social gradient over time may be partly explained by a more pronounced decrease in lifestyle-associated comorbidity among higher social groups in recent years.