The seroindidence was high (55%) even when the group immunity had already been partially established (42%) and the Ae. aegypti infestation rates were relatively low (<3%). Contrary to the ecological analysis, at the individual level, substantial heterogeneity in dengue exposure was observed.

**Conclusion** The observation that the dengue virus in our environment does not respect social spaces strengthens the principle that vector control measures must always be universally applied in each territory. On the other hand, the identification of specific risk factors in the domestic domain may indicate a need for other evidence-based interventions which can help to eliminate the disease from cities such as Salvador.

**P2-546 AGE AT DIAGNOSIS AFFECTS ADHERENCE TO NATIONAL BREAST CANCER GUIDELINES REGARDING LOCAL THERAPY**

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Leiden University Medical Centre, Leiden, The Netherlands

**Introduction** In the Netherlands, breast cancer patients are treated according to national guidelines. Despite comprising a large proportion, elderly breast cancer patients are underrepresented in clinical trials. Therefore it is questionable whether guideline recommendations can be extrapolated from a young to a heterogeneous elderly population. Aim of this study was to assess age specific guideline adherence.

**Methods** Data were extracted from the Dutch Cancer Registration. Overall, 83,982 patients without distant metastases, diagnosed between 2002 and 2008 were included. Adherence was assessed for breast surgery (BS), type of surgery (TS), axillary surgery (AS) and radiotherapy (RT). Analyses were stratified by age (<65, 65–74 and ≥75 years).

**Results** Adherence decreased with increasing age (BS <65, 99%; 65–74, 98%; ≥75, 75%; p<0.001. TS 69%; 66%; 42% respectively, p<0.001. AS 96%; 94%; 68% respectively, p<0.001. RT 91%; 93%; 83% respectively, p<0.001). BS and AS non adherence were explained by under treatment. For TS and RT, young patients were non adherent because of over- and under treatment. In the elderly, under treatment was the main reason for non adherence (under treatment TS 94%, AS 91%, TS 97% respectively, p<0.001. RT 94%, 90%, 80% respectively, p<0.001). Over time adherence to breast surgery declined for elderly patients (p<0.001). For other local therapies, the gap between young and elderly patients remained similar.

**Conclusion** These results emphasise the different approach and treatment of elderly breast cancer patients. Further age specific studies in breast cancer patients are necessary to investigate whether adherence to current guidelines results in optimal outcomes for elderly patients.

**P2-547 TILE: MUSCULOSKELETAL DISORDERS AND ASSOCIATED FACTORS AMONG NURSES IN SRI LANKA**

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1S Warnakulasuriya,* 2R Peiris Jone, 3A R Wickramasinghe, 4N Sathiakumar. 1Faculty of Medical Sciences, University of Sri Jaywardenapura, Colombo, Sri Lanka; 2Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka; 3School of Public Health, University of Alabama, Birmingham, USA

**Introduction** Work related musculoskeletal disorders (WMSDs) have significant impacts in labour intensive occupational groups. Lifting, moving, transferring and repositioning of patients and long hours spent standing during work makes nurses vulnerable to WMSDs.

**Objective** To determine the prevalence and risk factors associated with WMSDs among nurses.

**Methods** We randomly selected 237 nurses attached to National hospital of Sri Lanka and Colombo South Teaching hospitals, and interviewed them using a pre-tested questionnaire ascertaining WMSDs in the past year. Descriptive, χ² tests and multivariate logistic regression analyses were performed.

**Results** Results indicated that 21% of nurses had at least one WMSD. Back pain was the most common WMSD occurring in 44% of nurses. The prevalence of other WMSDs included pain in the knee (30%), neck (19%), shoulder (16%) wrist and arm (13%) and elbow (4%). Lower back pain was significantly associated with time pressure (OR=2.14, 95% CL 1.17 to 3.88), job dissatisfaction (OR=6.84, 95% CL 1.46 to 31.94), lifting more than 25 kg during a normal duty shift (OR=2.16, CI 1.26 to 3.7), and unhappiness during the past month (OR=2.74, 95% CI 1.06 to 7.08). Shoulder pain was significantly associated with job dissatisfaction (OR=4.15, 95% CI 1.24 to 13.87) and unhappiness (OR=2.98, 95% CI 1.11 to 7.98).

**Conclusion** The present study shows that nurses have a high prevalence of MSDs. The predominant ergonomic problem is lower back pain, followed by pain in the knee, neck and shoulder areas. Interven- tional studies are needed to address WMSDs among nurses, particularly for lower back pain.

**P2-548 GERIATRIC MENTAL HEALTH AND RELIGION: RESULTS FROM THE KRAKOW STUDY ON THE RELATIONSHIP BETWEEN RELIGIOUS INVOLVEMENT AND HEALTH IN OLDER AGE**

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B Wozniak,* K Zawisza, B Tobiasz-Adamczyk. Jagiellonian University Medical College, Krakow, Poland

**Background** Taking into account the prevalence of religiosity in the population of Polish older people inclusion of religiosity measures in mental health research is needed. The aim of the study was to investigate the relationship between religious involvement and mental health in older age.

**Methods** The sample population consisted of 350 randomly selected people aged 65 and over, living in Krakow. Religiosity was measured by assessing the following dimensions: ritualistic, experiential, consequential and intellectual. Religious coping and support were also measured. Health was assessed using SF-20, HADS, Will-to-live, DUKE Social Support and Loneliness Scales. Statistical analysis was done using K-means cluster analysis and multivariate regression analysis.

**Results** Two clusters were extracted in cluster analysis: cluster 1 (those who scored higher on each dimension of religiosity, ie, more religiously involved) and cluster 2 (less involved). Multivariate linear regression analysis showed that those more involved had better mental health (β=0.182), were less depressed (β=−0.236) and had more will to live (β=0.136) in comparison with those less involved. Regression analysis for particular dimensions of religiosity showed that consequential and experiential dimension significantly influenced the level of depression (β=−0.202 and −0.183 respectively); consequential dimension also influenced mental health (β=0.228). Respondents who were engaged in positive religious coping responses had better mental health than those who didn’t (β=0.240). Emotional support provided, received and anticipated from the members of religious congregation decreased the level of social loneliness (β=−0.229, −0.238 and −0.315 respectively).

**Conclusions** Religious involvement is a significant predictor of mental health in older age.