

- Malta DC, Bernal RI, Nunes ML, Oliveira MM, Iser BM, Andrade SC, et al. Prevalência de fatores de risco e proteção para doenças crônicas não transmissíveis em adultos: estudo transversal, Brasil 2012. *Epidemiol Serv Saúde*, Brasília. 2014 Dez;23(4):609-22.
- Instituto Brasileiro de Geografia e Estatística [homepage na internet]. Projeção da População do Brasil por sexo e idade: 2000- 2060 [acesso em 10 dez 2017]. Disponível em: [https://ww2.ibge.gov.br/home/estatistica/populacao/projecao\\_da\\_populacao/2013/default\\_tab.shtm](https://ww2.ibge.gov.br/home/estatistica/populacao/projecao_da_populacao/2013/default_tab.shtm).

#### Keywords

Obesity, Aging, Tendencies, Population projection, Demography.

#### P18

### Nursing interventions towards the hospitalized elderly patient with delirium – a systematic review of literature

Marta Bento, Rita Marques

Universidade Católica Portuguesa, 1649-023 Lisboa, Portugal

**Correspondence:** Marta Bento (marsofia81@hotmail.com)

*BMC Health Services Research* 2018, **18(Suppl 2):P18**

#### Background

Delirium is one of the most prevalent neuropsychiatric syndromes in the hospital setting, preferably in the elderly debilitated patients. It is a cognitive alteration of sudden onset, developing in a matter of hours or days; which is interspersed with periods of lucidity and also characterized by disturbances in attention, memory and behaviour. It is also identified by the worsening of the symptoms at night and by changes in the sleep-wake cycle. The presence of this syndrome, makes impossible a holistic care, upsetting an effectively communication, between patient and nurse or family. It may even be considered common for an elderly, given the age, to appear confused, but it should not be considered normal, so investing in concrete studies to specify these mental changes and determinate what interventions are more appropriate for this vulnerable group, is emergent. It is up to nurses, who are in a privileged position, the early recognition/intervention at this neurological condition. It is assumed as an emerging need, to implement non-pharmacological strategies, so that the occurrence of delirium decreases and thus avoids great suffering.

#### Objective

This study aimed to identify the nursing interventions directed to the hospitalized elderly, for the control and prevention of delirium.

#### Methods

Using the methodology recommended by the Cochrane Centre, this systematic review of literature was guided by the following research question: "What is the scientific evidence regarding nursing interventions directed to the hospitalized adult/elderly for the control of delirium?" Using a PICO framework as reference, a review of articles published between 2012 and 2017 was carried out. The research was conducted at B-ON and EBSCO host - Research Databases.

#### Results

In this bibliographic review 5 studies were selected, in common, they present tendentially, non-pharmacological strategies adopted by nurses with preventive character towards the predisposing and precipitating factors of delirium. The role of nursing in carrying out preventive actions was important in the maintenance of the sensorial balance (frequently reorientation, encouraging the use of visual and hearing aids improves patients 'sensorium), optimizing circadian rhythm (minimizing night procedures, allowing periods of rest), assessing the local environment (limiting background noise and light) as well as in the mental status, pain, monitoring hydration, nutrition and stimulation of early mobility.

#### Conclusions

The implementation of nursing delirium preventive measures truth sensibilized professionals reveals to be effective in reducing the incidence of delirium. Research is imperative, to recognize and validate witch interventions may better control delirium and thus reduce its consequences.

#### Keywords

Delirium, Nursing interventions, Hospitalized adult patients, Evidence-based practice.

#### P19

### Distribution of gama-chamber nuclear equipment is associated to the distribution of physicians in the state of Rio Grande do Sul, Brazil

Patrícia Silva, Roger S Rosa, Rita Nugem, Adriane Carvalho, Ronaldo Bordin

Federal University of Rio Grande do Sul, 90040-060 Porto Alegre, Rio Grande do Sul, Brazil

**Correspondence:** Patrícia Silva (patriciaairan@ig.com.br)

*BMC Health Services Research* 2018, **18(Suppl 2):P19**

#### Background

The use of effective technologies extends the resolution of health services. However, over-supply can create incentives for service over-use, which is not without risk to patients. Nuclear medicine equipment has been increasingly used. Knowing the associations with their spatial distribution can contribute to interventions aimed at reducing inequalities.

#### Objective

To dimension the association among mean number of equipment's of gamma-chamber, population, Gross Domestic Product and number of physicians, by health region of Rio Grande do Sul, state of southern Brazil.

#### Methods

Observational and cross-sectional descriptive study based on public data from each one of the 30 health regions for 2013, the most recent year at the time of the survey (2016-2017). Data was managed in Microsoft Excel®. Pearson's linear correlation coefficient and multiple linear regression analysis were used with Statistica 12.5® software, at a significance level of 5%. The variable considered for outcome was monthly mean of gamma camera equipment (GamaC) and the predictor variables (I) population (POP), expressed in number of inhabitants; (II) Gross Domestic Product (GDP), expressed in the national coin (Real); and (III) the number of physicians registered in the CNES - National Register of Health Establishments (MED) by health region of the State Health Secretariat, in 2013.

#### Results

The predictive variables POP, GDP and MED were each one highly correlated with GamaC (R = 0.94, 0.92 and 0.98 respectively). Simple linear regressions with each independent variable were elaborated. It was found that POP, PIB and MED significantly affected the GamaC variable (adjusted R<sup>2</sup> of 0.89, 0.84 and 0.96 respectively). In the final model, where variables were standardized and GamaC was considered to be simultaneously dependent on the predictive variables POP, GDP and MED, the POP variable lost significance (p > 0.05). The variable PIB presented a negative coefficient (-0.54, p < 0.01), while the variable MED, a positive (1.27, p < 0.01).

#### Conclusions

Health regions of the state that had the highest number of physicians, had the highest mean number of scintigraphic chambers. The growth in the supply of medical equipment such as nuclear medicine improves the population's access to services, but the greater supply in Rio Grande do Sul state was associated more with better developed health regions, when considering the number of medical professionals available, than the gross domestic product or the number of residents in the territory.

#### Keywords

Nuclear medicine, Supply, Health needs, Demand of health services.

#### P20

### Family experiences of the internalized person in situation of critical illness: integrative revision

Raquel MV Ramos, Ana CR Monteiro, Sílvia P Coelho

Instituto de Ciências da Saúde, Universidade Católica Portuguesa, 4169-005 Porto, Portugal

Raquel MV Ramos (raquel\_mvr@hotmail.com)

*BMC Health Services Research* 2018, **18(Suppl 2):P20**

#### Background

The admission of a patient to a critical health unit is usually traumatic for the family, having a major impact on their life, which can