

SESSION 3-3

« Inequalities of health »

Thursday, September 12th

Room : D 314 à 15h00

Jens Kandt

Town : London, United Kingdom

Job Title : No indicated

Company : LSE Cities, London School of Economics / Dept. of Geography, University College London

Title of the presentation : « Big Data to monitor health inequalities in London? An evaluation of potential datasets »

Abstract :

London is a city with pronounced and persistent health inequalities. The Mayor of London is statutorily required to set out a regional strategy to address them, and the recently enacted UK Health and Social Care Act 2012 has further assigned to local authorities the responsibility of preparing local “Joint Health and Well-being Strategies” with the aim to promote the health and well-being of residents and tackle health inequalities effectively. While the consultation of relevant data is at the heart of preparing these strategies, the Greater London Authority along with its 33 local authorities (London Boroughs) face the challenge of finding appropriate data sources that monitor trends in health of the local population and highlight health inequalities at an appropriate spatial scale. The potential role of Big Datasets created by public authorities and private companies in this undertaking has been increasingly emphasised. Therefore, the purpose of this paper is to provide an audit of routinely collected government administrative and survey datasets and discuss their potential application in monitoring health inequalities. 70 datasets that can be of strategic use in assessing and addressing health inequalities have been identified and systematically evaluated with respect to the ‘Three V’ criteria used to audit Big Datasets: Volume (the number of records, representation and coverage of the population), Variety (breadth of substantive, health-relevant information including geographical resolution) and Velocity (temporal resolution, the rate of record updates). The evaluated datasets pertain to six areas relevant to strategic planning: population demographics, physical health, mental health and well-being, access to and quality of care, lifestyles and social determinants as well as disease tracking and surveillance. While the identified datasets offer significant potential to monitor health inequalities, they require significant preparation, modification, processing and linkage by experts with profound skills in data management and geo-temporal analysis. While a number

of Open Datasets provide information at the borough level, 18 out of 70 datasets allow estimation of disease incidence or prevalence, risk factors or social determinants at the neighbourhood level. But most of these are rather generic with limited direct information on health. Disease-specific registers are characterised by poor spatial resolution, but, at the same time, a high degree of temporal resolution. Datasets in the category of lifestyles and social determinants score low with respect to both, which renders geographically targeted interventions difficult. While most administrative datasets are comprehensive and voluminous, data on access and quality of care require linkage to other datasets to enhance their strategic value. Datasets that turned out to be most comprehensive are large datasets that originate from secondary care (e.g. Hospital Episode Statistics). The next stage of the audit will explore and discuss, to which extent datasets can and need to be linked through precise geographical locations in order to monitor health inequalities at a range of geographical scales. Scale is a crucial parameter of unmasking health inequalities - and the extent to which Big Datasets allow scale-based applications will be critically reviewed for health equity research and policy.

Lynn Lavallee

Town : Toronto, Canada

Job Title : No indicated

Company : Ryerson University

Title of the presentation : « Urban Aboriginal (Metis) Health Disparities: A Profile of Toronto Canada Metis Peoples »

Abstract :

As reported by the World Health Organization, the health of Indigenous peoples globally is far poorer than non-Indigenous peoples. Within Canada, Aboriginal peoples (Metis, First Nations and Inuit) also experience greater disparities with respect to health. However, within the Aboriginal population in Canada there are differences in the health disparities between Metis, First Nations and Inuit. Most health research has focused on the health of First Nations and Inuit. In order to assess the specific health needs of the Metis sharing circles (similar to focus groups but incorporating Indigenous cultural protocols) were carried out with 60 urban Metis. The results of the sharing circle will be reported in this presentation. In addition, some of the political differences between the Metis and First Nations/Inuit will be highlighted. The audience will come away understanding the political differences within the Canadian Aboriginal population and how these differences have contributed to health disparity.

Mahta Mohegh

Town : Tehran, Iran

Job Title : No indicated

Company : Danish Refugee Council

Title of the presentation : « A Comparative study regarding Health Seeking Behaviors of Moslems and Zoroastrians in Yazd Province, Iran, 2010 »

Abstract :

A Comparative study regarding Health Seeking Behaviors of Moslems and Zoroastrians in Yazd Province, Iran, 2010 Background: Several factors form the behavior of different types of people at the time of illness, such as cultural and socio-economic factors and specifically cost of medical treatment. A comparative study of different population groups allows policy makers to have a wider overview of people's needs and better control of supply and demand. This comparative study aims to determine and compare the health seeking behavior of the minority group of Zoroastrians among Moslem society in Yazd Province. Method: Total sample of 392 persons (half Zoroastrians and half Moslems) participated in the study. The Zoroastrian residing areas were identified and the adjoining Moslems were selected by random sampling. The data was collected through a structured questionnaire consisting of 27 questions on bio-data, the socio-economic situation and health seeking behavior that was developed by the researcher. The data was analyzed by SPSS software. Chi Square test was used for analyzing the data and minor 0.05 P-values was considered as significant. Findings: The results indicate that in Zoroastrian group sex, marital educational, occupational and economic status, and medical insurance have a significant relation with at least one of the following mentioned health seeking behaviors; type of treatment, reasons of disease neglect, stage of disease when referring to the care givers, self-prescription reasons and consulting different groups of people. In the Moslems group age, number of family members, educational, occupational and economic status, and medical insurance have a significant relation with the same above mentioned health seeking behaviors. Conclusion: There is not much difference in the behavior of these two groups of population in terms of health behavior; however educational and economic status of populations in both minority and majority groups lead them to have different health seeking behaviors. This study suggests that providing better educational and occupational changes help people to choose the most proper behavior. Key Words: Health Seeking Behavior, Religion, Moslem, Zoroastrian, Yazd

Kathi Wilson

Town : Mississauga, Canada

Job Title : No indicated

Company : University of Toronto Mississauga

Title of the presentation : « Urbanization, Immigration, Health and Health Care in Canada's Largest Cities »

Abstract :

Canada's population, similar to other industrialized nations, is highly urbanized with over 80 percent living in cities. In addition, many of Canada's largest cities are home to growing immigrant populations, representing both ethnicity and socioeconomic diversity. The increasing growth and concentration of the general Canadian population, and the immigrant population, in particular, poses challenges to both population health and access to health care. The purpose of this paper is to examine health and access to health care across Canada's largest cities, paying particular difference to variations by socioeconomic status and patterns of immigration. Specifically, we use data from the 2010 Canadian Community Health Survey (CCHS) to determine if health status (as measured by self-reported health, chronic conditions) and access to health care (whether or not individuals have a regular medical doctor, unmet health care needs) vary across Canada's largest cities. Through this analysis we examine these variations and conclude whether they are a function of the differences in urban population structures or variations in the institutional delivery of health care by province. Key words: urbanization, health status, access to health care, immigration

Moses WONG

Town : Hong Kong, Hong Kong

Job Title : Research Assistant

Company : Department of Medicine and Therapeutics, The Chinese University of Hong Kong

Title of the presentation : « Exploring socio-geographical patterns of healthcare utilisation in Hong Kong »

Abstract :

Abstract Objective Living in urban areas may allow better access to healthcare, but there the provision and potential accessibility are not evenly distributed socio-geographically. Limited

data have documented recent pattern of intra-city variations of health services utilisation in Hong Kong, with particular focus on the use of health services by the elderly people in a rapidly ageing population. This study examined the use of different public hospital services by the elderly, as well as adequacy of healthcare provision in Hong Kong. Methods A secondary analysis of a dataset from the Hospital Authority (HA) was carried out, covering 98% of the total registered deaths in Hong Kong during 1999–2005. Deaths at age 65 years and above were examined, constituting 76% of the total registered deaths and 184,671 deaths were included to analyse the utilisation of public hospital services. Age-sex weighted mean utilisation ratios were calculated for 4 types of hospital services – length of stay (LOS), number of inpatient admission, specialist outpatient consultation and attendance at Accident and Emergency (A&E) department – by dividing the age-sex weighted mean utilisation of a particular service for each of the 18 districts in Hong Kong by that of the whole territory. To address the adequacy of service provision in terms of hospital beds in HA hospitals and primary care in community, 2 composite ratio parameters were used. We divided the LOS in hospital by the number of inpatient admissions to obtain the average LOS to assess bed adequacy, whereas the primary care adequacy was calculated by dividing the total number of attendances at A&E by the number of inpatient admissions, which examined the level of use of A&E service as an alternative to the lack of primary care in community. Results Findings showed significant district variations in the age-sex mean weighted utilisation ratios of hospital services, though patterns were inconsistent and depended on type of services being analysed. Substantial difference by 44% was found between district having the shortest and longest LOS. These differences were also observed for inpatient admission, special outpatient consultation and A&E attendance by 33, 35, 39% respectively. Multilevel analysis taking into account of district-level socioeconomic factors showed that district variations persisted. With respect to analysis of service adequacy, it showed geographic variations in healthcare adequacy at secondary and primary level of care, by which some districts in Hong Kong were better served by availability of hospital beds and community primary care than others. Conclusion These observations illustrate independent geographic contribution to intra-city variations of healthcare usage and provision in an urbanised Asian city. Future studies on individual areas or neighbourhoods are needed, in order to better understand the small-area patterns healthcare inequalities and its impact on health outcomes. Keywords Geographic variations, healthcare provision, service utilisation, adequacy, elderly Preferred format of presentation: Oral or poster