

7. POSTER PRESENTATIONS: ABSTRACTS

Child and adolescent health

Prevalence of insomnia among Portuguese adolescents

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Background

Insomnia is the most common sleep disorder. The aim of this study was to quantify the prevalence of insomnia and analyse their determinants in Portuguese adolescents.

Methods

In a cross-sectional study, we evaluated 1974 students aged 12- to 18-years old, from nine secondary schools of the district of Viseu. The information was collected using the self-administered questionnaire, answered in the classroom. The final sample was constituted of 1965 adolescents, (59.3% female sex). According to the DSM-IV insomnia was defined as the presence of one or more of the following symptoms: difficulty initiating or maintaining sleep, early morning awakening or non-restorative sleep that lasts for a period of 1 month or longer at least three times per week. The prevalence was expressed in proportions with 95% confidence intervals (CI), compared by the chi-square test.

Results

The last month prevalence of insomnia was 29.0%, higher in female sex (34.5 vs. 19.9%, $P < 0.01$). The prevalence of difficulty initiating sleep, difficulty maintaining sleep, early morning awakening with difficulty getting back to sleep and non-restorative sleep was 11.6, 8.3, 9.6 and 7.6%, respectively, significantly higher among female sex ($P < 0.01$). Insomnia was associated with sex (female OR = 2.1, 95% CI 1.6–2.8), age (>15 years OR = 1.4, 95% CI 1.0–1.9), parental education (>9 years, OR = 1.5, 95% CI 1.1–1.9), father's marital status (married OR = 0.6 95% CI 0.4–0.9), coffee consumption (OR = 1.5 95% CI 1.2–2.0), overweight/obesity (body mass index ≥ 25 kg m⁻² OR = 2.1 95% CI 1.1–4.0), go out at night (OR = 2.2 95% CI 1.2–4.2), presence of TV in room (OR = 1.2 95% CI 1.0–1.6) and depression (OR = 3.6 95% CI 2.8–4.8). No statistically significant association was found between insomnia and residence area, alcohol consumption, smoking habits and sports practice.

Conclusions

Insomnia in Portuguese adolescents is common and is associated with multiple factors. The results support a preventive program for a insomnia in adolescents in order to implement measures to promote health and sleep hygiene.

Teachers' views about health and health education in 15 countries

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Health education in schools has been implemented through a diversity of strategies, depending on the concept of health and of health education. Classically, health education has provided mainly factual knowledge about diseases and their prevention, assuming the person as being healthy if the body components are working properly. In contrast to this biomedical (B-M) view of health, the biopsychosocial model (BPS-M) embraces a holistic view of health. This work intends to analyse and

compare teachers' conceptions about health and health education from 15 countries. These countries differ in their geographical distribution and their historical, political and socio-cultural development: three in North Europe (Finland, Estonia, Hungary), five in South Europe (Portugal, France, Italy, Romania, Cyprus), three in North Africa (Morocco, Algeria, Tunisia), two in Sub-Saharan Africa (Senegal, Burkina Faso), one in the Middle East (Lebanon) and one in South America (Brazil). In each country, the BIOHEAD-CITIZEN questionnaire was applied to six subsamples: in-service and pre-service teachers of primary and of secondary schools in biology and national language. The overall sample included 6001 respondents. Multivariate analyses were performed. Results showed differences among countries. Tunisian teachers are those closest to the B-M view of health whereas Finish teachers are the most BPS-M. Logistic regressions showed preferential association of classes within groups (countries, religion, teaching groups and levels of education) to either B-M or BPS-M view of health. These results may help explain differences in school health education found among countries and within countries.

Determinants of need for professional mental health care in adolescents: data from a population based study

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Background

Many studies have been published on the patterns and determinants of health care utilization among adolescents with mental problems, but little is known about factors that influence their need for care. The aim of this study is to assess the occurrence of need for care for mental problems in adolescents and the determinants of this need.

Methods

Data come from the first assessment waves (T1 till T3: 2002 till 2007) of TRAILS (TRacking Adolescents' Individual Lives Survey) ($N = 1406$). TRAILS is a longitudinal study of the development of mental and physical health, starting at the age of 11 years. Need for care was assessed at T3, age 16/17 years (parent report). Possible determinants concerned: health care utilization, emotional and behavioural problems measured with the CBCL and the YSR, child characteristics (sex and progress in primary education), and family characteristics (degree of urbanization, educational level and occupational status of both parents, and parental psychopathology).

Results

Of the 1406 parents, 409 parents (29%) reported their child to need help for mental problems. Results demonstrated that parent reported externalizing problems at T2 and T3 (ages 13/14 and 16/17, respectively) and internalizing problems at T3 predicted need for care at T3. Moreover, following special primary education, parental internalizing problems and receiving specialized care at T2 seemed predictors for a need

for care. Children with a need for care, but not receiving care at T3 had less parent reported internalizing problems (T2 and T3), parent reported externalizing problems (T1, T2 and T3) and self-reported internalizing problem (T2 and T3) than those with a need for care who do receive care.

Conclusions

According to parent report, a substantial proportion of late adolescents needs care for mental problems, in particular a more chronic pattern of mental problems during adolescence is predictive. This group deserves particular attention in the planning of adolescent services.

Opinion leaders in child health promotion identified by network analysis, Sweden 2008

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Background

A prerequisite for getting new methods into everyday practice, which often takes too long time, is that potential users are aware of the method. Opinion leaders are individuals who can influence and encourage other people. Using opinion leaders within the public health sector might be one means to speed up the dissemination of new health promoting and disease preventing methods. The purpose of this study was to test social network analysis as a means to identify opinion leaders at the national arena of child health promotion in Sweden.

Methods

A feasibility study using social network analysis was designed. Seven leading actors at the national level within the Swedish public health sector were contacted by e-mail and asked to give names and e-mail addresses of a few persons who they felt confident to contact in order to discuss matters within the child health promotion field, independent of organization or profession. By using snowball technique the e-mail question was spread in up to five links. Attributes of and contacts between different actors were analysed.

Results

Five of the seven first contacted persons responded to the e-mailed enquiry. The snowball technique then resulted in a total of 153 contacts. The most often mentioned actors were researchers, public health officials and paediatricians. This probably shows that the trustworthiness of these groups is high among public health professionals.

Conclusions

Social network analysis proved a useful method to map opinion leaders in the national arena of child health promotion in Sweden. When opinion leaders are identified directed measures could be carried out in order to spread relevant knowledge about new methods within child health promotion. This may facilitate for the Swedish National Institute of Public Health, as well as for public health actors in other countries, to more rapidly progress new methods into everyday practice.

Characterizing youth concerning alcohol: using audience segmentation

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Audience segmentation in health promotion is not new. By means of audience segmentation a population is divided into separate (more homogeneous) groups. The idea is that every

member of a segment behaves in a similar way. Currently, segmentation is mainly based on socio-demographic variables such as age and socio-economic status.

Many local authorities in the working area of the Public Health Service Hart voor Brabant have an active prevention policy focused on alcohol use among youth. We proposed that segmentation based on value orientation and perceptions could have value for developing and implementing effective alcohol prevention interventions and policy. Therefore, in the spring of 2009 a pilot project was conducted to study whether it was possible to distinguish different groups of adolescents based on their values, perceptions and attitudes towards alcohol.

Based on the results of a workshop with experts and focus groups with adolescents a questionnaire was developed. Seven thousand adolescents were invited to fill in our questionnaire via internet.

An explorative factor analysis on the 56 propositions about alcohol yielded five different factors: aversion to drunkenness, alcohol is normal, admiration by others, alcohol as enjoyment and lack of interest in alcohol. Subsequently, a latent class analysis was conducted with these five factors. This analysis yielded five segment: 'socials' (42%), 'high spirits' (22%), 'consciously fresh' (17%), 'sobers' (11%) and 'enjoyers' (8%). These segments differ from each other both in their scores on the five factors and in alcohol consumption.

Our study has indicated that it is possible to distinguish different segments with regard to alcohol. In a future study, we want to investigate whether this segmentation can translated into ways of reaching the audience of adolescents better (both literally and in terms of connecting to their characteristics, requirements and needs) by differentiating between interventions based on these segments.

The importance of media literacy in adolescent smoking and drinking

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Background

Media exerts a strong socialization effect on adolescents who are particularly susceptible to different messages in this life period. Therefore, examining adolescents' media literacy was put in the focal point of the present study. We have analysed media literacy in light of socio-demographics (age, gender), as well as smoking and drinking status.

Methods

Survey participants were 546 adolescents from Makó (Southern Hungary). The sample was comprised of 288 (52.7%) Grade 12 and 258 (47.3%) Grade 8 students; 49.5% of the sample was male and 50.5% female. The instrument contained items on lifetime and monthly prevalence of smoking and drinking, attitudes related to substance use, and media literacy, as well as socio-demographics. Factor analysis with varimax rotation was applied to a media literacy scale (31 items). In relation to socio-demographics and behaviours, these aspects were analysed by *t*-tests.

Results

The results show that factors of media literacy were well differentiated not only by socio-demographics, such as age ($P < 0.05$) and gender ($P < 0.01$) but also according to smoking and drinking status ($P < 0.001$). For example, girls ($P < 0.05$) and younger adolescents ($P < 0.001$), whose rates of substance use were smaller yet, were more willing to notice the hidden messages of the substance use shown in advertisements and films, and the presence of the media interests of tobacco and alcohol industry. According to behaviour, non-smokers and non-drinkers were more aware of the manipulation effects of the media ($P < 0.001$).

Conclusions

Findings show that girls, older students and substance users tend to have positive attitudes towards media exposure to smoking and drinking and this suggests that special attention should be paid on media literacy that would be a part of prevention programmes for adolescent smoking and drinking. Such a public health action would be innovative in Hungary since no previous programmes have addressed this issue yet.

Comparison of nutritional status of boarders and day-students who study at the regional boarding-schools in Giresun, Turkey

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Background

Regional boarding schools were rather widespread in Turkey, especially in the rural areas. Boarders and day-students study together in these schools. Nutritional status of the boarders may be different from the day-students because the boarders are separated from their family. This investigation was carried out in order to compare nutritional status of the boarders and day-students who study at the regional boarding schools in Turkey.

Methods

A total of 1126 students, 634 boarders and 492 day-students, who study at fourth to eighth grades of nine boarding schools in Giresun province of Turkey were taken into the study. The students were visited at their classrooms and they were applied a questionnaire including 47 questions. The questionnaires were answered by the students under the supervision of the investigators and than weight and height measurements were taken. Body mass index (BMI) values were calculated from weight and height measures. Height and BMI values were classified according to the standards for age of WHO. Pearson's chi-square test was used for statistical analysis.

Results

It was determined that 60% of the boarders and 49.6% of the day-students eat three meals a day and significant difference was found between the groups ($P < 0.05$). Of the study group, 80.1% rated their nutritional status as perfect or good and 2.7% rated bad or very bad. No significant difference was found between the groups from the standpoint of self-rating their nutritional status ($P > 0.05$). According to BMI values; 11% of the boarders were classified as underweight, 77% as normal, 9.5% as overweight and 2.5% as obese. These proportions were 15.5, 67.3, 12.8 and 4.5% in day-students, respectively. The proportion of the normal weighed students was found significantly higher among the boarders than the day-students ($P < 0.05$).

Conclusions

It was concluded that nutritional status of the boarders was more regular than day-students. Both underweight and overweight were more prevalent among the day-students than the boarders.

Risks of exposure to ionizing radiations due to pulmonary radiography in paediatrics

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Background

Radioprotection in paediatric radiology should be paid particular attention because the patients are children and the span of late side effects is long. The risk life span/dose unit is greater for children than with adults. The probable damage can be correlated with the effective dose, but it is necessary to apply a greater risk coefficient.

Following the technical progress, we register nowadays a continual increase in using radiations for getting diagnosis information; the result is a growing number of radiological examinations.

Methods

The study was carried out in nine X-ray paediatric departments with the highest addressability rates, between 2005 and 2008, on children of five age groups. The radiological equipments were of the same type and technical characteristics both in the polyclinic and the hospital departments. We determined the entrance surface doses in pulmonary radiographies. The effective doses were estimated using the conversion factors obtained through the Monte Carlo method published in the National Radiological Protection Board.

Results

About 60% out of the pulmonary X-ray investigations were unjustified, meaning that the physicians prefer the benefits of the modern technology to the detriment of a thorough clinical examination.

Both the entrance surface and the effective doses varied from one age group to another, needing different examination conditions.

The analysis of the data and their comparison to the European reference values showed that the entrance surface doses were three to four times higher ($P < 0.001$) than the standards in the 0–1 and 8–11 years age groups for the anterior–posterior incidence, respectively, in the 8–11 and 12–15 years age groups for the lateral incidence.

Conclusions

The explanation for the high doses we measured could be explained by the fact that there are used low voltages in these departments which imply soft rays associated with high doses for the patient.

The medical exposure, as a man made factor, can be modified in such a way as to enhance its health benefits and to decrease the associated risks.

Experience of tackling a problem of acute respiratory infections in children in Armenia: a rationale for integration of clinical and public health approaches

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Issue

Acute respiratory infections (ARI) still is one of major killers of the children in many low- and middle-income countries like Armenia. Since mid-1990s, the efforts were implemented to reduce ARI-caused morbidity and mortality, which led to significant positive results. However, the mortality rate remains much higher than in the Western and Central European countries.

Description of the problem

In 1991, year of establishing independence, ARI-caused infant mortality rate was 4.5/1000. To reduce mortality, Ministry of Health in collaboration with WHO and UNICEF launched the National Program for Control of ARI in young children, which in early 2000s was transformed to IMCI project. The programme included such activities, as development and introduction of the case management standards, education of parents in facilities' settings. This resulted in improving the practices and significant decreasing the mortality rate to

2.2/1000. However, last years the mortality rate doesn't change. To analyse the situation, case management surveys at different levels, interviews with caretakers and continuous analysis of statistics were performed.

Results

Surveys indicated to some lacks in management include improper diagnosis, maltreatment and poor follow up practices; low capacities of the most secondary level facilities to provide qualified and in-time care; late referrals to the third level. Lack of practices in the third-level facilities was registered as well. Weaknesses of the care-seeking practices were met: one-third of patients were admitted to the hospital with no any previous interaction with primary level institutions; interviews with parents highlighted poor knowledge on key care issues, partially resulted by poor counselling practices in health facilities. These factors result in the prevalence of complicated cases and, finally to relatively high mortality rate.

Lessons

To address multifactorial problems, the effective strategies should rationally integrate 'clinical' and 'public health' approaches.

Infant mortality and income inequality in Europe: an ecological study

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Background

Income inequality has been found to be associated, in cross-national comparisons, with several health indicators such as life expectancy and infant mortality.

Recent studies suggest that in high income countries child wellbeing may depend more on income equality than on absolute national income.

The aim of the study was to analyse the relationship between income inequality and infant mortality in the 27 countries of European Union (EU).

Methods

Gini coefficient (income inequality) and infant mortality rate (IMR) for the year 2004 for each country were extracted from Eurostat database and per capita gross domestic product (GDP) for the same year was extracted from Health for All-Europe database.

Spearman correlation coefficients were calculated to analyse the relationship between GDP and Gini and infant mortality. Multivariate linear regression was used to analyse the relationship between income inequality and infant mortality after controlling for per-capita income.

Results

In EU countries, IMR was negatively correlated with GDP ($\rho = -0.57$, $P = 0.0016$) and positively correlated with Gini coefficient ($\rho = 0.3980$, $P = 0.039$). Multivariate linear regression showed that the coefficient for GDP ($\beta = -0.6$; $P = 0.002$) is still strongly associated with IMR, whereas Gini coefficient was unrelated to it ($\beta = 0.001$; $P = 0.99$). A scatter plot of IMR vs. GDP suggested that all the countries with a GDP over 14 000 Euro per capita have a IMR rate less than or equal to five deaths per 1000.

In Italy, IMR was negatively correlated with GDP and positively correlated with Gini coefficient, but correlations were not significant.

When the median familiar income was included in the multivariate regression model the relation was significantly negative, indicating that the higher the income, the lower is the IMR.

Conclusions

Differently from other studies conducted in developed countries, our results suggest that, in EU and in Italy, IMR

correlates more on economic growth than richness distribution.

Personal hygiene behaviours among adolescents in South Korea

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Background

Students are vulnerable to contagious diseases. To prevent these diseases, washing hands is the most effective intervention at the personal level. This study analysed personal hygiene behaviours using data from the Korea Youth Risk Behaviour Web-based Survey (KYRBS, 2009).

Methods

The KYRBS was conducted on a nationally representative sample of middle and high school students. 75 066 students completed the anonymous self-administered web-based questionnaire. Data were weighted to provide national estimates using SAS software to account for the complex sampling design.

Results

The percentage of students who washed hands with only water before having meal at school was 68.0% (95% CI 67.1–68.9) but 77.8% (95% CI 77.3–78.4) at home. Students who washed hands with soap before having meal at school were 56.5% but 72.4% at home. The percentage of students who washed hands with only water at school (92.0%) was higher than at home (88.3%) after using toilet. However students who washed hands with soap at school were 72.3% but 79.1% at home. Of the students, 38.0% (95% CI 36.5–39.5) brushed teeth after lunch at school; 61.3% regarded bringing toothbrush and toothpaste to school as a trouble, and 8.4% complained to the lack of sink facilities among students who did not brush teeth at school.

Conclusions

Compared to 2008, because of H1N1, personal hygiene behaviours at school were dramatically promoted. Nevertheless students still had problems and felt inconvenient with using school facilities. As a result, overall personal hygiene behaviours were worse at school than home. Improving facilities, putting soap near sink and setting toothbrush and toothpaste storage would lead to continuous good personal hygiene behaviours at school.

Maternal education and prevalence of obesity among children

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Problem

Childhood obesity is associated with an increased risk of adult obesity and chronic diseases. To estimate the prevalence of overweight and obesity in 8- to 9-years-old children in Italy and investigate the effect of socio-economic variables, in 2007 the Ministry of Health promoted the establishment of a national school-based nutritional surveillance system coordinated by the National Institute of Health.

Description of the problem

Cluster survey sampling of third-grade primary school classes was conducted in all Italian regions. Parents were asked to provide opt-out consent and complete a questionnaire. A brief in-class questionnaire was administered to the children, and they were weighed and measured by trained local health staff

using standardized equipment. Age- and sex-specific International Obesity Task Force cut-offs were used to define overweight and obesity. The prevalence of obesity and behaviours known to be associated with obesity were evaluated for northern, central and southern Italy.

Results (effects/changes)

A total of 45 590 students were involved. Overall, 23.6% were overweight and 12.3% obese, with values ranging from 20.2% overweight and 7.5% obese in the north, 23.7 and 9.9% in the centre and 25.9 and 17.2% in the south.

After controlling for maternal and child characteristics, the risk of overweight and obesity remained higher for children in central Italy (prevalence OR = 1.30; 95% CI 1.19–1.43) and Southern Italy (1.92; 95% CI 1.78–2.08) compared with those from the north.

The prevalence of obesity decreased as the educational level of the mothers increased: 15.8% of children whose mothers had less than high school education were obese compared with 7% among those of university graduated.

Lessons

The educational level of the mothers influences eating behaviour of children and the mothers with low education tends to underestimate the status of their overweight children.

FTO gene polymorphism associations with cardiometabolic parameters in the Siberian adolescent population

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Background

Early onset of metabolic syndrome (MS) is associated with the combination of unfavourable genetic factors and unhealthy life style. The aim of the study was to analysis an association of FTO gene (fat mass and obesity-associated) polymorphism with components of MS in the Siberian adolescent population.

Methods

In 2003, in Novosibirsk the representative sample of adolescents aged 14–17 years (667 subjects) was examined. The programme included questionnaire, double measurement of blood pressure, anthropometry (weight, height, body mass index, waist and hip circumferences, subscapular and triceps skinfolds). Blood lipid levels, basal insulin and fasting glucose were investigated. The rs9939609 polymorphism of FTO gene was analysed by standard method. Adolescent's overweight registered using IOTF criteria.

Results

The frequencies in the Siberian adolescent population of genotype AA was 17%, genotype AT—53.3%, genotype TT—29.7%, allele A—43.7% and allele T—56.3%. Overweight adolescents had 32% of genotype AA against 15.6% in group with normal weight ($P < 0.001$) and 52.6% of allele A against 42.7 accordingly ($P < 0.04$). A total of 32.4% of boys with overweight had the genotype AA against 13.2% in group with normal weight ($P < 0.004$). Girls had the similar tendency (31.8% against 17.4% $P < 0.09$). Comparison of levels of some investigated indicators in groups with different genotypes of gene FTO has revealed authentic distinctions between them. Adolescents with genotype AA had above parameters of weight ($P < 0.04$), body mass index ($P < 0.04$), hip circumference ($P < 0.001$), sum skinfolds ($P < 0.01$), when compared with persons having genotypes TT and AT.

Conclusions

Polymorphism rs9939609 gene FTO has been associated with metabolic syndrome components and can be used for early selection of adolescents with risk for overweight, adiposity and MS.

High prevalence of non-compliance to treatment and topical corticosteroid fear among parents of preschool children with atopic dermatitis in a Russian town

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Background

Topical glucocorticoids (TGC) play an important role in treatment of atopic dermatitis (AD) in children. International studies demonstrated high prevalence of topical glucocorticoids fear (TGCF) in parents of children with AD. However, the evidence from Russia is almost non-existent. The aim of the study was to assess the prevalence of TGCF in parents of preschool children with AD in a Russian town, assess compliance to treatment and parental knowledge of AD causation and management.

Methods

A cross-sectional study. Altogether, parents of all 417 children with recorded AD in medical documentation in kindergartens in Severodvinsk (Northwest Russia, population 189 000, 2009) filled out an anonymous questionnaire on various aspects of beliefs and practices of TGC use, knowledge of AD causation and management, socio-demographic characteristics and compliance to treatment. Data were analysed using Pearson's chi-squared tests and Fisher's exact tests.

Results

TGCF was observed in 92% (95% CI 88–94) of respondents. Among parents whose children were prescribed TGC, 57% (95% CI 49–64) admitted having been non-compliant to treatment. Medical personnel was the most common source of TGC knowledge (60% of respondents) followed by medical literature (32%) and the Internet (26%). Only 24% (95% CI 19–29) of parents showed an acceptable level of knowledge about AD causation and management. Parental and child characteristics were not associated with TGCF. Higher education ($P = 0.016$) and male gender of a responding parent ($P = 0.024$) were associated with non-compliance to TGC treatment.

Conclusions

The study revealed much higher prevalence of both TGCF and non-compliance to treatment as well as poorer knowledge of AD causation and management among parents of preschool children with AD in a Russian town in comparison with other European settings. Better communication between medical personnel and parents is needed to reduce TGCF and improve compliance to treatment.

Socio-demographic determinants of dental appointments in Portuguese adolescents

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Background

Dental check-up appointments should be routinely made twice a year and are associated with adequate oral health behaviours. The aim of this study was to analyse the association between socio-demographic variables and dental appointments in a Portuguese sample of adolescents.

Methods

A sample of adolescents aged 12–18 years old, attending 26 secondary public schools of the district of Viseu, Portugal, was enrolled in this cross-sectional study. A self-administrated questionnaire with questions about dental appointments during their life and in the last year, oral health behaviours and socio-economic status was answered by the adolescents in the classroom. The questionnaires without sex and age

information and those related to adolescents <12 and >18 years old were excluded from the analysis. The global sample included in the analysis was composed by 7563 adolescents (4117 female). The prevalence was expressed in proportions and compared by the chi-square test.

Results

A total of 86.7% of adolescents visited a dentist during their life, and 55.0% visited one or more times in the previous 12 months. The prevalence of last year dental appointment was higher among the female gender (female = 57.4% vs. male = 52.0%, $P < 0.01$) and is also associated with parental education (<4 years = 49.5%, 4–12 years = 56.4% and >12 years = 67.6%, $P < 0.01$) and residence area (rural = 52.5% vs. urban = 60.0%, $P < 0.01$). The most frequent reasons referred for the dental appointments in the last months were: 49.8% for a routinely dental check-up and 27.8% when having a toothache.

Conclusions

The prevalence of dental appointments is associated with demographic and socio-economic factors. A high proportion of adolescents do not make a routinely dental check-up, at least twice a year and visit a dentist only when they have dental pain.

Developing national quality measures for infants and toddlers preventive health services

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Background

About 40% of mother and child health centres (MCHC) in Israel are operated by the Israeli Ministry of Health (MOH), serving ~66% of Israeli infants' population, while the rest are operated by a range of providers. Recently, there has been a public debate who should be the provider of those services: government or private sector. This debate also raised the issue of developing quality measurements in order to compare and improve the services given in such centres.

Objectives

(i) To define quality measures for Infants and Toddlers Preventive Health Services in Israel on a national level and (ii) To examine and analyse various factors related to MCHC quality of care (e.g. SES, mother education, ethnicity).

Methods

The process includes the establishment of a multi-disciplinary steering committee for quality measures building and data collection stage. The sample size of children for the pilot programme includes overall about 10 000 babies and infants born between 2004 and 2009. Data analysis includes independent sample *t*-test, one-way ANOVA, chi-square test, linear and logistic regression.

Results

Currently Performance of the various screening tests was not satisfactory and decreased according to age. In the first stage, the national steering committee decided to focus on four fields: Vaccination, nutrition, growth and development. Accordingly four sub-committees were established in order to develop quality measures.

Lessons

This study serves as a foundation for quality measurements programme in MCHC in Israel. Such programme should include also socio-demographic characteristics and community activities. It can serve policy makers for evidence-based decision making while establishing priorities and effective resource management. Currently the Israeli National Quality Measures program does not include almost any measure

related to children health or specifically to the infant and toddlers preventive services. This innovative study can help to promote the field of children's health quality measures in Israel and internationally.

'We love all our children': cultural practices and trafficking of children in Guinea-Bissau

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Background

International legal framework and conventions aim to prevent and combat trafficking of children. Yet, the definition of the term in the UN Trafficking Protocol from 2000 gives an ample space for interpretation. Consequently, there are disagreements on what practices amount to trafficking. In the study, we aim to explore cultural practices regarding children in Guinea-Bissau, West-Africa, in the context of the international definition.

Methods

Anthropological fieldwork was conducted in Guinea-Bissau, Senegal and Gambia in July–August 2009. Qualitative interviews were held with authorities, religious leaders, police, judges, health professionals, teachers and parents, individually, in smaller groups, or in community meetings. The data were analysed by content analysis.

Results

Various practices are identified that may threaten children's rights and risk their health and wellbeing, irrespective of ethnic background. These include e.g. early and forced marriage, child labour, fosterage practices and religious education. Associated with some of these practices is movement within and out-of-country, and consequently they at times become classified as trafficking. On the other hand, the term is commonly described by the local population as a 'heavy' word and associated with trafficking of drugs. Community members do not consider the cultural practices examined as being trafficking and underline: 'we love all our children.'

Conclusions

Many of the cultural practices regarding children violate their rights, and risk their health and wellbeing. Still, the parents act with their best interest in mind. The use of the term 'trafficking of children' is provoking for them and the rural communities with its association to drug dealers. Its use should be put into cultural context to facilitate collaboration and implementation of national laws, aimed to protect children. To succeed with preventive measures, it is necessary to engage in a respectful and collaborative dialogue with the population involved.

Parental support and control and adolescent alcohol use

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Background

The social integration perspective claims that participation in cohesive societies and groups protects individuals against disordered functioning. The parenting style perspective suggests that parenting styles influence adolescent adjustment. Both perspectives agree that parental support and parental control can protect against adolescent alcohol use and other health risk behaviours. The purpose of the study was to assess linear, as well as non-linear and interactive effects of parental control and parental support on alcohol use in mid-adolescence.

Methods

The study is based on a national school-based survey of Icelandic 10th grade students, entitled Health Behaviour in Schoolchildren (HBSC). The present study is based on questionnaire responses from 1918 students (response rate 86%).

Results

Parental control and parental support both affect adolescent alcohol use. However, the effects are non-linear. Thus, the importance of parental control depends on the level of social support. The combination of high parental support and high parental control is associated with the lowest frequency of adolescent alcohol use.

Conclusions

Generally, the results speak to the importance of parents as agents of socialization during adolescence. Systematic efforts by health professionals to help parents improve their parenting style may be an effective way to reduce or prevent alcohol use during adolescence.

Multi-sector policy action to create 'activity-friendly' environments for children: a multiple case study

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Background

Lack of physical activity among children is a serious health problem in many affluent countries and creating active-friendly environments is a promising strategy to tackle this. Several policy sectors can contribute to an active-friendly environment, but critical success factors for multi-sector policy development are poorly documented. This study describes the present state of multi-sector policies at the local level in four Dutch municipalities and the critical success factors for amelioration of multi-sector policy action.

Methods

A policy analysis was conducted in four Dutch municipalities by means of semi-structured interviews with 25 policy officers from different policy sectors (Public Health, Sports, Youth and Education, Spatial Planning, Traffic and Transportation, Environment and Play Facilities). Interviews were transcribed ad verbatim and analysed using qualitative data coding software.

Results

Each policy sector carried out policy measures with an impact on (a determinant of) physical activity of children, but most respondents were not aware of the potency of their policy measures regarding this topic. In two municipalities, some form of structural collaboration between (some of the) policy sectors was present, but the number of sectors involved was limited. Respondents generally had a positive attitude towards multi-sector policy action, because they felt it increased the quality and sustainability of their policy plans. A positive and stimulating political environment, awareness and support among all policy sectors, knowing each other and being informed about policies of other policy sectors were mentioned as important success factors for conducting multi-sector policy. The main bottleneck for multi-sector policy action was lack of time and resources.

Conclusions

This study indicates that the multi-sector policy approach is still in its infancy, but that policy officers in general have a positive attitude towards multi-sector policy action. The identified success and failure factors provide useful directions for improved multi-sector policy actions.

Alcohol and tobacco: approach, use and risk perception in the adolescents of the south Europe

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Background

Alcohol and tobacco have human, economic and social costs, now they become unsustainable. Monitoring is essential to plan prevention interventions.

The aim of this study is to investigate on use of alcohol and tobacco and then to understand the perception of their risks.

Methods

During the 2007–08 school-year, an anonymous and semi-structured self-administered questionnaire was administered to 432 middle school students of Catania, to know the young people behaviour about alcohol and tobacco.

Results

The results revealed an early approach to alcohol and tobacco (mean age of 11.9 years). A total of 52.1% claim to have already tasted alcoholic drinks and the 18.1% have yet smoke. A total of 11.8% of the student population have used both alcohol and tobacco.

The drinkers consume an average 7.0 g day⁻¹ of anhydrous alcohol, the smokers consume 3.6 cig day⁻¹, drinkers and smokers population take an average of 18.6 g day⁻¹ and 4.3 cig day⁻¹.

Every day 3.0% of students exceeds the threshold values of alcohol, while 0.9% of smokers smoke >5.0 cig day⁻¹. A total of 7.9% of students had an acute alcohol intoxication, of these 16.5% belongs to the drinker group and 50.0% to smoker group.

A total of 52.1% of the students' families makes use of alcohol and 55.6% smokes tobacco. Finally, 31.0% of students are living together with someone who smokes or drinks.

Conclusions

The early approach and the widespread use of alcohol and tobacco highlights the high risk for the investigated population, so it is important to propose a healthier lifestyle, to enhance prevention and to strengthen public health surveillance systems.

Eating disorders among youth aged 13–14 in Republic of Macedonia—what do students eat and how do they behave?

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Background

Eating disorders (EDs) are the most common psychiatric problems faced by adolescents, characterized by chronicity and high rates of recurrence. It affects both females that represent a population with higher prevalence, but males are not an exception and new studies reveal that they are similarly affected. Eating disorders are characterized by medical complications, psychosocial impairment and accompanying psychopathology. They have the highest levels of treatment seeking, inpatient hospitalization, suicide attempts and mortality of common psychiatric syndromes.

Survey of this type has never been conducted in Republic of Macedonia (RM), thus this effort has established the baseline for planning interventions for this specific target group.

Methods

Cross-sectional study was performed in the period May–June 2009, on a sample of 1293 students aged 13–14 years. The

survey was conducted in eight primary schools located in urban and rural areas in four municipalities in RM, both in the eastern and the western part of the country as well as the capital Skopje. We have used Eating Disorders Test (EAT-26) questionnaire translated into Macedonian and Albanian language to assess attitudes, beliefs and practices related to food.

Results

Of the respondents, 52.3% were males with average age of 13.42 years \pm 0.8 SD. Sixty-three per cent of the respondents were Macedonians, 27.2% Albanians, 5.9% Turks and 2.5% Roma.

Conventional interpretation of EAT-26 results classifying as ED each result higher than 20 has identified 17.4% respondents as having some form of ED, in favour of females (52.1%). More than a half of them (56%) are of Macedonian ethnicity, while 71% go to schools in urban areas. Subscale for identification of dieting habits has pointed to more frequent dieting in female students (59%) compared with their male fellows.

Conclusions

The survey has proved results established with other surveys that EDs are more prevalent in female population of that age and students residing in urban areas. Attitudes, beliefs and practices related to food significantly differ among students residing in urban and rural areas. EDs were found among students of different ethnicities, thus pointing to the fact that there is little to be associated with cultural or other factors.

Public health training on local community level in republic of Macedonia—from assessment to policy development

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Background

Some essential public health functions at local level are under pressure in Macedonia such as technical support to strengthen civil society participation and institutional capacity development.

Objectives

In order to improve the capacities on local level a community-based public health management and research training programme had been conducted applying bottom up approach. The aim was to assist decentralization of the health planning process to local community level, targeting the vulnerable and marginalized groups, improving the knowledge and management skills of the public health workforce and transferring research in practice at local level.

Results

Stakeholders and public health workforce have been the target audience in eight municipalities, with different ethnal, cultural and socio-economic background, political and executive representatives from: ministries and local government, technical professionals from public health institutions and civil society members.

The core structure of the training curriculum were Healthy Communities developed modules for strengthening capacity for the three core functions like assessment, policy development and assurance. This Model has been already successfully applied in some other countries in the region. As an innovation an environmental health prioritization module was added.

Conclusions

As final outcome the attendees from eight municipalities designed local evidence-based community health plans on different public and environmental health topics which they have selected and worked on during the course. New teaching module for community health planning will be introduced.

Sexual practices of high-school students in Tirana, Albania in 2009

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Background

I aimed to assess the prevalence of sexual activity and the age at first sexual intercourse among high-school students in Tirana, Albania.

Methods

An anonymous questionnaire survey was carried out among 660 high-school students (63.5% females) in Tirana, Albania, in October–November 2009. The questionnaire included information on current or previous sexual activity, age at first sexual intercourse and data on socio-demographic factors. Pearson's chi-square test and student's *t*-test were used to assess the difference in prevalence rates of sexual activity and the mean age at first sexual intercourse between boys and girls.

Results

The prevalence of current and/or previous sexual activity was 27.3% (95% CI 23.9–30.8%). It was 51.1% in boys as compared with 15.0% in girls ($P < 0.001$).

Mean age (\pm SD) at first sexual intercourse was 15.58 \pm 1.61 years. Boys engaged in sexual activity at earlier age than girls (mean age: 15.3 years in boys vs. 16.2 years in girls, $P < 0.001$).

Conclusions

Given the early age of engagement in sexual activity, effective school-based prevention programmes against sexually transmitted infections should be implemented in Albania.

Interventions for Promoting Early Child development for Health: an Environmental Scan with special reference to Scotland

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Aims

To provide policy-makers with a synthesis of international research evidence that assesses the effectiveness of early childhood interventions aimed at equitably promoting cognitive and social development and suggest potential areas for action in Scotland.

Methods

A rapid review was conducted of review level studies of early childhood interventions with outcome measures relating to child cognitive–language or social–emotional development, subsequent academic and life achievement. Websites were searched and interviews were conducted to identify relevant interventions, policies and programmes delivered in Scotland.

Results

Early childhood intervention programmes can reduce disadvantage due to social and environmental factors. Significant improvements in all domains of child development, school achievement, delinquency and crime prevention, and life success have been demonstrated with the greatest effects seen in those at highest social risk. Mixed, two-generation approaches, that is, a combination of centre and home-based programmes focusing on children and parents, appear to be effective.

Conclusions

Programmes should provide a universal seamless continuum of care and support from pregnancy through to school entry with the intensity of support graded according to need. The current information systems in Scotland would be inadequate for monitoring the effects of early childhood interventions especially in relation to cognitive–language and social–emotional development.

Environmental Scan of Adolescent and Young Adulthood Health in Scotland: interventions that address multiple risk behaviours or take a generic approach to risk in youth

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Aims

We aimed to describe existing data sources for adolescent risk behaviour indicators in Scotland, investigate how risk behaviours cluster, and identify promising interventions to reduce multiple risk behaviour (substance use and sexual risk behaviour).

Methods

We identified surveys and studies of youth risk behaviour in Scotland, and performed a secondary analysis of existing cohort studies to investigate clustering between risk behaviours. We reviewed review-level studies of interventions with single or multiple risk behaviour outcomes, and reviewed primary studies of interventions with multiple risk behaviour outcomes.

Results

Substance use and sexual risk behaviour data are collected in surveillance surveys of adolescent health. Fewer data are collected on risk behaviours among older adolescents and young adults. Substance use is associated with a greater risk of sexual risk behaviour, and vice versa.

Few studies evaluated interventions where outcomes were collected on substance use and sexual risk behaviour. The most promising approaches address more than one domain of risk and protective factors for adolescent risk behaviour. This is supported by data from interventions where single risk behaviour outcomes were collected.

Conclusions

A multi-component, cross-domain approach is needed to effectively reduce risk behaviour in young people. This approach requires a process of implementation which achieves co-ordinated cross-sectoral collaboration.

Environmental scan of potential policy interventions to tackle obesogenic aspects of the built environment

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Aims

The aim of the environmental scan is to present a broad synthesis of the published evidence on obesity causation and prevention in adults of working age, in a form that would be of most use to policy makers in developing effective interventions.

Methods

A semi-systematic review of 86 reviews and 37 primary studies was conducted. An additional 51 publications were identified by citation tracking and reference lists. Evidence was organized around the ANGELO framework, namely: Physical Environment; Economic Environment; Political Environment and Socio-cultural Environment.

Results

Effect sizes were modest across all intervention domains and of order of $\leq 10\%$ of target populations changing behaviour or reporting weight benefits. At the local or institutional level, greater success was seen with multi-component interventions. Society-wide changes were only seen with high levels of government commitment, for example, the active travel improvements in northern Europe. Developing interventions on nutrition can be especially difficult due to the difficulty of challenging commercial and economic interests.

Conclusions

An incomplete evidence base and modest effect sizes ought not to be a barrier to action in the case of obesity. It is important to learn lessons from successes from other countries where concerted political will and appropriate investments have been shown to impact on behaviours at the population level.

Alcohol (ab)use and health among Dutch college students

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Background

Alcohol use among students of tertiary education is on the rise worldwide regarding the prevalence, the incidence of drinking sessions and binge drinking, and closing of the gender gap in alcohol use, abuse and dependence. Nearly all students drink alcohol. Students drink more than non-studying peers, especially those in student societies. Binge drinking needs to be reduced because of its negative effects on health and academic performance.

Methods

A pilot questionnaire with questions on health, quality of life and life style (including alcohol consumption) was distributed to students in the waiting room of the Student Health Service of the University of Amsterdam (march–april 2010). Response rate: 70%. Alcohol use and abuse is measured with the AUDIT. Regressions of alcohol use on measures of physical and psychological health (SF-36, k-6) and grade point average were performed, controlling for gender and age.

Results

In our sample of 265 Amsterdam students 96% uses alcohol. Of the male population 60% drinks 2–3 times a week, 18% 4 or more times. Of the women 49% drinks 2–3 times a week, 14% 4 or more times. Regarding binge drinking, 69% of college students report drinking 4–6 or more drinks in one sitting at least once a month, men with 73% (6 or more) against women with 67% (4 or more). Alcohol (ab)use is significantly and negatively ($\beta = -.15$) related to general health ($\Delta R^2 = .02$, $p \leq .05$). And alcohol (ab)use is significantly and negatively ($\beta = -.20$) related to grade point average ($\Delta R^2 = .04$, $p \leq .01$). No significant results were demonstrated for psychological health.

Conclusions

Our preliminary results on alcohol use and abuse indeed show a negative correlation with health and study results. These findings support steps with regard to self-regulation of (at risk-) students, including individual feedback and a social norms intervention.

Normative misperceptions of alcohol behaviours in students

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Background

Research in the American college system has demonstrated that students significantly over-estimate rates of alcohol misuse in their peers. Correction of these misperceptions has become adopted as a widely used and apparently successful method of reducing alcohol related harm in the USA, as evidenced in a recent systematic review. However there is lack of research student populations outside the USA.

Methods

The study to be presented reports an ongoing annual survey of approximately 30 000 students at 200 university and college sites in the UK on misperceptions of alcohol use. These figures have also been used to create an alcohol education campaign, which is currently being implemented at selected sites.

Results

Preliminary analyses of the results indicate that on average students consume 5 alcoholic drinks once a week, but significantly overestimate ($p < 0.05$) their peers to drink 7 alcoholic drinks twice a week. Furthermore the size of these misperceptions vary by several factors including gender, age, ethnicity, residence, social interaction with other students and how much of a typical student the respondent perceive themselves to be. Perceived alcohol use of peers was also found to be correlated with personal behaviour ($r = 0.5$), an effect which in keeping with work in the USA increased as social distance fell.

Conclusions

This provides further evidence for social norms theory and highlights several areas of attention for future student health interventions. The data also compares with similar, smaller scale projects elsewhere in Europe and illustrates some cross-cultural differences in misperceptions.

Online-intervention alcohol—a new gender-related module for the portal ‘Rauschbarometer’

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Background

The portal ‘Rauschbarometer’ with its online counselling service has established itself as a starting point for information about counselling services and self-help in the context of addiction in the Hamburg region. The module ‘Online Intervention Alcohol’ (www.trink-kompass.de) has been implemented in April 2010. Users will be channelled according to their gender and age to gender-specific information and interventions.

Methods

The implemented user-tracking is being used continuously to identify weaknesses and strong-points of the approach. A workshop was organized to ensure the participation and the input of experts of both sexes and from various professional background. A usability pre-test will be designed in order to gain information on gender-related acceptance, appropriateness and manageability of the tool.

Results

In 2009 over 59 000 users visited the portal. Counselling service pages accounted for about half of these. Almost half of the test results showed moderate consumption or abstinence. The most popular term searched for was ‘alcohol’. Online-counselling was very popular among females with a wide range of drug-related problems. The workshop highlighted the various aspects where target-group/gender specific intervention is required or preferable.

Conclusions

The portal www.rauschbarometer.de is well established in Hamburg. In order to motivate persons with problematic alcohol use to seek help and/or actually change their drinking behaviour the new self-management-module has been implemented. The gender-related approach is hoped to further the motivation and enhance the percentage of users with benefit from the program.

Chronic diseases and elderly

Chronic conditions among the elderly: results of the minimum European health module and self-reported chronic diseases in a sample of community-dwelling adults aged ≥ 65 in Germany

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Background

Chronic diseases are of increasing importance due to their impact on health expenditure and the ageing of the population. As part of the European Health Survey (EHIS), a short questionnaire (Minimal European Health Module, MEHM) has been applied to determine the prevalence of persons with one or more chronic long-standing conditions (CLC). We examined the association between the CLC and self-reported chronic conditions in a population-based health survey of persons ≥ 65 years.

Methods

The Study, Operationalizing Multimorbidity and Autonomy for Health Services Research in Aging Populations’ (OMAHA) explores methods to assess the impact of co- and multimorbidity in longitudinal studies of the elderly population in Germany. In OMAHA_Tel, we recontacted participants ($N = 1223$) of previous national health telephone surveys. A total of 730 individuals (59.7%) completed a computer-assisted questionnaire, covering 29 different chronic conditions as well as the MEHM. Chi-square statistics and logistic

regression were applied to examine the association between CLC and self-reported chronic conditions.

Results

Overall, 63.0% of the respondents (65.1% females/60.1% males) reported CLC; the proportion increases with age. Of these, 97.8% also reported at least one specific chronic condition as compared with 83% among persons without CLC. The average number of chronic health problems was significantly higher among those with than without CLC (4.2 vs. 2.0, $P < 0.001$). The most prevalent conditions among persons with CLC were hypertension (65.2% females/64.0% males), joint complaints (65.2/49.5%), hypercholesterolemia (50.0/39.4%), osteoarthritis (46.1/33.7%) and chronic back pain (40.2/24.7%). Participants without CLC showed a high prevalence of joint complaints (46.9% females/32.5% males), hypertension (38.9/36.8%) and osteoarthritis (30.6/17.7%).

Conclusions

The CLC question is likely to underestimate chronic disease morbidity among the elderly. Further research is needed to explore whether revised wording of the question is helpful or whether groups of specific health problems have to be covered separately.

How do IBD patients search for information on their disease?—Findings within a national clinical cohort study

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Introduction

Inflammatory bowel disease (IBD) is a chronic condition affecting relatively young patients. It is unclear how these patients search for information on their disease. The goal of this survey was to consider patient input in order to develop a specific website by identifying relevant target information more precisely.

Methods

The Swiss Inflammatory Bowel Disease Cohort (SIBDC) started in November 2006. Two short questionnaires were sent to all the patients in the cohort. The first was used to identify current information resources used by patients. The second was a narrative questionnaire used to identify which kind of specific information patients were seeking. The questionnaire was divided into four parts each focusing on a different phase of disease history.

Results

Questionnaires were sent to the 1566 IBD patients enrolled in the cohort from November 2006 to September 2009. A total of 64 were excluded (false address). Only 681 patients (45%) replied. The characteristics of those who responded were quite similar in proportion to the whole cohort. Patients consulted the following information sources to gather information on their disease: gastroenterologist (90%), Internet (67%), family doctor (38%), books (30%), TV (17%) and patient associations (13%). A total of 586 (86%) patients accessed the Internet at home or at work, 60% having access on a daily basis. The information currently sought by patients on websites was advances in research (37%), therapies (especially adverse effects of therapy and alternative medicine) (25%) and daily disease management tips (15%). Patients sought information at the time of initial symptoms, mainly through physicians or the Internet; 48% were satisfied with what they found. A total of 47% of patients sought information just after initial diagnosis, 52% during flares or complications and 40% in periods of remission. The main information topic consulted during relapses concerned therapies (41% of patients who are seeking information); during periods of disease remission it was mostly linked to advances in research (44%).

Conclusions

This survey performed in a large national IBD cohort reports on how patients look for information on their chronic disease. These results will facilitate the creation of an information website tailored to patients' needs.

Surgical and anaesthesiological timing, cost, length of stay evaluation in robot assisted and open radical prostatectomy in Italy

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Background

Prostate cancer involves a lower quality of life and early death in men >65 years old: it is the most common malignancy of the genitourinary tract and although treatments are progressively evolving, many studies confirm the surgical one as the best.

We compare robot radical prostatectomy and open surgery in the management of localized prostate cancer and analyse if the two techniques influence the surgeon and anaesthetist time.

Methods

The study, performed in 2008, was a single institution (Hospital S. Giovanni—Turin), a randomized comparison of

timing, length of stay and costs in 24 patients undergoing robot-assisted prostatectomy and 99 undergoing other techniques.

Results

While the robot average length of stay was 7.04 days (95% CI 5.95–8.14), with open surgery it was 8.10 days (95% CI 7.13–9.07). Variances are not homogeneous (Levene's Test P -value = 0.47) and there is no difference between groups (P = 0.30). The costs of pharmacy, laboratory, radiology, anaesthesiological drugs are more expensive with robot vs. open surgery from 50% to 170%. Only transfusion and pathology costs are cheaper.

The anaesthetic time is always statistically significant higher than surgeon time for both techniques (P = 0.000 in both).

The correlation between different times for the two models is perfect among 82% and 100% with values statistically significant (P = 0.000).

The growth pattern of the anaesthetist time vs. surgeon time is estimated according to a model of a compound exponential growth curve model (P = 0.000).

Conclusions

Robot seems more expensive and anaesthetic and surgeon times are higher than open surgery.

Increasing surgeon time raises anaesthetic time but this does not depend on the techniques.

Setup of a Dutch system to collect diabetes care data

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Issue

Collecting reliable data from different sources and turning them into useful information for all interested parties is a long process that can be hampered by many obstacles. Data routinely collected at the point of care can be complex to share due to insufficient interoperability of database systems and restrictions imposed by privacy legislation. The Netherlands is no exception to this problem.

Description

The Dutch system under development involves two tiers linking regional databases to the national coordinating centre. Each regional database sends individual data with a key to a trusted third party. This key can not be traced back to the single individual neither by the sender nor by the trusted third party. The third party links diabetes data to other databases, creating a large scale datawarehouse, which can be used to conduct research in a secure framework. A national system is built upon standards defined by the EU BIRO project. It exports data from heterogeneous sources towards a common format maintained by different regional databases. Aggregate data are transmitted to an international server for international comparisons.

Results

ZorgTTP (Zorg Trusted Third Party) has planned the key system, which will allow guaranteeing the highest level of privacy protection. The BIRO system has been successfully tested on top of the Hoorn region diabetes database. Results will be presented at the Conference. Four more regions will be included in 2010/2011, including primary care centres.

Lessons

Best use of available ICT approaches can make real time national/international benchmarking of chronic disease indicators a reality. The Dutch system merges innovative ideas that fully respect National/European privacy laws and are extremely sustainable.

The effects of motivations and female labour participation on informal caregiving

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Background

On the one hand, Dutch policies are aimed at promoting informal caregiving by emphasizing personal responsibility. On the other hand, general policy focuses on increasing (female) labour participation. This study explores the effects of these policies on the supply and intensity of informal care in the Netherlands.

Methods

Data was used from the 2004 baseline wave of the Survey of Health, Ageing and Retirement in Europe (SHARE) of people aged ≥ 50 years ($N=1406$). Informal caregiving was examined in the context of other activities such as volunteer work and sports in terms of numbers of caregivers and intensity of care. Personal responsibility was indicated by the reasons why people perform an activity such as: 'Because I'm needed', 'Because I feel obligated'. Female labour participation was defined as the number of women with a paying job.

Results

Multivariate logistic regression analyses showed that motivation is strongly associated with the number of caregivers and the labour participation of women with the intensity of informal care. Simulations have shown that an increased feeling of being needed and obligations are associated with more informal caregivers, up to a potential rise of 25%. Higher female labour participation decreases the number of hours spent on care with an average of 1%.

Conclusions

Motivation and labour participation have different effects on informal caregiving. The focus on personal responsibility is likely to be an incentive to start providing informal care. The finding that increased female labour participation is associated with less intense care suggests a decreased availability of elderly working people for informal care.

Relationship between the metabolic control, cardiorespiratory endurance and the quality of life in children and adolescents with type 1 diabetes mellitus

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Background

Children suffering in type 1 diabetes look and feel healthy with proper care and go on to live productive lives just like other kids of their ages.

Objective

To come to know the relationship between the perception of quality of life, the cardiorespiratory endurance and the metabolic control in children and adolescents suffering from type 1 diabetes.

Methods

A total of 97 type 1 diabetes patients (45 girls and 52 boys) aged 8–18 years old (mean 13.45 ± 2.98) took part in this cross-sectional survey in Autumn of 2009. The young patients completed the Pediatric Quality of Life InventoryTM 3.0 Diabetes Module and carried out the 20 m multistage aerobic shuttle run to estimate the maximal oxygen consumption (VO_2max) proposed by Léger et al. Checking the metabolic control HbA1c was taken in the Diabetes Centre of the county hospital in Miskolc. SPSS 17.0 Statistics Software was used for data analysis.

Results

There was statistically significant negative moderate correlation between metabolic control (HbA1c) and the maximal aerobic endurance (VO_2max) ($r=-0.338$; $P=0.001$). There was statistically significant weak positive correlation between QoL and VO_2max ($r=+0.222$; $P=0.029$). There was not significant correlation between the HbA1c and the QoL.

Conclusions

The quality of life is the person's subjective opinion about his or her well-being and health status. That might be the reason that we found no connection between the subjects' quality of life and the metabolic control expressed by the HbA1c. However, higher maximal oxygen uptake is associated with better metabolic control and higher QoL. These findings underline the positive impact of good cardiorespiratory endurance on both metabolic control and quality of life of children with type 1 diabetes.

Behavioural risk factors for chronic diseases: how often are health workers screening their blood pressure, blood sugar and cholesterol?

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Background

The aim of this study is to determine the screening behaviour of health professionals as acting a role on counselling patients about screenings.

Methods

A cross-sectional study was carried out using a questionnaire administered to 835 health care professionals in the city centre of Yozgat. Study population was comprised of all health professionals working in city (151 physicians, 84 other health profession, 325 nurses and 275 health technician). We used X2 tests and forward logistic regression to assess the relationships between variables.

Results

A total of 52.7% of the health personnel had not completed their routine health controls, 8.0% did not have their blood pressure taken, 17.2% did not have their blood glucose measured in the past 2 years and 17.4% did not have their cholesterol measured in the past 5 years. The risk of not having their blood pressure, blood glucose and cholesterol measured in due time, was higher in men than women, 3.36, 2.32, 1.98 times, respectively; was higher in people who were separated from their spouses or else who were widowers compared to married, 4.89, 3.19, 4.56 times, respectively; and was higher in singles when compared with married—2.38, 1.71 times, respectively. Furthermore, not having their blood pressure taken appropriately was 2.00 times higher in people who stated that they were not satisfied with their lives, compared with those that stated that they were; for cholesterol, this was higher in the 25–34 age group and in ≥ 45 age group compared with the 18–24 age group, 2.00 and 6.94 times, respectively; and 1.95 times higher in people with health/disease issues compared with those without. Among the ones that did carry out their necessary measurements, 11.4% had high blood pressure, 6.1% had high blood glucose and 27.0% had high cholesterol.

Conclusions

Approximately one-tenth of the health personnel aged ≥ 35 years, did not have their blood pressure, blood sugar and cholesterol measured in due time. A health personnel that does not take the necessary care for his/her own health, would hardly be capable of advising the people they are serving to, or even actualizing the necessary health controls regularly.

Patient perspective of barriers to adherence—results of European survey

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Aims

Approximately 50% of patients are non-adherent with their treatments for both chronic and acute conditions. Thus, non-adherence is a major barrier for realising the benefits of evidence-based therapies. This phenomenon has a number of reasons, of which some are related to patients, and the others are related to the condition, therapy, healthcare workers and healthcare system, and social factors. In order to assess the patient perception of barriers to adherence, an international survey was designed.

Design and Methods

This was a web-enabled survey in 16 European countries. A panel of validated questionnaires assessing adherence and its determinants (i.e. IPQ, BMQ, TPB, BBQ, MARS, and Morisky questionnaire) was provided to the patients in these countries with the aim to achieve at least 322 respondents in each country. Patients were invited to participate in a survey with web-based invitations, and information provided at their general practitioner's practices.

Results

The analysis of data point at several behavioural, cognitive, and ecological factors as important predictors of adherence variation. Multifactor analysis will enable the construction of a model that explains the interrelations between these factors and adherence.

Conclusions

Evidence-based policy aiming at the reduction of the burden of non-adherence needs to take into account the patient perspective of the barriers to adherence. Thus, the results of this survey conducted within European project on non-adherence (ABC Project) provide useful information for both practitioners and policy makers.

Social participation and psychological well-being in recent vs. established rheumatoid arthritis patients

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Background

The aim of this study was to explore the role of social participation and its association with mental health in recently diagnosed vs. established rheumatoid arthritis (RA) patients.

Methods

The data were collected at outpatient rheumatology clinics in Eastern Slovakia. The sample consisted of 132 established patients (age 59 ± 10 years; disease duration 15.6 ± 3.4 years; 80% women) and 99 recent patients (age 53 ± 12 ; disease duration 2.9 ± 1.3 years 69% women). Patients underwent routine examination, laboratory tests, participated in a structured interview and completed questionnaires regarding their psychological well-being, functional status and social participation. Additional data were obtained from the medical files. Recent and established groups were compared applying independent *t*-tests. Hierarchical regression models were built to explore the multivariate associations of psychological well-being and social participation within the two groups.

Results

Significant relationship was found between psychological well-being and functional status in early RA patients but these variables were found to be unrelated in the established group. Contrary to this social participation was constantly and highly significantly related to psychological well-being in both groups. Hierarchical regression models revealed that within both the established the recent RA groups social participation served as the most robust explanatory variable after disease related variables were controlled for. In total, social participation explained 26 and 21% ($P < 0.001$) of the variance in studied groups early and established RA patients, respectively.

Conclusions

This study found a strong and consistent relationship between social participation and psychological well-being in both studied groups (early and established RA patients). Presented results suggest that supporting interventions aiming to improve participation opportunities is significantly beneficial for the studied patient group.

Environmental health and safety

Respiratory health risks of indoor air pollution by solid fuels combustion in Slovakian Roma community

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Background and Significance

More than three billion people worldwide continue to depend on solid fuels, including biomass fuels (wood, dung, agricultural residues) and coal, for their energy needs. According to The world health report 2002 indoor air pollution is responsible for 2.7% of the global burden of disease.

Objectives:

to improve the indoor air quality in the Roma villages through identification of main hazard and education the inhabitants about possible health risks.

Methods of analysis

The exposure of the population was assessed by the environmental questionnaire, which was partly oriented on risk evaluation. The respondents were asked what they use for heating, cooking, how often they ventilate their houses, how often they vacuum etc. The respiratory health of the subjects was assessed by respiratory questionnaire. The health outcome assessment was focused primarily on respiratory symptoms rather than disease (e.g. coughing, sneezing, incidence of higher and lower airway infection symptoms, asthmatic and allergic symptoms etc.).

Results

From all 53 Slovakian Roma respondents, we found out that from all solid fuels users more than half (63%) suffers of chronic cough but at the other side less of them were complain about the sputum expectoration (37%). Respiratory health problems signed mostly those who use stoves which was made or repaired themselves and which are not tightly sealed. Combustion products are venting by leakage and damaged

chimneys and smoke is blown indoor. Indoor environment in these households is vented deficiently, most at cold period of the year, and only air leak is through the microscopic chinks of windows and doors.

Conclusion

The results of the study will contribute to the understanding and describing of indoor air pollution in Roma villages, the exposure of the inhabitants and the possible health outcomes and solutions.

Spatial modelling of population vulnerability to heatwaves in the Lisbon metropolitan area

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Health Impacts of heat waves have been mainly studied at a national or regional level. However, local variations in mortality exist, associated, in one hand, with local climatic differences, due to features such as urbanization and, in other hand, with vulnerability factors (depending on demographic and socio-economic features of populations).

Recognizing that few studies had tried to investigate the mortality spatial variations in urban environments, at a fine scale, an ongoing investigation has been conceived to fill this gap. We have developed a conceptual geospatial analysis method of death risk during heat waves, which fits into the global risk assessment framework for natural disasters and is intended to be used primarily in urban areas. Risk is assessed taking into account the spatial intersection of information between the potential hazardous areas and the vulnerability indexes within those areas, in the Lisbon Metropolitan Area.

Daily mortality data were supplied by the Health National Authority, with description of age, sex and cause of death. Hazard is represented mainly by temperature and air pollution. Vulnerability is a result on personal sensitivity and exposure. Personal sensitivity is assessed considering individual constitutional and demographic factors as well as socio, cultural and economic variables at different levels. Daily mobility determines the population exposure to heat.

A comparison between Lisbon and Berlin risk of death by heat wave will be performed, in the framework of an international project, regarding present environmental and socio-economic conditions as well as future climate change scenarios under the predicted demographic and urbanization changes.

Crossing boundaries—why community severance needs an interdisciplinary approach

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Background

Community severance (CS) occurs where road traffic (speed or volume) inhibits access to goods, services or people. CS greatly reduces the number of social contacts, thus has been assumed to lead to higher morbidity and mortality, especially among the elderly. We reviewed the literature to assess the extent of evidence on its effects on health.

Methods

A 2001 search using a combination of specified search terms, of Medline, BIDS International Bibliography of the Social Sciences, Embase, Sociological Abstracts, PsycInfo and Transport Research Laboratory library was updated in March 2010 by searching for 'community severance' in PubMed and

UCL's MetaLib collection of transport, planning, and engineering databases.

Results

CS cannot be quantified effectively at present. No studies explore the effects of CS on mental or physical health, nor have studies of reductions in social contacts as a result of changes in roads or traffic examined ensuing morbidity or mortality. What evidence there is indicates that traffic volume and speed interfere with normal activities and reduce social contacts; studies demonstrate that reduced social contact and access to goods and services are detrimental to health. CS particularly affects older people and children. Although <10% of participants in one study avoided activities because of reluctance to cross the main road, this increased significantly with age, including among fully mobile older people. Increasing traffic affects road traffic collisions, perceived risk of injury and subsequent curtailment of healthy behaviours. Children, in particular, experience greater restriction on their independent mobility, affecting levels of physical activity and, consequently, obesity.

Conclusions

It is likely, but unproven, that CS adversely affects health and well-being. CS would reduce with spatial planning and transport policies that encourage modal shift from car use. Robust interdisciplinary methods to measure the health impact of residential CS need to be developed urgently.

World tourism and waterborne infectious diseases

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The tourism sector has very substantial weight in the global economy. However, it also causes a significant increase in pressure on water resources in countries that are top tourist destinations. Some reports suggest that this pressure may have a negative impact on the quality of potable water and provoke the emergence of waterborne infectious diseases.

The aim of this study is to determine the prevalence of infectious waterborne diseases in different tourist areas around the world.

We selected eight diseases usually transmitted by water, for which there was sufficient accessible information in international records: cholera, salmonellosis, brucellosis, typhoid and paratyphoid fever, hepatitis A, leptospirosis, shigellosis and campylobacteriosis. Countries and tourist areas that published their notification records of these diseases were chosen. An annual average of reported cases and rate per million inhabitants by country and tourist area was obtained from the reported cases, for 2002–05.

During this period, the annual average number of cases of waterborne infectious diseases per million inhabitants was the following: Japan, 52.12; USA, 234.13; EU Mediterranean countries (Portugal, Spain, France, Italy and Greece), 248.40; EU Mediterranean countries and Turkey, 451.00; Canada, 520.54; EU-27, 872.13; Scandinavian countries (Norway, Sweden and Denmark), 1107.35; western and central Europe (UK, Ireland, Germany, Benelux), 1226.50; Alpine Countries (Switzerland, Austria, Slovenia), 1383.59.

The USA and EU Mediterranean countries have very low rates (one-third of the EU-27 average and a quarter of other European countries excluding Mediterranean countries) while occupying the top positions in ranking as tourist attractions. Therefore, our results do not support the negative relationship, traditionally presumed, between tourism and water quality.

Adapting the health care system to climate change: results of a European inventory

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Background

Health impacts of climate (change) can be ordered in three categories: direct impacts through extreme weather events (heat stress, flooding, cold spells), secondary effects when weather patterns influence other local systems (e.g. agriculture, food production, disease vectors) that in turn affect health, and tertiary effects that stem from global impacts that affect the local health situation through changes in global trade, wars and immigration. The effects of the secondary and especially the third category are likely the strongest ones in countries with a temperate climate. But the health care systems are not yet prepared to adapt to tertiary impacts nor is this possible as long as scenarios and clear decisions in other policy fields are lacking.

Methods

Therefore, we concentrate on adaptation processes in which the health care system can take the lead. These processes were ordered in a table linking adaptation measures with relevant stressors. Based on this system European experts were asked to provide the information regarding their own country.

Results

Adaptation measures do take place but are often poorly coordinated. Adaptation simply happens and data are collected (if at all) by different institutions both on a national and on regional levels. Some national institutes try to coordinate the work but often only concentrate on selected aspects of this broad theme. From some countries, we received convincing information that they still lack any national adaptation strategy and their preparatory work regarding the health sector has not started yet. Other countries drafted national adaptation strategies but health is not featured dominantly while in other national strategies the health sector is well integrated.

Conclusions

Climate change has a long-term perspective. So education now of young health professionals is essential to prepare them for future decades. Little is seen yet in this regard in the European medical curricula.

Collaborative development of a neonatal sepsis prevention checklist

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Bamyan Provincial Hospital, a Ministry Of Public Health facility, is implemented and managed by the Aga Khan Health Service-Afghanistan. The Provincial Hospital is the natural focal point for secondary care in the Central Highlands of Afghanistan and serves a population of over 500 000 from across the region. The people of Bamyan suffer some of the highest Maternal Mortality and Newborn and Infant Mortality Rates in the world. Neonatal sepsis is one of the major causes of inpatient admission in Bamyan Hospital. The facility plays a critical role in supporting safe deliveries for Mothers who have limited understanding of risks for their newborns, limited resources in their homes and villages and limited access to health care. During Autumn 2008, the Heads of Paediatrics and OBGYN noted that there were persistent, disturbingly high and increasing rates of neonatal sepsis among deliveries by Mothers from all areas of the community. Hospital Management and the respective Department Heads agreed to focus attention on prevention of this deadly condition. The development process of an original and contextually specific checklist has resulted in a marked and immediate decrease in

the rate of neonatal sepsis among babies delivered at the Hospital.

Environmental measures for traffic injury prevention. GIS methodology

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Low- and middle-income countries still lack proper surveillance such as registries that document traffic fatal and non-fatal injuries. Literature indicates that traffic injuries prevention can be enhanced based on rigorous documentation and reliable data. The Romanian Road Safety Plan is a national centralized programme, offering little room for local initiative and evidence based approaches. The traffic injury prevention measures implemented so far involve very few health professional and disregard new technologies.

An innovative pilot-project conducted in Cluj-Napoca, Romania used police reports and emergency department data to draw a map of accidents using Global Information Systems (GIS) technology. According to the Police Department Database pedestrian injuries account for 70% of traffic related injuries. More than a third of the traffic crashes occurred under normal weather and road conditions, during daylight and on dry road. GIS has been used to identify traffic injury hot spots with the primary scope of developing future injury prevention strategies in Cluj-Napoca, Romania. This local need based technologically enhanced initiative, uses GIS to assess high risk areas of the city and to allow the local Police Departments to take corrective actions. The digital map enables to locate precisely the hotspots from the city and to develop a need-based intervention plan.

GIS has proved to be a successful tool, specific hotspots being detected and mapped. Further research is needed to determine environmental related causes. Furthermore, population-based educational interventions are encouraged.

Nutritional quality in food services: service impact assessment

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Issue

Food services have a significant role in maintaining or developing public health. However, public food services are under heavy economic pressure and organizational changes are common. The nutritional quality of food is in the danger of being forgotten.

The Services Impact Assessment (SIA) method was developed at JAMK as a tool to evaluate the impact of services. The SIA method is based on the Human Impact Assessment and the Health Impact Assessment methods. The SIA method differs from other methods in two ways: first, the impacts are assessed from several perspectives. Second, the SIA method aims to give quite accurate economic estimates.

Description of the problem

This article is a case study description of how the SIA method can be used to focus on the nutritional quality of food when the public food services are re-organized. The SIA method was used in a small rural municipality with their food service development process in its planning phase. The options for the food service organization were: no changes, one municipal food service organization, cooperation with neighbour organization or outsourcing the food services.

Results

The method showed that one municipal food service organization was best solution in this case from the point of

view of nutritional quality. The method estimated the possible risks and benefits of the options. The method helped to choose the best solution.

Lessons

The SIA method is useful in ensuring the nutritional quality when food services are re-organized. The method helps to see where the possible problems might occur or in which part of the process more competencies are needed. The SIA method could be used in evaluating other services concerning public health issues.

Methadone as the only opiate among deaths due to acute reaction to psychoactive drugs

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Background

Acute reaction to psychoactive drugs (ARPD) is one of the main causes of death associated to illicit drug use. Among ARPD deaths reported in Spain in 2007, methadone was the only opiate found in toxicological analysis of 24.4% of cases.

Substitution therapy with methadone is an effective treatment for heroin dependence. Numerous studies have shown that methadone maintenance therapy (MMT) is well accepted by heroin-dependent patients, resulting in significant benefits in terms of quality of life, and associated morbidity and mortality.

The main objective of this study was to assess the feasibility of combining forensic data with drug treatment data to investigate determinants of ARPD deaths.

Methods

All cases in which methadone was the only opiate shown by toxicological analysis performed in ARPD cases identified by forensic pathologists in 2007 in several areas of Catalonia were included in the study.

In order to investigate the duration of treatment and daily dosages of methadone administered, a manual search was carried out within files integrated in the Catalan Drug Dependence Information System to locate cases that were in MMT when deaths were reported.

Results

A total of 98 ARPD deaths were reported in the study period. In 25 cases (25.5%), toxicological analysis revealed that methadone or related metabolites were the only opiates present in the biological samples studied. In a vast majority of cases, laboratory tests also revealed other substances, mainly cocaine or sedatives.

Active MMT when death occurred could be demonstrated for 11 cases (44.0%), with a mean daily dosage of 70.45 mg of methadone (15–230 mg), and a mean length of treatment of 1.2 years (range 2 days–6.8 years). Death occurred within the first 6 days after MMT initiation in five cases (45.5% of those in MMT or 20% of all cases investigated).

Conclusions

Forensic data are a useful and valuable source of information for the epidemiological analysis of drug abuse, injuries and intoxications.

In more than half of ARPD deaths in which methadone was the only opiate present, being in MMT when deceased could not be demonstrated, a finding that requires further investigation.

MMT must be started at low dosages with a close medical supervision to minimize the risk of ARPD.

Domestic injuries in children at the age of 1–5 years old

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Background

Analysis of mortality in 2000–05 showed that the most of deaths (53.3%) took place in younger age group, i.e. under the age of 5 years. Review of existing injury prevention programmes revealed that pre-school children remain the population uninvolved and uncovered with preventive activities. To improve such kind of injustice, we undertook first steps on identification of risk factors and circumstances of domestic injuries among children aged from 1 to 5 years old for further development of evidence-based preventive programmes.

Methods

We conducted the case–control study of cases in the population of children aged 1–5 years old who were hospitalized in 2008 to the Traumatological Department of Almaty City Child Clinic because of domestic injuries. The sample size was 478 cases. For analysis, we used statistical software packages. For analysis purposes we used ten predictors (e.g. age, gender, day and time of injury and etc.) whereas mechanism of injury, its severity, injury localization and etc. were assigned as dependent variables. In addition, we also used aggregated age variables, i.e. one of under three and another of pre-school children aged 3–5 years old because at the age of three children start to attend kindergarten and become more supervised.

Results

Approximately two-thirds of injured children were children under the age of 3 years (67%). The mean age was 2.18 years old (95% CI 2.07–2.29). More than half of injured children were boys (57.7%). The most frequent mechanism of injury among children under three was the contact with hot substances: water, food and household devices (73.5%). Children aged 3–5 years usually were hospitalized with fractures of upper extremities due to falls and contacts with furniture (30.7%). Children of pre-school age usually get injured during time of lunch and evening time.

Conclusions

Development and implementation of injury prevention strategy directed to pre-school children is strongly recommended. Good practice of other countries in addition to existing in the country practices should be combined and implemented on different levels (family, community) and in different settings (home, medical facilities, kindergarten, mosque/church and etc.).

Hospital waste management—Pombal health centre and their health extensions

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The hazardousness of hospital waste, for reasons of public health and risk of safety in infection nosocomial, is increasingly felt not only by health professionals and but also in the general population.

The main goal of this research was the evaluation of the knowledge, good practice and opinion of officials of the Pombal Health Centre (headquarters and extensions), face the problem of hospital waste and to assess how the facilities are prepared and equipped to deal with this problematic. This case study has realized in both locals: Pombal Health Centre headquarters, and their 18th health extensions. In this sense a questionnaire was passed to all health care professionals working directly with the hazardous hospital waste (doctors, nurses, technicians of diagnosis and therapy and auxiliary cleaning). Visits were also carried out to all units of health study in order to fill in a completed check-list based on existing legislation.

The statistical processing of collected data was carried out in the programme of statistical SPSS, version 13 for Windows. Of the eighteen health units only one seat, had a separate storage for this type of waste and in accordance with specified in Portuguese law (missing only emergency signalling). Of the remaining, 33% had one proper place (but needs to be updated) and 61% still use inappropriate spaces (like toilets, hallways, etc). With regard to questions posed to health professionals, it was found that the vast majority of the sample, 71.2%, responded correctly between one and five responses, from a total of eleven placed, i.e. less than half. However, 86% took up training on this subject. The majority of the sample, 58%, believes that applies the correct procedures for good practice when handling this type of waste. Regarding the resources they have at their disposal, 53% of respondents have a positive opinion against 47% showing negative view.

Nutrition and Health Claims: different requirements in different jurisdictions

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Background

Companies are increasingly producing foods that are designed to improve health and reduce risk factors for disease in addition to educating consumers about health issues. However, regulatory environments for making these claims

differ. The purpose of this paper was to review and compare the scientific and regulatory environments for nutrition and health claims on foodstuffs in the USA, Japan and the European Union.

Methods

A review of the literature and the relevant legislation in the three jurisdictions. Regulations are reviewed and scientific evidence requirements are outlined in each country.

Results

Full regulatory approval for nutrition and health claims across all three jurisdictions requires the support of robust scientific evidence. Full dossiers and detailed applications must be submitted to the regulators with full descriptions of the tests and studies completed during product development. However in the USA and Japan, an alternative process exists. A health claim that is suggested but not supported by scientific evidence is known as a qualified health claim. In the USA and Japan, it is possible to make qualified health claims whereas in Europe, this option is not legally permitted.

Conclusions/Value

This paper is of value to regulators and the food industry. It demonstrates the difference in regulatory environments in different jurisdictions which ultimately will lead to different claims being permitted in different countries. It will also lead to different levels of scientific support for similar claims which will lead to consumer confusion. Given the global nature of the food industry today, a consensus must be reached regarding the level of scientific evidence required to approve a health claim.

Health promotion

A benchmarking system for health promotion capacity building

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Issue/problem

There has not been any nationwide comparable information about health promotion activities in Finnish municipalities. The aim of the national development project (started in 2006) was to create a benchmarking tool for management, planning and evaluating health promotion.

Description of the problem

Development of a generic framework (applicable to all fields e.g. health care, education, physical activity etc.) was based on international literature on health promotion capacity building and quality management. Key characteristics for health promotion at the level of the organization are measured by seven dimensions:

- Commitment to the promotion of population health;
- Management;
- Common practices;
- Population health monitoring and needs assessment;
- Resources;
- Public participation/partnership in the planning and evaluation of health promotion services and
- Other core health promotion functions.

At present data are collected from surveys and registers. Nationwide survey data was collected from primary health care, schools and physical activity/sports. All answers were recoded to indicate the desired quality of the organization. In 2011, new data will be collected from municipal managers.

Results (effects/changes)

TEAviisari ('HPpointer') is a free benchmarking system in the internet (see www.thl.fi/teaviisari and click one of the pictures). In this system, anyone (e.g. inhabitants, officials or

decision-makers of the municipality) may: consider indicators of a municipality or region; compare two municipalities or regions with each other; and view the overall score of municipalities or regions within a certain area. TEAviisari is so far only in Finnish.

Lessons

TEAviisari shows that it is possible to create a tool which assesses organizational health promotion capacity and activity. It is a very promising tool for supporting local governments' planning, management and evaluation of its health promotion work. However, there is a clear need for further research for developing the indicators.

Pre-test materials to communicate the results of the Surveillance System on children's BMI, eating habits and physical activity to their families and paediatricians, Italy 2009

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Background

Following a nationwide test of a nutritional surveillance system carried out in 45 590 8-year old schoolchildren, the National Public Health Institute showed a high prevalence of overweight and obesity (36%), bad eating habits and sedentary lifestyles, and low parental perception of the problem. The aims of this study were to pre-test health education materials for two target populations: parents and paediatricians

Methods

An informative leaflet for parents and an informative chart for paediatricians have been produced. The leaflet contains the

important results from the Italian surveillance system and the evidence-based advices for the parents, while the chart also emphasises the important role of paediatricians. These materials were evaluated using two questionnaires: one for parents and the other for paediatricians. A descriptive analysis was performed using the data collected.

Results

Health professionals have delivered questionnaires to 813 parents of children in 49 primary schools, and 176 paediatricians. Parents evaluated the leaflet positively, but suggested that the number of messages be reduced underlining those that are essential and better explanation of what should be done to improve the well-being of their children giving clear messages. They also suggested that the explanations be improved using understandable graphics. Paediatricians suggested that the written part should be more concise leaving more space for graphs and charts.

Conclusions

To better communicate health risks and information to the public for promoting healthy lifestyles, the opinions and comments of the recipients of informative materials should be used to improve the drafts produced by communications professionals.

It's easier, cheaper and pleasanter by car—findings from a multi-method research programme on active, sustainable travel in Scotland

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Background

Improving physical activity and developing sustainable transport are high on political and public health agendas but car use continues to dominate. This multi-method research programme examined relevant national, regional and local policies and action plans; explored popular attitudes and perceptions regarding urban travel; and analysed travel-related data to ascertain trends and patterns in different modes of travel.

Methods

- Appraisal of national/regional and local transport-related strategies, policies and plans to assess the translation of aspiration into reality on the ground through prioritized/specified actions and resource allocation.
- Qualitative research using interviews and focus groups to explore cultural norms around urban travel.
- Analysis of secondary data from Census, Scottish Household Survey and other data sources to elicit patterns and trends in school travel, pedestrian road casualties and travel to work.

Results

- National, regional and local transport-related strategies, policies and plans support active, sustainable travel as an important outcome for individual and public health. There is little evidence of corresponding local prioritization and resource allocation and a 'business as usual' approach in transport and urban planning is evident.
- Despite a degree of multi-modality, overarching cultural norms towards convenience, time efficiency, perceptions of cost and safety favour less active travel choices.
- Data analysis illustrates major differences in mode of travel and pedestrian casualty rates by geographical area, population group and deprivation. Trend data for travel to work show increasing levels of car travel over time accompanied by less use of active modes.

Conclusions

Current infrastructure, planning and prevailing societal attitudes and norms promote car use over other more active modes. National and local leadership and reprioritization of

resources needs to take place to improve the environment for active, sustainable travel and to encourage change in societal and personal values required for modal shift. Learning from successful public health campaigns on issues such as smoking and road safety could be usefully applied in this arena.

MoveM8! A technology-based physical activity intervention for UK worksites: Results of a randomized controlled trial conducted from September 2009 to August 2010

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Background

Physical inactivity is one of the leading health risk factors for Europeans. Key government policies advocate promoting physical activity (PA) in the workplace as it is associated with 27% fewer sick days. MoveM8! is an e-mail and text messages (SMS) physical activity intervention based on the Theory of Planned Behaviour (TPB). The purpose of this study is to examine to what extent the addition of SMS to an e-mail based intervention influences PA behaviour.

Methods

In a randomized controlled trial, adults from 19 UK worksites were recruited and randomly assigned to one of two study conditions. Over 12 weeks, the control group received one e-mail per week and the intervention group received one e-mail and two SMS per week. Study outcomes, including PA level, motivation, self-efficacy and TPB constructs, are measured at baseline, 1, 2, 3 and 6 months.

Results

At baseline, there were 393 adults with an average age of 39.4 (SD = 11.7, min = 18, max = 63). They were predominantly female (78.9%), healthy (47.8% good health; 38.7% very good-excellent), highly motivated (mean = 7.3, SD = 1.9), moderately confident (mean = 6.4, SD = 2.2) to increase their PA and sedentary (average sitting time = 421.7 min/day, SD = 9.3).

Preliminary pre-intervention data show that for job-related PA, 78.4% engage in no vigorous activities, 71% do not engage in moderate, and 50.1% do not walk. For leisure time, 56.5% of the sample report not engaging in vigorous activities, 71.8% do not engage in moderate activities, whereas 65.1% report walking. Post-intervention data will be presented and discussed.

Conclusions

Using e-mails and text messages to promote healthy behaviours in workplaces shows great potential given the ability to reach large numbers of people at minimal cost. However, greater integration with workplace management and the built environment may be warranted to increase participation rates and workplace physical activity.

Assessment of the quality and effectiveness of (lifestyle) interventions

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Background

In the Netherlands, there is growing demand for insight into evidence-based practice and 'what' works in health promotion, particularly in the area of lifestyle interventions. Many interventions are performed, but there is very little

information about the quality and effectiveness of these interventions. For that reason, the Dutch Institute for Youth Interventions and the National Institute for Public Health and Environment have started a quality assessment system for youth and lifestyle interventions.

Objective

The aim is to provide professionals, policymakers and researchers with usable information about the quality and effectiveness of youth and lifestyle interventions.

Methods

This system consists of a Recognition Committee, a website and databases for lifestyle interventions (www.loketgezondleven.nl) and youth interventions www.nji.nl/jeugdinterventies), where professionals can find information about effectiveness and quality of these interventions.

The committee consist of experts in the field from the research, policy and practice arenas. Four levels of recognition are distinguished inspired by the evaluation framework for complex interventions to improve health from the UK Medical Research Council: (i) theoretically sound; (ii) probable effectiveness; (iii) established effectiveness; (iv) established cost-effectiveness. Specific criteria have been set for each level of admission, except for level 4 which will be included from 2011.

In the presentation, the criteria for these categories will be clarified.

Results

From 2008 until April 2010, 64 lifestyle interventions have been considered by the committees. Twenty-five interventions are recognized on the level of theoretically sound, four on the level of probably effectiveness and two on the level of established effectiveness.

Conclusion

It appears to be difficult for health promotion professionals to describe the theoretical basis of their interventions and evidence for effectiveness is lacking. Therefore, the Centre for Healthy Living is exploring closer collaboration with The Netherlands Organization for Health Research and Development to endorse continuity between development, evaluation and recognition.

Erosion of solidarity and failure to accumulate perceived cardiovascular risks among the Austrian public

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Background

Previous studies on the public's perception of cardiovascular risks mainly focused on the role of demographic differences (such as gender, socio-economic status) and subjective health on the perceived risk related to single risk behaviours. Little is known about how multiple risk factors jointly affect the perception of cardiovascular risks.

Methods

Vignette techniques were applied to investigate how risk behaviours (smoking, heavy episodic drinking, obesity) and uncontrollable risk factors (work-related stress, genetic predisposition), alone and in combination, affect the perceived risk of a major cardiovascular event (either myocardial infarction or stroke). Additionally, we explored whether these factors provoke an erosion of solidarity (operationalized via measuring the willingness to impose an increased risk premium on a person). A random sample from the general population ($n=265$) was presented one vignette of an incomplete 5+2 factorial design during a telephone interview.

Results

If risk factors were presented alone, participants highly overestimated the likelihood of a major cardiovascular event, but displayed a close solidarity with the described person of the vignette. If two risk factors were given simultaneously ('genetic predisposition and obesity', 'heavy episodic drinking and work-related stress'), the subjective probability of incidence declined. Participants erroneously assumed a compensative effect especially if binge drinking was perceived as a kind of self medication. If 'genetic predisposition' was combined with the modifiable risk factor 'obesity' a high odds ratio in favour of increasing health insurance premiums could be observed (OR = 7.3; 95% CI 1.75–30.50).

Conclusions

The results might be seen as an adverse effect of unwarily promoting concepts of individual responsibility towards health perfection and 'healthism'. Thus, future health promotion campaigns may better communicate the cumulative nature of multiple risk factors to eliminate health myths such as 'beneficial binge-drinking' and might be aware of potential unintended effects of intolerance and decreasing solidarity.

Towards Health Impact Assessment in Germany? Ten (partial) examples, analysed with a focus on 'integrative' features

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Context

In the European arena, Health Impact Assessment (HIA), either within Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA), or performed independently, evolves into comprehensive 'cultures', including, e.g. HIA conferences, guidelines and gateways. In Germany, there is little explicit reference to HIA. This article aims to illustrate that approaches towards HIA in Germany do exist.

Methods

From current and past activities of LIGA.NRW and predecessor institutes, 10 examples of health-related impact analyses were selected, based on a broad understanding of HIA. The HIAs are described and compared according to a set of descriptive (e.g. topic, qualitative and quantitative methods applied in the HIA) and evaluative (e.g. strengths and weaknesses of the HIA) criteria, with a focus on 'integrative' features.

Results

The set of HIAs covers a wide range of topics. The generic public health impact assessments included in this study refer to: 'European Employment Strategy', 'Housing policy North Rhine-Westphalia 2010', 'Joint spatial planning of six Ruhr area cities' and 'Demographic change in the Ruhr area'. Other impact assessments focus on environmental health topics, e.g. waste site extension, transport planning/urban ring road and drinking water privatization. Several of these assessments were (or are currently being) conducted within EC-funded projects. In general, our HIAs reflect the stepwise procedure as described in internationally available HIA guidelines. Most of them involve some level of quantification for selected health determinants; participatory elements are weaker developed.

Conclusions

In contrast with many other countries, in Germany the large potential of HIA for health protection and promotion is widely untapped. Beyond existing examples of feasibility, a broader debate on HIA is needed. Current auxiliary activities include a comparative analysis of HIA guidelines; the exploration of dedicated health plans on local/regional level to strengthen the health sector; and an initiative to study the whole 'family' of health-related impact assessments.

Severe lack of information concerning the sexual and reproductive health

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Background

It is well known that poverty is almost always associated with inequitable access to health services. The burden of reproductive and sexual ill-health is great in poor areas where health services are often scattered or physically inaccessible, poorly staffed, resourced and equipped. In Romania, this situation could be frequently found in rural areas. In this context, we have been running a research financially supported by CNCIS—UEFISCU, project PN II—IDEI code 72/2008, regarding the sexual and reproductive health of people living in rural and urban areas in South West Romania.

Methods

We applied a questionnaire with 111 items on 600 subjects for both men and women (plus other eight items for women) aged 18–75 years living in rural areas, equally distributed by gender, age groups and instruction level. This work presents data referring to the sources of information people had when about · sexual activity · sexually transmitted diseases (STD) · contraception methods.

Results

People got first information about sexuality at the age of 15.79 ± 2.58 , men earlier than women ($P = 0.046$). About 89% of the subjects had no classes of sexual education in school, whatever the instruction level. For all three issues mentioned above, the subjects got information most frequently from friends (28.2%, respectively, 20.7 and 18.7%), mass media and relatives and less frequently—from school (6.2%, respectively, 5.3 and 4%). When about sexuality, men preferred to ask their friends ($P < 0.001$), while women—their relatives ($P = 0.005$). During their teenage, the respondents discussed with their parents about sexual abstinence before marriage, menses and pregnancy, girls much more frequently than boys ($P < 0.001$).

Conclusions

Data analysis shows the reliable sources of information (physicians/nurses, medical books and especially the school) have an unacceptable low contribution in informing people from rural environment about sexual and reproductive well-being.

The first phase in intervention mapping in a Dutch neighbourhood: implications for the professionals

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Background

Local governments in The Netherlands are responsible for public health in their municipalities. Stimulating physical activity among inhabitants is a frequently applied preventive measure. In a neighbourhood with mainly lower Socio-economic situations (SES) inhabitants in Deventer, The Netherlands, all sorts of sports and active leisure activities were offered. The participation rate was low and mainly limited to people, who already were physically active. One of the problems of the sports professionals was how to reach and persuade the inactive majority of inhabitants. The supporting Saxion expertise centre therefore introduced intervention mapping.

Methods

Socio demographic figures were used to describe the population characteristics. Then the willingness to change physical behaviour was investigated. In the Deventer, 'Rivierenwijk' the Stages of Change (SOC) questionnaire regarding physical activity (available in Dutch, Turkish and English) was handed

out door by door at 1643 houses and recollected 3 days afterwards. At markets and community centres questionnaires were filled out immediately. This took place from October 2008 to January 2009. Data were processed with SPSS17.0.2.

Results

The number of inhabitants in the Rivierenwijk is 3.182. Approximately 34% is Dutch and 30% is Turkish. In this study, 60% is Dutch and 30% Turkish. A total of 745 people accepted the questionnaire, 231 responded. Turkish people are statistically significant ($P = 0.000$) less active and not willingly to become active than the Dutch.

Conclusions

Reaching the target population was extremely difficult. This has implications for the choice of interventions; organizing a soccer tournament, will only reach the active group. Even within the more or less selected group of respondents, the readiness to change behaviour was relatively low, but particularly low for the Turkish people. This exposes the necessity for the next phases of intervention mapping in this neighbourhood.

Benchmarking of health promotion capacity in Finnish health centres

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A nationwide benchmarking system consisting of (i) indicators depicting health promotion capacity (HPC) of municipalities and (ii) of a user interface that enables an extensive utilization of the indicators, was launched in March 2010. The database is organized according to a HPC framework consisting of seven dimensions: commitment, management, monitoring and needs assessment, resources, common practices, participation and other core functions. This work describes the stages of the method development.

The first set of data consists of a health centre survey that was conducted in 2008. The interrelationships between variables selected to describe the dimensions were examined for each dimension using Spearman's rank correlation. Each dimension was divided into partial sum variables, scaled from 0 to 100. An arithmetic mean of the partial sums was calculated to describe each dimension.

The analysis resulted in a total of 129 variables to describe six dimensions of health promotion capacity. The 'commitment' comprised 22 variables divided into four partial sums. The six partial sums of 'management' were based on 34 variables. 'Monitoring and needs assessment' had three parts (15 variables), 'resources' two (six variables) and 'common practices' five (43 variables). The nine variables of 'other core functions' formed three partial sums. There were no questions on 'participation' in the survey. Apart from the 'resources' dimension, the scores were statistically related both to each other ($r = 0.32$ – 0.59) and to the size of the health centre ($r = 0.15$ – 0.40). The 'resources' dimension was not related to other dimensions and had negative relation ($r = -0.16$) to the population base.

This process is the first step in formulating benchmarking on municipal health promotion capacity. The same process can and should be used to go through and develop indicators in other municipal sectors. In the future, it is essential to invest in validating the indicators and conducting necessary outcomes research.

Body mass index of Romanian adults and relation to self-perception of weight status

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Background

The study aimed to describe differences in mean BMI of Romanian adults by gender, area of residence, marital status and self-perception of weight.

Methods

The target population was represented by adults aged 20–64 years. A two-stage stratified sample of 3000 subjects was included in the survey, with a response rate of 93%. The respondents were nationwide representative, by age group, by gender and by residential area. A probability of 95% and a standard error of $\pm 1.8\%$ were considered for the study. The weight and height of the individuals were measured and BMI was calculated. Data collection was done in 2006.

Results

An average height of 175 and 164 cm were found in males and females, respectively. Significant differences of ~ 1 cm were found in favour of urban areas in both genders ($t = 2296$). The average weight of Romanian individuals was 78 kg in males and 65 kg in females, with significant higher mean weight in urban areas for both males and females ($t = 1989$). Mean BMI was higher in male (BMI = 25.43) than female (BMI = 24.22) ($t = 7804$) and in the married (BMI = 25.30) compared to unmarried (BMI = 23.42) ($t = 10782$). Based on WHO criteria 44% were overweight (33%) or obese (11%). However, only 25% of these participants believed they were overweight or obese.

Conclusions

BMI was related to gender, marital status and residence. Further monitoring is necessary to analyse the trend of the indicator in Romanian population and awareness campaigns for a healthy weight should be considered.

Organizations and their readiness for workplace health promotion

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Background

Researchers are merely speculating about the causes for low and heterogeneous prevalence of workplace health promotion (WHP). Systematic explanatory approaches might be discovered in the diversity of organizations whose organizational conditions are to be taken into account when considered for WHP projects. This dissertation assumes that different types of organizations require different types of WHP. The question that has to be answered is which type of WHP is appropriate for which type of organization.

Methods

An exploratory study of the organizational theoretical and cultural conditions for WHP should provide an answer to the problem. We look for possibilities to link WHP with classical, social, contingent, modern, systemic evolutionary and cultural approaches to organization theory through a theory-based exploration. Present hypotheses about the correlation between type of organization and WHP are summarized through an empirical-qualitative exploration based on a two-stage Expert-Delphi survey.

Results

Only cultural approaches offer rich linking possibilities. Due to specific and relevant health-related values, beliefs and attitudes of leaders, different types of organizations require different ratios of WHP elements. As a general rule, the more hierarchically structured an organization is, the less linking

possibilities for WHP there are, and the more self-organized it is, the more linking possibilities there are. As a result, four hypotheses about WHP readiness of differing types of organizations are presented.

Conclusions

Taking what is presently known about WHP, the cultural approach seems highly adequate to give valuable hints about an organization's ability for health promotion. Nevertheless, the question whether or not the diversity of organizations can be reduced to four types is an object for further discussion. Organization analyses should be applied to validate instruments, which can measure organizational readiness for WHP. This provides the frame within which the empirical testing of the stated hypotheses could be carried out.

euPrevent-EMR: crossing the borders in health policy

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Issue/problem

The Euregion Meuse Rhine (EMR) is a relatively small area (3.2 million inhabitants) in which three countries are present: Belgium, The Netherlands and Germany. French, Dutch and German are the languages that are spoken in the EMR. Within this area the mobility of people is large. Not only for tourism, shopping, entertainment and work but also for health care and, for example, drug tourism. Beside that we have in the EMR a lot of common general issues: obesity, ageing and infectious disease that do not stop at the border (Q-Fever, MRSA), etc.

Description of the problem

The cross border cooperation was mostly based on loose (thematic) projects or initiatives, which were funded with EU resources. The problem most of these projects faced was the guarantee of durability after the EU resources ended.

Results (effects/changes)

To address the common issues and problems like infectious disease control, drug tourism and obesity and to make sure the durability was secured we made some policy changes:

- We set up a common marketing strategy: our main target groups were the politics, experts and professionals and the organizations working in the specific area's like infectious disease control and obesity.
- We house all former themes and our future themes under our promotion programme 'euPrevent'
- We formalized our common cooperation (euPrevent) in a foundation under Dutch law
- We set up a content-related support structure: centre of knowledge, promotion of expertise, (independent) policy advice and so on.

By combining our forces, we are not only stronger to address health care as a single theme but are also stronger to connect health care with other themes like tourism, culture, economics, agriculture, environment, technology, education and science. There are countless opportunities which we are exploring right now.

Lessons learned

In cross border cooperation policy-making and a structure-oriented approach is at least as important as the quality of the interventions itself. It is important for the success of a cross border project or initiative and is a guarantee for durability.

Health promotion for elderly family caregivers—results of a non-user analysis

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Background

European as well as German studies identify elderly family caregivers as an important target group that have, due to various burden, high need for health promotion.

Moreover, data from the Federal Statistical Office show there are approximately one million family caregivers in Germany—with increasing tendency. The project 'Health Promotion for Elderly Family Caregivers' developed an assessment to identify resource and risk profiles of caregivers (≥ 50) to derive the need of health promotion. On that basis an offer is supplied by a health insurance company. Despite a low-threshold and a need oriented offer structure the usage remains past the expectations. A non-user analysis examined the restraining factors of influence which reduce the claim of these offers. These factors are introduced.

Methods

Validated instruments are used to examine possible factors of influence like self-efficacy, risk-perception or status of physical activity etc. (intrinsic factors). A semi-standardized questionnaire was used to analyse circumstances in the (familial) environment of caregivers (extrinsic factors).

Results

A total of 128 caregivers took part in the non-user analysis. The average age is 65 years. First data show that contacting caregivers via a health insurance is for most non-users not an obstacle (93%). Circumstances like excessive demand (22%), the feeling to be bound at home (16%) or a lack of mobility—no bus, no car—(11%) play a main role regarding the non-usage of offers. Results from the logistic regression analysis will be presented.

Conclusions

These findings give a basis for the modification of a need oriented structure of offers for this target group with still a high need of health promotion. Furthermore, structures to support elderly family caregivers that focus on extrinsic as well as intrinsic factors need further research.

Education and health promotion for students: an original approach with students' peers and a specific website—France 2009–10

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Background

The health of students is becoming a public health challenge. Although, it is usually considered that students have a good health, recent studies describe new risks mental stress, eating disorders, cyberaddiction, psychological suffering and situations of socio-economic vulnerability.

Objectives

The objectives were to improve the knowledge of students and to develop a better awareness of health-promoting behaviours, on classic topics as tobacco, cannabis, alcohol, nutrition, activity physical and also as new risks.

Results

Our health educational programme was focused on students in Higher Education (university) from 18 to 25 years in seven campuses in Upper Normandy (France). Different actors have gathered around a dynamic partnership with a regional multi-disciplinary group 'Ta Santé en 1 Clic' (TS1C), involving 20 partners in health, higher education, the voluntary sector and students-peers involved from the project design. These peers students were trained during 2 days by experts.

TS1C programme was based on two main actions: health forums in campus led by peers-students and the creation of a website specifically dedicated to students: www.tasanteuncl-c.org. The evaluation has measured students and peers-students satisfaction about the health forum. Students'

knowledge and behaviour were also assessed by an anonymous online questionnaire on the web site.

Conclusions

Our programme allows identifying behaviours for which information and prevention should be more focused. One major feature of this action is the participatory approach of students: prevention by students-peers has been chosen by the group for an active involvement of students in the programme and implements prevention tools adapted to students and the creation of a website specifically developed for students. For the Group Project, the next step is to ensure sustainability of this intervention, the guarantor of success, with communication tools adapted for this population with the challenge of improving student behaviour.

Towards health promotion-oriented public health reporting

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Issue

Public health reporting is traditionally based on the biomedical concept of health. Data and information with a holistic approach to health is rare. Since information from health reports contribute to political and practical decision making the lack of health promotion relevant data and information is causing disease oriented actions. The integration of a health promotion and determinants oriented perspective on health into public health reporting is required.

Problem description

To address this issue a development process for a recommendation on health promotion oriented public health reporting on physical activity was started from the Austrian Health Promotion Fund. The first step was to analyse the Austrian public health reports to assess the current situation. Afterwards a systematic literature review was conducted to identify determinants of physical activity and indicators used to measure these determinants. The results of the review were complemented by a review of monitoring instruments and frameworks developed by the WHO and the EU.

Results

A discussion article was produced. The article describes the aim and the process of the recommendation development, the current situation on public health reporting in Austria and the target group for the recommendation. Determinants that should be covered in a health promotion oriented public health report on physical activity are outlined. Examples of indicators are listed, that can be used to measure these determinants.

Lessons

The development of the discussion article has to be followed by further development work. For instance, a review of existing instruments to measure the determinants and indicators is necessary to develop a more practical recommendation. Furthermore, the discussion article needs to be discussed in a consensus process with practitioners, decision makers and researchers from the field of public health reporting, physical activity and health promotion.

Health education programme for children in city of Novi Sad, Serbia

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Background

Information, knowledge and skills about healthy lifestyle using appropriate health educational tools and workshops as method

in health education of children is essential in making healthy decisions and for healthy behaviour in the future.

Objectives

To present process evaluation results of Health for young's programme during seven years activities that encompassed children aged 6–10 years, carried out by Health promotion team from the Institute of Public Health Novi Sad, Serbia.

Methods

Creation of printed health educational tools in calendar form, intended for work with children aged 6–10 and organization of educational seminars for preschool educators and teachers in kindergartens and primary schools in Novi Sad in 1994–2010 period.

Results

Seven health educational calendars were printed so far, containing appropriate illustrations, messages, workshops and practices for children. Based on expressed health educational needs of health educators, healthy life style and risk behaviour were the main topics. Fourteen seminars were organized for 560 preschool educators and 300 school teachers in primary schools. Evaluation results demonstrated that on scale from 1 to 5 (5 is the best grade) educators appraised contents of calendar with average grade 4.8, practical use with 4.6 and age adaptation with 4.7. Average grades of education seminars ranged from 4.4 for seminars contents and level of new informations, 4.2 for motivation and quality of training, and 4.5 for practical use and possibility of application in everyday work with children.

Conclusions

Most of educators of children aged 6–10 years consider getting health educational tools very useful in their work, printed health educational tools in the form of 'healthy' calendar containing workshops assess with excellent grades, and theme seminars with very good and excellent. Health professionals should give expert methodological support in health promotion for kindergartens and schools.

The knowledge about adult vaccination and voluntary vaccination state of adults: a study from Turkey

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Background

In this study, establishing the knowledge about adult vaccination and voluntary vaccination state of adults in the province centre of Kayseri was aimed.

Methods

This descriptive study was performed in 2009 May–July, in six public health centres (PHC) in the province centre of Kayseri, by way of a questionnaire. A total of 998 adults from the population of an area covered by 34 family practitioners, working under six public health care centres, in the province centre of Kayseri, were asked to fill a questionnaire. Chi-square test was used in the statistical analysis and $P < 0.05$ was accepted as significant.

Results

The mean age of the participants was 37.4 ± 14.1 and 56.7% were female. A total of 75.8% of the individuals knew that adults had to be vaccinated and 55.3% that influenza vaccination had to be done every year. A total of 97.9% of the participants were aware of influenza vaccination, and the rate of vaccination was 7.8%, 97.8% knew tetanus vaccination, the awareness rate of hepatitis B vaccination was 84.4%, and vaccination rate 25.6%, Human Papilloma Virus (HPV) was known by 44.4%, vaccination rate in women was 1.1%, pneumococcus vaccination was known by 19.8% and vaccination rate was 0.4%. A total of 22.0% of the individuals aged

≥ 65 years old had got an influenza vaccination while none had got a pneumococcus vaccination.

Conclusions

It is found that the tetanus, influenza and hepatitis vaccinations were highly known, whereas, HPV and pneumococcus vaccinations were not, and that the number of individuals stating that they had been vaccinated was quite low.

Awareness, knowledge and use of folic acid among women, a study from Turkey

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Background

To investigate the awareness, knowledge and behaviours relevant to folic acid intake in women aged 15–49 years.

Methods

A questionnaire designed by the researchers was administered to 1083 women who attended to family health care centres for any reason between 1 and 15 of December 2009.

Results

Half of the women (53.7%) surveyed did not hear or read about folic acid. Women with a university degree were more likely to have heard about folic acid than were less-educated women and women < 25 years were more likely to have heard about folic acid than women > 34 . A total of 81.3% of the pregnant women and 8.9% of the non-pregnant women were taking supplements. Only 12.2% of the pregnant women took folic acid during preconception period. The most common information sources on folic acid were the doctors.

Conclusions

In order to improve the intake of folic acid during the protective period, preconceptional counselling by the family doctors to inform patients about the need to take folic acid to prevent NTDs seems to be important.

The importance of communicating the message of vaccines' value: an Italian experience

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Issue/problem

Immunization is one of the most safe and effective interventions available to the public health. In spite of this, the role of vaccines as fundamental tools for improving health needs to be remarked, to deconstruct the false and dangerous myths that exist on vaccines. The aim of our initiatives was to spread the message 'vaccine as value' and not mere instrument for profit, based on strong scientific evidence.

Description of the problem

The fifth European Immunization Week, promoted by WHO–Europe in order to awaken the population on the theme of vaccination, took place between 24 April and 1 May 2010, in particular the 2010 edition was focused on the measles and rubella vaccines. Under this initiative, three workshops addressed to healthcare professionals, medical and nursing students, but also citizens, were held in Italy at the Catholic University of Rome, at the Universities of Palermo and Cassino. The topic was 'The value of vaccination' and the audience was explained the message through a multidisciplinary approach, showing epidemiological, clinical and social data. These events had joined the UNICEF and the Italian Parents Movement.

Results (effects/changes)

During these successful events, an interesting debate aroused about the different Regional vaccine policies and the low participation to H1N1 immunization campaign in Italy. All the oral presentations were published on-line to make them available to the internet users. Moreover, this campaign was included in the Better Value Health Care initiative, which aims to achieve better value in healthcare through programmes of organizational and professional improvements, also involving citizens/patients. The objective to reach 95% measles and rubella vaccination coverage in all WHO European Countries by 2010 has failed, in fact nowadays measles and rubella outbreaks still exist.

Lessons

To reach the goal of complete worldwide vaccination coverage is an achievable challenge, but many efforts are still needed. The next infectious diseases to eradicate in the WHO–Europe region will be measles and rubella and new strategies of communication play a key role in this process.

A community health programme to promote women's knowledge of postmenopausal hormone therapy

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Background

Conflicting recommendations and position statements about the risks and benefits of menopausal hormone therapy (HT) have been released over the years by different institutions and scientific organizations, thus compromising the quality of communication between health professionals and women. A survey conducted in 2007 in five Italian Regions revealed that participating women aged 45–60 years desire greater information regarding the subject. They report having insufficient knowledge and that given information is often incoherent and sometimes obtained from non qualified sources. This leads to difficulties in making informed choices about one's health.

In order to make light of the evidence regarding postmenopausal HT, identify information needs of women and evaluate the quality of information aimed at physicians and especially at the female population, a Consensus Conference (CC) was held in 2007, promoted by the 'ParticipaSalute' project (ParticipateHealth) and the National System of Guidelines of the National Health Institute.

Objectives

In view of the public health relevance of postmenopausal HT, CC promoters have launched a 2-year project with the aim of defining, implementing and evaluating a multimodal intervention activity to actively disseminate final CC recommendations.

Methods

The project will be implemented through a series of activities which involve staff of the national health service contacting women aged 45–60 years. In order to allow health professionals to adequately respond to the information needs of women, educational activities have been organized aimed not only at providing health professionals with updated information on the subject but also on teaching them appropriate communication skills.

Results and Conclusions

Information will be disseminated to women through various modalities which include thematic meetings, active counselling at family clinics, media involvement and distribution of printed material. These various modalities will act synergistically and allow the dissemination of information throughout the entire territory of the local health authority, thus promoting more knowledgeable health choices among women.

Trends of future health communication and promotion via—Web 2.0 /Social Media

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Background

Technological progress in the area of communication has caused a tremendous change in our every day life communication that allows us to send or receive messages almost every time and every where. You-Tube or Twitter are commercial inventions that have already inspired other providers to experiment with 'new media' in the health market. Online doctors and pharmacies as well as self-help groups or patient networks are establishing a new form of health communication via social media and internet. This development has to be considered in future health promotion and health communication activities.

Methods

The study comprises of: (i) structured online survey (2300 cases) at 15 major health service portals (commercial) and one public health service provider

(ii) structured observation and analysis of provider services on German web sites

(iii) Descriptive summary of best cases and development of trends (UK,US and Japan).

Results

There are benefits for users and providers in several areas. Benefits for users are higher degree of access to individualized information, better compliance, product information and access to new research and treatment options. Furthermore health-care systems stakeholders are adopting increasingly new digital forms and tools to improve health outcome, compliance, disease management and prevention.

Conclusion

The findings focus at first glance on disease and patient needs but are of high interest for prevention activities and the development of new prevention services. There is a need for critical observation of these developing areas of health communication, particularly with respect to: validity of information, influence of commercial interests on self-help and patient networks, loss of authority of old stakeholders (State, physicians)

Note: the empirical study is part of a dissertation by A. Schachinger at Humboldt University Berlin.

How to make your local health authorities work? Experiences from North–West Poland

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Issue/problem

Data possessed from various studies suggest high rate of amphetamine use (also injected) in Polish rural areas. They report sharing needles and low risk awareness among drug users. Local public health authorities (LPHA) are hardly aware of drug use patterns. Intravenous drug use is still associated with big cities. Risky behaviours and lack of adequate intervention offered to drug users endangers hidden HIV and other blood-borne viruses epidemics.

Description of the problem

Project realized in 2008–10 by a group of public health interventionists has been addressed to LPHA of North-West Poland small commune. It aimed at (i) raising their risk awareness, (ii) diagnose local drug use patterns and (iii) implement adequate strategy. Project adopted Rapid Assessment and Response (RAR) methods. Crucial questions

were (i) how to attract LPHA attention to our message, (ii) how to make local VIPs cooperate together and (iii) how to mobilize local capacity of solving the problem.

Results (effects/changes)

The project engaged local VIP who participated in meetings with LPHA. Meetings evolved into regular Local Community Advisory Board (LCAB) comprising of key people of various professions. LCAB inspired the commune to diagnose drug use patterns. The qualitative research confirmed intravenous amphetamine use, sharing the equipment, poor access to sterile needles, rare HIV screening.

Research findings and recommendations were implemented to local drug strategy (2009–10).

Lessons

LPHA designed pilot needles exchange programme operating since March 2010. Though not innovative as a programme itself, it is exceptional because of the setting—a community with a strong social control. Involvement of potential opponents at early stage of project made it feasible.

Rural areas are vulnerable to hidden phenomena and poor access to health care services. They should be specially targeted by public health attention.

Prevalence, consequences and motivations for alcohol consumption in Portuguese university students

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Background

Alcohol consumption is a real public health problem. As part of the young, is associated with certain risky behaviours, including unprotected sex, conflict, consumption of other drugs, truancy and disapprovals. Aim of the study to determine the prevalence of alcohol consumption in young Portuguese students and relate it to some motivations and consequences associated with consumption.

Methods

In a cross-sectional study of quantitative nature, inquires a sample of 354 college students, aged between 18 and 35 years (mean = 20.86 years, SD = 3.52) and 61.60% women enrolled in four Portuguese universities. The information (collected in class) was obtained through a questionnaire for self completion.

Results

It found a daily consumption of alcohol in 28.6% of students. The motivations described as being associated with consumption of alcoholic beverages are to be happy (24.0%), to disinhibit (18.7%), to overlook the problems of everyday life (13.3%), because it gives you pleasure (25.7%), to calm (7.4%), to relate to others who drink (7.9%), because they miss their family or friends (6.8%), to forget problems/quarrels with her boyfriend or friends (5.9%). The most striking consequences associated with consumption of alcoholic beverages are: go to school without sleeping (8.6%), often missing school (8.3%), have unprotected sex after drinking alcohol (2.4%), have poor academic performance (3.2%), get drunk several days (6.4%), get depressed the next day (6.8%), seek to avoid friends and family (3.5%) and they get in conflicts (2.6%).

Conclusions

The evidence presented here based guidelines for preventive and health promotion in the university context. The reasons for the consumption of alcoholic drinks, reported by young people, show a strong socio-cultural and anthropological. It is necessary to develop effective preventive action aimed at information/education of young people in order to promote health and quality of life.

Health literacy measures: application and implication

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Several instruments to measure health literacy have been developed and validated in the United States. Objective measures are the Rapid Estimate of Adult Literacy in Medicine (REALM) and the Newest Vital Sign (NVS). Subjective measures are Chew's screenings items and Ishikawa's health literacy questionnaire. Since no health literacy tests are currently available in Dutch, our aim was to translate and adapt existing measures and to test to what extent they are applicable to assess health literacy in Dutch health care.

Existing measures were critically examined on suitability in Dutch and on psychometrical characteristics. The REALM, NVS, Chew's screenings items and Ishikawa's health literacy questionnaire were translated into Dutch according to the current rules. The measures were tested among diabetic patients that were recruited at general practices and patients with diabetic foot-problems or coronary heart disease at Amsterdam Medical Centre.

Preliminary results show that 52% of the coronary heart disease patients can be classified as low health literate according to the NVS. This percentage is only 20% according to the REALM. An advantage of both tests is that they are short and easy to use, a disadvantage is that they only measure the ability to read, calculate and understand and not how people obtain and process information. The subjective measures showed that most patients reported that they often have problem A disadvantage of the subjective measures is that the questions are formulated at high literacy levels and not.

Further research is needed to assess the validity of the translated measures. New measures need to be developed that not only measure the ability to read, calculate and understand, but also how people obtain and use information in public health and health care setting.

Measuring functional, interactive and critical health literacy skills beyond self-report: what can people do with health information?

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The theoretical framework for conceptualising health literacy advocated by Nutbeam (2000) has been cited highly. In the Nutbeam model, there are three different components of health literacy: functional, interactive and critical. These originate from the Four Resources model of reading. Functional skills enable patients to ask, 'can I understand this information'? Interactive skills allow them to ask, 'what can I do with this information'? Critical skills make it possible to question the reliability of information, asking 'what is this information trying to do to me?' Although this model is attractive, no instrument has been developed that measures interactive/critical health literacy, other than by self-report. It is not clear whether each component is unique, or if functional skills are required in order to interact with and critique health information. In this talk, we outline our plans to develop a reliable and valid measure of all three health literacy skills. Psychometric test development occurs in five stages (test conceptualization, test construction, test tryout, item analysis and test revision), providing an organisational framework for the project. Expert panels comprised of professionals and lay people will critically appraise the item bank, as it develops. To ensure that the tool has maximum impact, we propose to make the items and scoring freely available to nonprofit organisations and researchers. Once the tool is available, it will be possible to evaluate the impact of interactive and critical health

literacy on health outcomes, or the impact of interventions designed to increase health literacy, more comprehensively.

Measuring health literacy in Europe in the view of the European Health Literacy Survey (HLS-EU)

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From a public health perspective, health literacy (HL) refers to the capacities of people to meet the complex demands of health in modern society. On the basis of an integrative conceptual model, a questionnaire has been developed to measure HL in eight countries in Europe. The questionnaire distinguishes itself from existing measurement tools in its ability to address a broader concept of HL and allows for a standardized comparison of levels of HL between and within

populations in Europe. The validation of the measurement tool, taking place in spring 2010, follows a sequential exploratory mixed method design by means of focus groups and a pilot study. The validation will take place in a multicultural context, and prioritizes social research and public health applications. The results of both the focus groups and the pilot study will be presented. Subsequent to the validation, survey data is collected through face-to-face interviews with $n=1000$ people in each of the participating countries Austria, Bulgaria, Greece, Germany, Ireland, The Netherlands, Poland and Spain.

Data analysis takes place in autumn 2010 and results of the European Health Literacy Survey will be addressed. The empirical findings and comparative analysis help verifying and substantiating the concept of HL while taking national and cultural specificities into account.

Health services research

Personnel qualification in Bulgarian hospices

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Background

Hospices were legally introduced in Bulgaria in 1999. After the initial enthusiasm many of the newly established institutions had to close down mainly because of financial problems. In the last years fewer hospices appeared, most of them were supported by international projects.

The objective of this article is to study the qualification of the personnel in Bulgarian hospices.

Methods

The study employed a combination of sociological and statistical methods. Self-administered questionnaire was distributed among the personnel in 29 of 35 functioning Bulgarian hospices and five palliative care units. All in all 190 health professionals responded to the questionnaire. The response rate was 86%. The statistical analysis was done by Microsoft Office Excel 2003 and SPSS v.13.

Results

As a whole, 35.3% of the personnel didn't have any previous clinical experience and 55.8% had no training at all in palliative care. Hospice managers and head nurses were identified as the main organizers of in-service training. Very few of respondents received training in the National oncology centre. The role of universities and international training programmes was insignificant. More than half of the respondents expressed their needs of further qualification mainly in pain control and psychological care. The majority of the respondents assessed their opportunity for qualification improvement as good but 74.2% had never participated in scientific events on palliative care. A total of 75.8% were not involved in any exchange of experience with other Bulgarian hospices or hospices abroad. The main educational forms identified in the study were team meetings and case discussions.

Conclusions

More than a third of the personnel in our study did not have previous clinical experience and more than a half were not trained in palliative care. Educational programmes in palliative care should be introduced both in undergraduate education vocational training programmes.

Consumer choice in the Dutch health insurance market

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Background

In the last decades, health care reforms based on introducing managed competition have been implemented in several countries. The policy assumption is that managed competition leads to lower prices and increases the quality of health care. However, not much is known about the underlying assumptions. The assumption of the critical health care consumer is a crucial one. The mechanism for improving quality and, at the same time, lowering costs is based on this assumption. Besides these assumptions on choosing there is another, underlying assumption: it is assumed that consumers want choice in health care. This study focuses on this assumption. Does it hold, and if so, does it apply to all socio-demographic groups? In addition we studied whether people perceive enhanced choice.

Methods

Questionnaires were sent to the Dutch Health Care Consumer Panel, a cross-section of the Dutch population. Data were collected from 2005 until 2008 from approximately 1000 panel members per year.

Results

The study shows that overall people think it is important to have enhanced choice in health care. Choices between insurers and between providers are approximately of equal importance to people. Comparing different providers, people attach more importance to enhanced choice between medical specialists and hospitals than to enhanced choice between general practitioners. This holds for all socio-demographic groups, although these groups differ in the extent to which they prefer enhanced choice.

Conclusions

The results of the study suggest that the preference for enhanced choice depends on the extent to which people are confronted with choices. In order to facilitate choice, decision-making-assistance should be targeted at those people, for example the elderly, who are frequently confronted with choices on high risk procedures.

Cancer care from the perspective of women: preliminary results from a cross-sectional survey in Southern Italy

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Background

Female cancer diseases, involving breast, ovarian, endometrial and cervical cancer, represent an important public health issue due to the high economic and organizational impact on Health Care System. Our study evaluates the quality of oncology facilities (OF) placed in southern Italian regions (SIR) in the context of a national project.

Methods

A cross-sectional survey of 114 OF in the SIR has been conducted by means of a questionnaire sent by e-mail to each Hospital Directions investigating the characteristics and the extent to which these OF have implemented strategies to promote a patient-centred approach and patient-involvement in quality management.

Results

Forty-six OF sent back the filled questionnaire with a response rate of 40%. Most of the structures are set up as public hospital under local health authorities (as the Italian acronym ASL). Departments for Palliative Care are lacking in 53.3% of OF. About 20% of OF have not established a Case Management Department with trained nurses to coordinate patient care services and improve the quality of the total patient experience. About 90% of surveyed OF have actually implemented with the ASL a programme of Domiciliary Care (DC). As concerning the waiting list, the median time to wait for an ultrasound exam is 1.5 days (range: 9 days) for hospitalized patients and 12.5 (range: 43 days) for outpatients. Almost all OF have not dedicated services to cancer patients (as recreation centres or baby-sitting); books borrowing is possible in 45% of OF.

Conclusions

The analysis highlights organizational difficulties in managing an integrated care pathway for cancer patients which could offer a best clinical care at hospital and territorial level in order to allow them high-quality living at every stage of their illness. Even if the strong implementation of DC is noteworthy, great efforts should be done to improve end-stage cancer treatment.

Customer's satisfaction on the implementation of drive-through pharmacy in Penang general hospital, Penang, Malaysia—Pilot study

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Background

Quality medicine and cheaper hospital fee draws peoples' attentions to go to the government hospital for their treatment. Long queue exists in all government hospitals and clinics which also cause the high workload to the pharmacy unit. Drive-through Pharmacy has been implemented in Penang General Hospital (PGH), Penang, Malaysia since 2008 as a pilot project by the Ministry of Health, Malaysia. The purpose of this study was to evaluate the customer's satisfaction on the project.

Methods

Self-guided questionnaires were distributed to 100 registered customers for the drive-through programme during their visit to collect their medications on monthly or quarterly appointment in the drive-through counter. Demographic, qualitative and quantitative data were collected to access the level of customers' satisfaction on the programme.

Results

A total of 98.5% ($n=65$) of respondents were satisfied with the project. Some of the major reasons were decreased waiting time (63.2%, $n=21$) comfortable service hours (61.4%, $n=35$), convenient counter location (36.8%, $n=21$) and other reasons (19.3%, $n=11$).

Conclusions

Respondents were satisfied with the Drive-Through Pharmacy projects at PGH due to the reduced time waiting, convenient

service hours and counter location. Therefore it is suggested that the implementation of Drive-Through Pharmacy is widen up in other hospitals all over Malaysia.

Appraising the hospital reform in Bulgaria 2000–10—lessons learned and future perspectives

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Issue

The health reform in Bulgaria changed the method of financing hospitals from history budgets to per case retrospective reimbursement (clinical pathways—CPs). The CP system is based on a contractual relationship between hospitals and the National Health Insurance Fund. The shift aimed to overcome ineffectiveness, inefficiency, quality of care and resource allocation problems.

Description of the problem

The aim of this article is to evaluate the hospital reform in Bulgaria – accomplishments, improvements and negative effects. Therefore, performance and statistical indicators of hospitals are analysed and discussed.

Results

The performance indicators analysis shows that important accomplishments are achieved with respect to efficiency: significant reduction in total number of beds, bed days and length of hospital stay; improvement of beds' utilization and turnover. As a result improved efficiency and resultant cost savings are reported. The economic analysis shows steady increase of hospital costs per patient, bed, bed day and medicine day. The analysis of CP pricing reveals that there are underfinanced CPs, e.g. the cost of treatment exceeds the reimbursement. Therefore, many hospitals are financially unstable and in debt to suppliers. With regards to quality of care there are improvements in the standardization of care among hospitals as CPs impose strict rules for diagnosis and treatment. However, issues with patient centeredness emerge. With respect to resource allocation, the system provides transparent mechanisms for contracting hospitals which fulfil the requirements. The payment ratio per CP is flat and distributed among contracted wards per treated patient, irrespective of the outcome of treatment or the type of facility. This raises doubts about CPs effectiveness.

Lessons

Despite the major changes, the overall impact of the hospital reform in Bulgaria is mixed due to discrepancies between prior objectives and current accomplishments. There are still significant issues concerning quality and effectiveness of care, reimbursement ratios and resource allocation. Future reforms and researches should be directed towards containing hospital costs and implementing pay per performance in order to enhance competition and improve quality of care.

Access to health care of the immigrant population in Spain. A systematic review

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Background

The significant growth of foreign population in Spain means that the health system must provide healthcare to a diverse population. International studies show an inadequate access to healthcare for migrant populations. An extended belief in Spain, however, is that immigrants utilize the health services more frequently than the natives because they are free at the point of delivery. The aim is to analyse existing evidence on access to healthcare of the immigrant population in Spain.

Methods

A systematic review of the literature was conducted, through an exhaustive literature research in diverse electronic databases, using the general subject heading 'access to health services', 'immigrants' and 'Spain'. Original studies were selected based on: (i) review of titles and abstracts, (ii) review and assessment of the full text. Out of 89 articles, 22 original studies were selected that analysed access to or barriers for the use of health services by immigrants. The analysis, based on the Aday and Andersen Model, and focuses on (i) determinants of potential access related to characteristics of the population and health services and (ii) actual access.

Results

Empirical studies that examine immigrants access to healthcare in Spain are still few and with weak or inconclusive results. Most are quantitative studies that analyse access by comparing the use of services by natives and immigrants, especially in hospital emergency services and few look at mental health care of primary care. Very few studies focus on determinants of access, and those consider mainly demographic factors—sex, country of origin. Few studies incorporate social predisposing factors such as language or culture and no analysis of health services variables, availability of resources, organization, can be found. Of the studies that consider the perspective of the actors most are quantitative and only few use a qualitative approach; both focus mainly on difficulties in the provision of care. The results of studies on actual access to health services are contradictory.

Conclusions

Evidence on the immigrant population access to health services in Spain is scarce with a limited and not conclusive scope of results. Contextual variables—characteristics of services and policies—have not yet been analysed.

Feasibility of multi-sector policy measures aimed at creating activity-friendly environments for children

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Lack of physical activity among children is a serious health problem and creating active-friendly environments is a promising strategy to tackle this. Policy measures from different policy sectors may contribute to an activity-friendly environment, but multi-sector policy development is still in its infancy. This study aims to identify concrete multi-sector policy measures aimed at stimulating physical activity in children and examines their feasibility.

Delphi studies among policy officers of different policy sectors (Public Health, Sports, Youth & Education, Spatial Planning, Traffic & Transportation, Environment and Play Facilities) in four Dutch municipalities were conducted. In the first Delphi round, consisting of interactive workshops, policy officers were asked to compile a list of policy measures addressing environmental determinants of children's physical activity. In the second round, consisting of a questionnaire filled in during the workshops, policy officers were asked to score the policy measures on five aspects of feasibility: political feasibility, cultural/community acceptance, technical feasibility, cost feasibility and legal feasibility. Policy officers were asked to weigh the aspects according to their perceived importance. In the third Delphi round, consisting of a questionnaire by mail, policy officers were asked to score the feasibility of the policy measures again, and were given opportunity to (re)adjust their answers based on group feedback from the second round.

This study quantifies the perceived importance of different aspects of feasibility according to policy officers. Furthermore, this study yields a list of concrete multi-sector policy measures, which are evaluated on feasibility. By using the Delphi method, consensus was build, which enhances implementation.

Mapping of health activities in a Danish municipality by using the Euphid model

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Background

Since 2007 the municipalities of Denmark have been made responsible for all public health activities taking place outside hospitals. Still methods for working and developing these activities in a systematic way are needed to be improved. The aim of this study was to find out which kind of health activities are taking place in a municipality. Further, to analyse these activities according to the European Community Health Promotion Indicator Development Model (EUHPID Model) to see if working with this model can be a way of systematizing work process.

Methods

The study was carried out in a Danish municipality with around 50 000 citizens. Mapping was carried out as a prospective review for a period of 3 months. A framework to describe public health activities was developed and handed out to all departments of the municipality. To validate the mapping we went through budgets to see if we could find additional activities.

Results

A total number of 143 public health activities were reported from 40 respondents belonging to Social and Health (71); Children and Youth (66); Planning, Culture and Technique (6). The activities were mainly focusing on disease prevention (49), but also on health protection and health promotion. A lot of the activities focused on vulnerable target groups (23), and none was focusing on environment isolated.

Conclusions

Lots of public health activities are taking place in the case municipality and it can be hard to keep an overview and ensure links between all efforts. Use of the EUHPID model seems to be a way of making a systematic strategy for development of health activities in the municipality. Also it can help to promote the health promotion way of working. Finally it can strengthen the public health monitoring system in the municipality and enhance implementation of relevant interventions.

Integrated health policy: inter-sector collaboration from the municipal government's perspective

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The national government encourages municipal governments to develop local health policy and especially policy which integrates different policy sectors (integrated health policy). Though municipal governments possess various policy instruments for this purpose, like laws and advocacy, integrated municipal health policy still appears in its infancy. The development of such a policy requires inter-sector collaboration. Literature shows that to realize inter-sector collaboration actors on strategic, tactical and operational level need to have a dialogue with each other. A dialogue to create better understanding and stimulate vertical and horizontal collaboration within an organization.

The question arises how municipal governments perceive the possibilities to set inter-sector collaboration within their own organization. To answer this question, civil servants (operational level), heads of departments (tactical level) and

aldermen (strategic level) of different policy sectors (Public Health & Welfare, Sports & Recreation, Youth & Education, Traffic & Transportation, Spatial Planning & Environment and Social Affairs) were invited to fill in a digital questionnaire. In the questionnaire determinants on strategic, tactical and operational level are asked. In total 32 municipalities in the Dutch region Limburg were involved in the research, including nine municipalities who started to participate in a counselling process of their Regional Public Health Service (GGD South Limburg) to stimulate integrated health policy against overweight.

The research results show that there is a difference between (non) participating municipal governments in a counselling process in the possibilities they see for inter-sector collaboration. Also inside the municipal organization the vertical collaboration within the Public Health sector is not consistent and there is a lack of horizontal collaboration between different policy sectors. The overweight case clearly demonstrates the limited inter-sector collaboration within municipal governments.

Health systems and policy

The 'healthy views'—is there a correlation between political preferences of voters and the health status of population?

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Background

Determinants of the population health are of scientific interest for a long time, but rarely this issue is examined in context of prevailing political preferences within a community. In Poland clear territorial divisions are relatively stable in terms of dominant political preferences, where the south-east regions have traditionally shown conservative preference, and the north-western regions are of traditionally socio-liberal political attitude. This division is partly conditioned by historical factors, and partly have occurred during the social and economic transformation of the communist and post-communist period.

Aim

The aim of presented study is to examine a possible relationship between the dominant political preferences of voters residing in a specific geographic region of Poland, and the health status of local populations.

Methods

Electoral preferences were defined for the middle-level local administration units (approximately 382 local communities). Preferences were defined based on the results of last three general elections (2001, 2005, 2007). Each party is assigned a factor stating the nature of its political agenda, placing it on the axis from a radical leftist to the radical conservative. The ideological issues were taken into account, paying less attention to economic topics, which is determined by the traditional understanding of liberal/conservative political attitude in the public discourse in Poland. The indicators of political preferences of local communities were analysed in terms of correlation with the selected measures of health status of the population.

Results

Detailed statistical analyses are still in the development. Preliminary analysis of simple dependencies show that there is a statistically significant relationship between average life expectancy at birth, and dominating political preferences of the community. The shift of the indicator of political preferences to the right represents an increase of the average length of life expectancy. For other measures of health status (mortality due to cancer, the morbidity of cardiovascular diseases) we did not observe a correlation that would be statistically significant.

Conclusions

To be provided during the conference.

Steps in obesity prevention through health policy in Serbia

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Issue/problem

Obesity in Serbia

Description of the problem

According to health survey of Serbian population conducted in 2006, 38.3% of the population was classified as having a normal body mass index (BMI). Every second person was overweight (54.5%), 18.3% was obese and 36.2% was overweight. The average BMI among the adults was 26.7. The biggest percentage of BMI was among population with the lowest level of education (23.1), middle class (20.8%) and population of Vojvodina (20.5%) and eastern Serbia (21.4%). The percentage of the obese and the overweight population increases with the age up to 64 years. In the population older than 75 years the percentage of the overweight decreases significantly.

SWOT analysis: Strengths: strategic documents of national Ministry of Health, Primary Health care, Institute for Public Health network, NVO; Weaknesses: insufficient involvement of non-health sector, insufficiently developed conditions for physical activity, inadequate implementation of strategic documents, difficulties in making progress in life style; Possibilities: international funds, research support, mobilization of non-health sector, Threats: influence of the commerce lobby, marketing food and beverages, obesity reaches epidemic proportions.

Results (effects/changes)

Main goal: Public health improvement by reducing obesity and overweight rate

Specific goals: Individually orientated specific goal: accepting healthy lifestyle range 20% of population in 10 years time. Population orientated: target group: children and adolescents, 50% reduction of obesity rate in next 10 years by 50%

Stakeholders: Decision-makers, National insurance fund, Health sector, Educational sector, Economic and finance sector, Transport sector, Agriculture Sector, Mass Media, NGO, Consumers association, Commercial lobby

Lessons

Short-term steps:

- Improvement in prevention and control of the chronic diseases linked to excessive nutrition and
- insufficient physical activity
- National Nutrition Guide
- Making strategic plans for 10 years

Long-term steps:

- Monitoring activities in health department, motivation by regulating participation
- Activities in non-health, food producers, taxes, product declaration, school food Implementation and evaluation of process

Decentralization in health care system—last 20 years in Croatia

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Background

At the beginning of transition in post-communist countries, decentralization in health care systems was recognized as important and promising process. Twenty years later expectations and objectives related to decentralization were not achieved. Lack of financial decentralization and insufficient management were recognized as main causes of limited effects as in many countries, but our preliminary analysis of health care system in Croatia showed that problems related to decentralization are much more complex, and that mentioned problems are more signs than causes of the crisis.

Methods

We analysed general setting for decentralization in public services; legislation changes; resource allocation and main outcomes of planned or implemented changes in health care system during last 20 years.

Results

Both legal and administrative liability for health care on local level is not well defined. Therefore local authorities have limited possibilities to achieve significant changes. Also some of them use this position as an explanation for the lack of any proactive projects.

Health care system network is designed and maintained primarily to assure basic national health standards, thus reorientation towards specific local needs is limited.

Performance and power of public health professionals are insufficient and thus capacity for needs assessment, as basic precondition for decentralization on local level, is limited. Policy processes, techniques or practices are not developed. Some political debate and decisions made by politicians are only available options for public or professional influence on decision making process.

Conclusions

Croatia has a long tradition of decentralization during socialism, and despite problems inherited from that time experiences were used for the reforms. However, our research projects discovered problems not well recognized neither before nor during transition period. Among these problems four are recognized as essential: limited legal and administrative liability of local authorities; 'national' model of health care network; insufficient power of public health professionals; and absence of policy processes.

A model for assessing disability policy and the degree of inclusion of people with disability

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Two main strands of disability policy may be identified: individual specialized care coupled to positive discrimination and collectively based non-discriminatory policy linked to social models of disability. Associated with the first paradigm tools to measure impairment have been evolved. These tend to focus on evaluating the person's performance of daily living tasks and fundamentally are based on biomedical functional paradigms. With the advent of new public policy non-discriminatory paradigms coupled to promoting personal autonomy and life projects, it is necessary not only to promote such policy but to formulate models and tools for its evaluation. We postulate that such public policy evaluation

may be related to three key dimensions: (i) the choices really open to the disabled person, (what society offers), This may be linked to an ethical framework inspired by the Nuffield Foundation's work on public health ethics, but adapted to disability; (ii) the individual's acts enshrining the choices that he or she has reason to value (Sen); and (iii) the recognition of those acts by society (how society responds) (Honneth). The successful combination of these three dimensions leads to inclusion and the satisfaction of disabled people. Lack of resources, a denial of choice and non-recognition or rejection leading to exclusion. Such a model we suggest provides a basis for faithful needs analysis of the disabled population and the assessment and transnational comparison of public policy.

Studying effectiveness and feasibility of colorectal cancer screening programmes: the Italian experience

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In Italy, colorectal cancer screening started to diffuse after year 2000. Since 2003 the implementation of organized screening is recommended by law.

The starting of new programmes represented the opportunity to conduct studies comparing the effectiveness and feasibility of different organizational strategies. The most important barrier for programme effectiveness is low compliance. Consequently most of the research was aimed at understanding and removing barriers to participation.

Two observational studies defined the main reasons for non compliance. Five trials measured the effect of type of test (sigmoidoscopy vs. faecal occult blood test, guaiac vs. immunochemical FOBT), type of provider (GPs vs. gastroenterology centres), organizational factors (mailing of the FOBT, pharmacy distribution, primary and family care centres). Organizational and behavioural barriers are very important in determining the participation of invited population. The type of screening test used for colorectal cancer plays an important role in screening uptake and immunochemical test showed higher compliance than guaiac one. In a low compliance area, better compliance will result from offering the faecal occult blood test than from the flexible sigmoidoscopy. The involvement of GPs can be very effective to enhance the compliance, but it depends on their motivation to be involved. Mailing the FOBT had a modest effect in increasing compliance.

A study on stability of faecal samples showed that in the summer there was a 17% lower probability of the FOBT being positive and a probability of detecting a cancer or an advanced adenoma 13% lower than in the winter.

In conclusion, screening programmes can be an ideal setting for translational researches.

The Flemish pilot trial for colorectal cancer screening

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Between February and December 2009, all inhabitants ($n=20\,000$) of Borgerhout (an urban area), Schilde (a residential area) and Vosselaar (a rural area) aged 50–74 years received an invitation by surface mail to take part in the pilot trial for colorectal cancer screening. People were asked to take a faeces sample with a faecal immunochemical test (FIT). They received the test kit included by regular mail or had to

visit their general practitioner (GP). There also was a reminder after 6 weeks when people did not respond to the invitation. The faeces sample had to be returned to the laboratory in an enclosed envelope, together with a reply form. This faeces sample was analysed for precursors of colorectal cancer, i.e. polyps or colorectal cancer by exploring traces of blood that are invisible for the human eye. Both the participant and the participant's doctor received the results. Follow-up examination was recommended when the FIT was positive, i.e. a FIT-value of >74 ng blood per millilitre stool, by means of colonoscopy. The test kit and the testing were free of charge. The main goal of the pilot trial was to gather knowledge on the participation rate that could be reached in a Flemish screening programme for colorectal cancer, especially since the participation rate for breast cancer screening in Flanders is rather low (47%), compared to that in neighbouring countries. The first results indicate that almost half of the invited people took part. At this moment, the data are analysed, more specifically concerning the two ways of invitation. All statistical results to report on potential participation rates for the different invitation strategies will be presented at the symposium. In addition, 3600 questionnaires were sent to participants to evaluate the pilot trial. A more in-depth exploration will be performed by means of focus group discussions.

The Dutch Bowel Cancer screening program

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In 2006 a Dutch pilot study started, inviting people aged 50–75 years to randomly perform a guaiac faecal occult blood test (gFOBT) or a faecal immunochemical test (FIT): having higher participation as well as detection rates, FIT was three times better. Cut-offs below the standard 100 ng ml^{-1} would be more (cost-) effective and detect more precancerous lesions (primary prevention). However as high as 200 ng ml^{-1} almost no extra cancers would be missed and many less colonoscopies need to be done. The participants recorded the sampling date and it was found that increased delay between sampling and FIT return, resulted in decreased positivity and detection rates. Recently the Dutch Health Council (www.gezondheidsraad.nl) calculated that—with the developments in chemotherapy—FIT screening can even be cost saving and advised the minister of health to start bowel screening, with people aged 55–75, using FIT with a 75 ng ml^{-1} cut-off. Rollout of national bowel

screening is expected to start in 2011. The council also advised to reserve budget for research and development. Many challenges still exist e.g. Can general practitioners (GP) be involved in screening? *Pro:* they can select eligible people and possibly increase participation. *Con:* logistically more difficult and therefore expensive, and not all GPs want to be involved. Usually gFOBTs are repeated (bi)annually, however, as evidence suggests, after six negative FITs the risk of colorectal cancer is negligible—so stop after six FITs?

The Scottish bowel screening programme

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The Scottish Bowel Screening Programme (www.bowelscreening.scot.nhs.uk) began roll out in June 2007 after three successful pilot screening rounds. The Programme is now fully rolled out to all 14 NHS Boards and invites the 1.5 million eligible 50–74 year olds every 2 years. Guaiac faecal occult blood tests (gFOBT) were used in the pilots: a two-tier gFOBT and faecal immunochemical test (FIT) strategy is currently used. A single Centre issues invitations by post, along with information on bowel cancer and the test kits. A helpline is available. The analyses are performed in the Centre Laboratory, which is accredited to ISO 15 198 standards. Negative screening test results are reported to the participant by letter. Positive results (currently 2.1% of tests received) are reported to the participant and GP by letter and to the NHS Board of residence electronically. These central elements are funded by the National Services Division. The NHS Boards are then responsible for pre-colonoscopy assessment by a specialist nurse and also the colonoscopy and any subsequent pathology, surgery and other clinical care required: these activities are funded by the NHS Boards through their allocations from the Scottish Government Department of Health. The performance of the Programme is monitored through the 26 Key Performance Indicators and these are published annually by the Information Services Division (www.isdscotland.org): it seems challenging for some NHS Boards to upload all of these data. There is considerable interest in using FIT as a first-line test in the future with cut-off concentration designed to give the 2% positivity that the limited colonoscopy resource can handle. Emphasis on research and development will ensure that the Programme evolves.

Migrant health and social inequalities

Perception of occupational risk and discrimination among migrant workers in Italy

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Background

The presence of migrant workers (MWs) in Italy has increased steadily in the last ten years: from about 500 000 in 1999 to 3 million in 2008. In Italy immigrants are recruited largely for low-level unskilled jobs that natives are no longer willing to accept. Objective of the study was to investigate whether MWs are likely to perceive discrimination and a higher risk of work injuries.

Methods

Using data from the 2007 National Labour Force sample survey, we compared self-reported perception of safety hazards and discrimination among workers coming from high

migration pressure countries (HMPCs) and Italian workers. MWs were identified through their citizenship that in Italy has been shown to be a valid indicator to identify migrant status. The logistic regression model, adjusted for sex, age and economic sector of activity, was used to estimate the odds ratios (ORs) to compare the above mentioned risks between migrants and Italian workers.

Results

The number of MWs from HMPCs included in the survey was 2203 (3.6%). Only 3.7% of them worked in agricultural activities, 40.9% in industry (+10% compared to Italian workers) and 55.3% in services. The risks, expressed in terms of OR, of perceiving to be exposed to hazardous tasks was 1.32 (95% CI 1.23–1.42) and, respectively, 2.61 (95% CI 2.27–3.01) among males and 1.40 (95% CI 1.15–1.70) among females that of being discriminated.

Discussion

The study shows as MWs suffer of higher risk perception and discrimination at workplace. In turn, discrimination may be

correlated with risk perception, as it has a strong influence on work stress. Male MWs appear more discriminated than female. However, main work sectors among MWs are different: mainly industry and constructions for males; services to aged persons for females. The risk to be exposed to discrimination is likely to be different in so different contests.

Social inequalities in mortality from infectious diseases and tuberculosis in Lithuania: does education matter?

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Background

Until recently, inequalities in mortality from infectious diseases did not deserve particular attention in Lithuania. The aim of this study was to examine changes in inequalities in mortality from infectious diseases and tuberculosis of males and females by the level of education in Lithuania.

Methods

This analysis was based on routine mortality from infectious diseases statistics and census data for 1989 and 2001 for the Lithuanian population over 30 years. The relative and the slope indexes of inequality were calculated.

Results

Mortality from infectious diseases and tuberculosis among persons with primary education was higher than that in the population with university education, and inequalities increased in 2000–02 compare to 1988–90 due to a declining mortality in people with higher education and increasing mortality in those with low level of education. Similar tendencies were noted in evaluating inequalities in mortality from tuberculosis. In 1988–90, the relative index of inequality in mortality from all infectious diseases among males was 9 and 13—from tuberculosis. In 2000–02, relative indexes of inequality increased significantly, respectively, up to 16.5 and 28.8. Inequalities from mentioned causes by education among females were less than that of males. Slope indexes of inequality in mortality from infectious diseases by education among males were considerably higher than in females and in 2000–02 exceeded indexes of 1988–90.

Conclusions

While implementing tuberculosis prevention and control programme and planning prevention and control measures, the major attention should be paid to the least educated groups of Lithuanian population experiencing the highest risk of this disease.

Do socio-economic differences in tobacco use exist also in developing countries? A study of Ghanaian adolescents

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Background

In western countries, tobacco use is most prevalent among adolescents in lower socio-economic groups. The association between socio-economic status (SES) and tobacco use among adolescents in developing countries is unexplored. Using multiple SES measures, we investigated this association among adolescents in Ghana.

Methods

A school-based survey of a representative sample of 13- to 18-year-old Ghanaians ($N = 1165$, response rate = 89.7%) was conducted in three regions, in 2008. Logistic regression

analysis was used to evaluate the associations between smoking, tawa use and familial SES (parental occupation and education, material affluence scale, family structure), an adolescent's individual social position (school performance, plans after graduation) and intergenerational social mobility (predicted by differences of familial and individual positions).

Results

Socio-economic differences existed in tobacco use whether measured by familial SES or individual social position with higher prevalence in lower socio-economic groups: low father's education and living in a non-nuclear family were associated with both forms of tobacco use while low material affluence was associated with tawa use only. Individual social position measured by plans after graduation was the strongest predictor of both smoking and tawa use. Intergenerational downward social mobility was related to both forms of tobacco use.

Conclusions

Similar to western countries, lower SES is related to adolescent's tobacco use in developing countries too. These differences predict differences in tobacco related diseases when adolescents reach adulthood. Health promotion strategies aimed at reducing adolescence tobacco use should pay attention to those of lower social and material statuses, and those in danger of discontinuing education too early.

Does the impact of smoking differ by socio-economic status? Evidence from Belgium

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Background

Some researches claim that the effect of tobacco on health is higher on individuals with a lower socio-economic status, others purport that the effect of tobacco is higher among those with a higher socio-economic status, finally some suggest that the effect of tobacco is similar across all social groups. In this study, we have examined the effect of education on the association between smoking and mortality in Belgium.

Methods

We used the Belgian Health Interview Surveys (HIS) of 1997 and 2001 for information on tobacco consumption by age, gender and educational level. The mortality follow up of the HIS respondents was provided by the national register. We calculated age standardized mortality rates, and using a Poisson regression we estimated the rate ratios of mortality by smoking status. To evaluate the interaction between educational level and smoking, we introduced in the regression interaction terms between smoking categories and educational categories.

Results

The interaction between educational level and smoking indicates a borderline significant effect for men (0.0557) and a non significant effect for women (0.3886).

Men with an intermediate educational level witnessed the highest effect of smoking ($RR = 3.85$, $CI\ 2.73-5.43$), and those with the lowest educational level witnessed the lowest effect ($RR = 1.80$, $CI\ 1.13-2.87$). For women, we found no significant effect of smoking for the highly educated. For lower educational levels, the effects were more significant.

Conclusions

Our result suggest that except for men with a low educational level, individuals with a higher socio-economic status are generally less subjected to the negative impact of tobacco smoke compared to those with a lower educational level. Such an interaction is only significant for men. This brings additional evidence to the importance of complementing the population level prevention measures by targeted prevention measures that focus on groups having higher risk of mortality from smoking.

Health professionals' experiences with providing care for undocumented migrants in Denmark

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Background

The rights of undocumented migrants are frequently overlooked. Denmark has ratified several international conventions recognizing the right to health care for all human beings, but has very scanty legislation and no existing policies in the area of providing health care to undocumented migrants. This study focus on how health professionals navigate in a health care system that does not officially recognize the existence of undocumented migrants in our society and how they experience providing treatment in such circumstances.

Methods

The study was carried out as part of an EU-project on European Best Practices in Access, Quality and Appropriateness of Health Services for Immigrants in Europe (EUGATE). This presentation is based on 12 semi-structured interviews with general practitioners (nine) and emergency room physicians (three) in Denmark.

Results

The emergency room physicians express that treatment of undocumented migrants is no different from the treatment of any other person. However, care may become more complicated due to lack of previous medical records and contact persons. Contrary to this, general practitioners explain that undocumented migrants will encounter formal barriers when trying to obtain treatment. Additional problems in relation to treatment of undocumented migrants include language issues, financial aspects for general practitioners and insecurities of how to handle the situation including possibilities of further referral of the undocumented migrant as well as insecurities of whether to involve the police.

Conclusions

The health professionals in our study describe that undocumented migrants experience an unequal access to primary care facilities and that great insecurities exist among health professionals as how to respond in such situations. The lack of official policies concerning the right to health care for undocumented migrants continue to pass on an unfair responsibility to health professionals leaving it up to the individual to decide whether treatment can be obtained or not.

Mortality patterns among refugees and immigrants compared to Danish born

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Background

Mortality patterns have previous been studies in relation to country of origin, but not in relation to immigration status. Therefore the study investigates differences in mortality patterns among refugees and immigrants in relation to Danish born. Specific study aims are to investigate overall as well as specific mortality patterns among refugees and family reunification immigrants in Denmark compared to Danish born individuals.

Methods

The project is based on a cohort of refugees and family reunification immigrants which was established through the Danish Immigration Services and includes all migrants who came to Denmark between 1 January 1993 and 31 December

1999. In total this population amounted to 65 000 persons of 18 years or more. Consequently, a native Danish born control group was identified through Statistics Denmark. The control population was matched 1:4 on age and gender. The total cohort amounts to 312 000 individuals. The cohort was linked to the Danish Death Cause Register and registers on socio-economic status.

Results

Preliminary results show that overall mortality rates among refugees and family reunification immigrants are lower compared to their Danish born control groups. Additionally, the preliminary results for specific death causes show diverging findings. Concerning infectious diseases refugees and family reunification immigrants have higher mortality whereas mortality for cancer and cardiovascular disease is lower; although variations are seen according to country of origin.

Conclusions

Refugees and especially family reunification immigrants overall have lower mortality compared to Danish born although results vary with death cause. This is in accordance with previous international studies and may be explained by the healthy migrant effect.

Undocumented migrants access to healthcare in Denmark

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Background

European research studies have shown that limited access to healthcare for undocumented migrants may have negative health implications. In Denmark however, the existing data on undocumented migrants' health is scarce. This study is original in the sense that the health, social conditions and access to healthcare has not before been addressed from the perspective of undocumented migrants in Denmark. The overall objectives of the study are to explore which barriers undocumented migrants face when trying to access the Danish healthcare system, and if possible barriers give rise to specific health and illness behaviours.

Methods

The study is based on semi-structured interviews with eight male undocumented migrants' from South Asia (Bangladesh, India and Nepal) in the period February 2009–April 2010. The interviews which were of 35–80 minutes duration were audio-recorded, transcribed and then analysed using 'Content Analysis' procedures. Additional eight ER health professionals from four hospitals in The Capital Region of Denmark have been scheduled for semi-structured interviews in April and May 2010.

Results

The study has shown that undocumented migrants face discrimination accessing the healthcare system, which primarily is due to a lack of hospital guidelines in this area. Based on semi-structured interviews, one formal and four informal barriers have been identified, which can hinder the access to the healthcare system. These barriers are: lack of medical rights, health professional's characteristics, fear, language barriers and lack of knowledge about the healthcare system. These barriers cause undocumented migrants to avoid or postpone contact to the healthcare system and instead make use of alternative treatment methods.

Conclusions

Undocumented migrants face formal and informal barriers to the Danish healthcare system, which may lead to a practice of illness behaviours that have negative effects on their health. The study shows the need for hospital guidelines that may clarify the medical rights for undocumented migrants in Denmark

Humanitarian practices vs. social rights advocacy: NGOs role in migrants' health care

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Migration, whether forced by persecution or disasters or resulting of the economic inequalities between North and South, puts people in subordinated situations in which their basic human rights may be violated. While the recognition of basic social rights has developed historically after the recognition of civic and political rights, their violation puts immigrants at a serious risk, since the violation of basic social rights means obstacles in access to basic needs such as nutrition, housing, education and health care. Humanitarian NGOs became an alternative source that partially fills the vacuum in the provision of social welfare services, but in many cases help to build legitimacy for the state's retreat from responsibility. Human right organizations play an important role in advocating for migrants, but on the other hand can promote a legalistic and individualized perception of the migrant's condition.

In 2007, following a dramatic increase in the number of asylum seekers arriving to Israel, an intense internal debate took place within PHR-Israel concerning the proposal to temporarily close their Migrant and Refugees Open Clinic in order to press the government to take responsibility for the provision of health care services to the increasing number of asylum-seekers. Using the protocols of the meetings and in-depth interviews the article will analyse the interactions and tensions between the humanitarian and the human rights' discourses including their limitations within the neo-liberal context of health care systems configuration.

The analysis of this case study has a significant relevance for the understanding of the current role of NGOs in migrants' health care policies in the context of globalization, transnational migration, neo-liberal public policies as well as bottom-up initiatives of ethnic, racial and class communities that struggle for their right to health.

Self-reported health and lifestyle factors among Finnish migrants in Sweden—results from a population-based study in two counties

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Background

Finns are the largest migrant group in Sweden. Previous studies indicate that incidence of some diseases (such as CHD, alcohol-related diseases and suicide) is higher among Finns living in Sweden than among native Swedes. This study investigates self-reported health and lifestyle factors among Finns living in two Swedish counties with relatively high proportion of Finnish migrants.

Methods

The analyses were performed both at municipality and at individual level. Over 14 000 persons at ages 18–84 years answered a questionnaire about health, lifestyle and living conditions in spring 2008: 12 280 of them were born in Sweden and 976 in other Nordic countries. In these two counties about 90% of inhabitants born in other Nordic countries are born in Finland. The overall response rate was 59%.

Results

In municipalities with high proportion of Finnish migrants self-rated health was, in general, poorer than in municipalities

with low proportion of Finnish migrants. Analyses at individual level strengthened these results. Persons born in other Nordic countries had poorer self-rated health, higher prevalence of musculoskeletal pain, obesity and hypertension than native Swedes even after adjustment for age and educational level. Heavy alcohol use, and among men also smoking, was more common among persons born in other Nordic countries than among native Swedes. There was no difference in physical activity or in psychological distress between these groups.

Conclusions

The study supports the notion that Finns living in Sweden have a poorer self-rated health than native Swedes. Finnish migrants seem to have a higher prevalence of musculoskeletal pain, obesity and hypertension as well as some unhealthy lifestyle habits. No differences in psychological distress or in physical activity were observed.

Pregnant asylum seekers: a review of outcomes, needs and experiences

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Background

Asylum seekers are a vulnerable group with respect to their sexual and reproductive health. Reported reasons for this vulnerability are general health status, stressful experiences in their home country and during flight, uncertainty due to the asylum procedure, language problems and lack of knowledge of the health system in the host country. We conducted a study into the causes of death among asylum seekers in The Netherlands (2002–05) and found three cases of maternal mortality; a strongly increased risk in comparison with the host population (SMR 10.1, 95% CI 8.0–12.8). We reviewed the literature to get insight in the reproductive health outcomes and experiences of female asylum seekers and in how to adjust health care to their specific needs.

Methods

A review of published and grey literature on (i) maternal and perinatal outcomes among asylum seekers, (ii) needs and experiences of pregnant asylum seekers, (iii) recommendations to improve care.

Results

Reports on pregnancy outcomes among asylum seekers are limited in number, but consistently show increased maternal mortality and, among subgroups, perinatal mortality. Qualitative studies showed that pregnant asylum seekers need (i) information about pregnancy and about health care in the host country, (ii) health professionals that listen to their (mental health) problems and (iii) mothers' groups to increase social contacts and information exchange. Pregnant teenagers, HIV-positive women and women with female genital mutilation are groups with specific needs. Recommendations to improve pregnancy care for asylum seekers include: medical screening for specific health risks, promotion of childbirth classes and mothers' groups, cultural competency (including interpretation services) and an empathic attitude among health professionals, an integrated team approach involving health and other professionals.

Conclusions

Asylum seekers are at increased risk for adverse obstetrical outcomes. Even on the basis of the limited number of studies available, strategies to increase quality of care for pregnant asylum seekers can be implemented. One of the core recommendations is an integrated and multidisciplinary care approach.

Working in a new country: foreign physicians' integration into work in Finnish primary health care centres

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Background

During the last decade, the number of foreign physicians in Finland has grown rapidly from 900 to 1650 (~10% of working age physicians in Finland). The migration of physicians is often explained by the shortage of general practitioners creating working opportunities for foreign physicians in primary health care in rural areas in Finland. However, there is little evidence on such a pattern. Research is also lacking on primary motives for coming to Finland as well on challenges of integration into the Finnish health care system. This study examines foreign physicians' career plans, experiences of integration and barriers and facilitators of integration.

Methods

An ongoing study on public sector GP services, 224 municipal health centres was used to identify foreign physicians. The chief physicians of health centres were contacted to ask permission for interviews and the numbers and contact information of foreign physicians working at the centre. Foreign physicians received general information on the study from the chief physicians. Thereafter the researcher contacted them asking permission for an individual interview. We conducted 15 thematic interviews in the winter 2009–10. Interviews were taped, transcribed and analysed using qualitative content analysis.

Results

Despite increasingly active recruitment policy in Finland, family related factors tended to be main motives for migration and the most frequently mentioned challenges in migration were related to applying licenses and getting a job in Finland. Learning Finnish language was also experienced to delay the integration process. After gaining work experience in primary health care centres, most foreign physicians had plans to move from primary to secondary care.

Conclusions

Our study shows that acquiring the licence and employment forms a challenge. However, foreign physicians already employed are relatively well integrated into their work. Considering a career plan among the interviewees, their interest is to move from primary to specialized care which is popular also among Finnish physicians.

Living on social assistance with chronic illness: buffering and undermining features to well-being

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Background

In Sweden, the social security and sickness insurance system are comprehensive and aim to maintain a sufficient income for people whose illness prevents them from earning their own living. Some, however, do not qualify for such benefits and are referred to social assistance. The purpose of this study was to explore in depth, how social assistance recipients with chronic illness perceive and respond to their situation.

Methods

Seventeen in-depth interviews were carried out with chronically ill people who had received social assistance for several years. Grounded theory informed the design of the study.

Results

The study showed that different strategies (living one day at a time, taking steps forward and backward and making attempts to find ways out of the situation) were employed by social assistance claimants to maintain or improve their well-being. Contextual features like the prevailing welfare system, services and the local neighbourhood could buffer or undermine these strategies and their overall well-being. These features together influenced how people perceived their situation, the possible ways out of the situation and the consequences for their well-being.

Conclusions

From this study it is evident that the way in which individuals on social assistance interact with services and how they are treated by professionals plays an important role in their well-being, in combination with what kind of help and support is available for claimants through the welfare system.

Child bearing and social situation of the gipsy families

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Objective

To examine the distribution of gipsy society within a settlement measuring the social status, child bearing tendencies, the financial incoming sources and contraception methods.

Methods

Survey involving 50–50 gipsy families in a Hungarian settlement called Taktaharkány.

Results

The gipsy community is divided into two parts. Families living near the cemetery on the periphery of the settlement are called 'uppers', families living with the Hungarians are called 'downers'. Data regarding the number of children, housing, schooling, illiteracy, working, contraception reflect less favourable results in the case of families living separated from Hungarians. Furthermore the number of children in these families is one and a half time more than in 'uppers'. The number of children in the disadvantageous families is 225 and 157 in the families that live with the Hungarians. The separated gypsies face with harsh housing conditions. Many of them live in houses without necessary conveniences. Furthermore the average number of persons living within one household significantly exceeds the 'uppers'.

Apart from a slight exception most of the integrated gypsies have attended school and quintuple of them have even successfully finished the elementary school. A quarter of them have continued their studies in secondary school. Six 'upper' gypsies can speak a foreign language on basic level. Thirty-nine separated gypsies out of fifty are illiterate. Gipsy community in Taktaharkány is also hit by unemployment. Two third of the 'uppers' and half of the 'downers' do not take any seasonal jobs. Child bearing determination and protection against unwanted birth are not coherent in families being involved in the survey. Though plenty of them would not like to have further babies they do not use contraception.

Conclusions

Results of the survey show the benefits of integration. The integrated ethnic groups have much better chance for social and economic development.

Characteristics of patients receiving allergy vaccination: to which extent do socio-economic factors play a role?

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Issue/problem

Little is known about characteristics of patients receiving allergen-specific immunotherapy. Identifying obstacles to appropriate treatment according to guidelines may facilitate the development of strategies aiming at improved treatment of patients with allergic respiratory diseases. The objective of this study was to investigate differences in disease severity, demographic and socio-economic status between allergic rhinitis patients receiving allergen-specific immunotherapy and allergic rhinitis patients not receiving allergen-specific immunotherapy.

Description of the problem

A total of 366 patients were studied of whom 210 were going to receive subcutaneously administrated immunotherapy (SIT) against grass pollen and/or house dust mite allergy. The severity of rhino-conjunctivitis (hay fever) and/or asthma was classified according to international guidelines. The questionnaires included an EQ-5D VAS-scale instrument and some socio-economic questions.

Results (effects/changes)

Severity of disease, young age, high level of education as well as greater perceived impairment of health related quality of life due to allergic symptoms were significantly associated with use of SIT. Somewhat unexpectedly, household income was not associated with use of SIT.

Lessons

Use of SIT was associated with both disease severity measures and educational level, but not income level. These results suggest social inequality as reflected by lower use of SIT among patients with lower educational level may represent an obstacle to treatment with SIT.

Primary care interventions to reduce socio-economic health inequalities

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Background

Socio-economic health inequalities (SHI) are widening in Europe despite growing political attention. European projects have demonstrated their multiple causes and called for intersectoral actions in and out of the health care system. However, health often remains the concern of solely the health sector and although its organization has been linked to reduce SHI, only a few successful interventions have been described, mostly in primary care (PC). A systematic literature review of PC intervention aimed at reducing SHI has been conducted to provide evidence-based actions.

Methods

Articles published after 2000 were selected in Medline, Cochrane, Health Policy Monitor, Nber and in Eurothine results, if they reported a quantitative evaluation of a PC intervention on health outcomes by social groups. PC interventions were defined as either related to the types of PC services provided, to their organization and to their financing.

Results

The review included 101 (80% USA) evaluated interventions mainly on financial access to care, health promotion in the community setting and health care organization. PC interventions successfully reduce SHI. Improving financial access to care increases health care utilization and health outcomes. Universal access to care can be completed with tailored, culturally adapted health promotion interventions led by peer educators. Finally, health care organization interventions such as teamwork or disease management can reduce health inequalities.

Conclusions

This systematic literature provides evidence on the efficiency of interventions within primary care that reduce SHI but more evidence-based interventions are needed to establish the appropriate public policies.

Occupational health and safety

Severe bottlenecks for employee and employer to realize early work resumption, The Netherlands 2008–10

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Background

To increase labour participation, many Western countries have provided sick or disabled employees and their employers with the responsibility to actively engage in work resumption. However, in practice, both parties perceive bottlenecks taking this responsibility. This issue is increasingly relevant for public health policy makers, due to the expected growth in the population of disabled people.

This study aimed to provide a comprehensive understanding of the bottlenecks that impede the employee and employer to take their responsibility and realize early work resumption.

Methods

We used a combination of purposive- and snowball sampling to recruit participants and contacted them by means of online information and professional networks. In total, 40 participants: employees (14), employers (15), Occupational Physicians (OPs) (five) and scientists (six)

were interviewed by means of a topic list based on the research questions. All interviews were analysed by means of thematic analysis.

Results

First, employees and employers had divergent perspectives on problem definitions and desired actions. Employers often emphasized medical and individual aspects. However, employees also made explicit psychosocial and work-related aspects.

Second, actors showed several undesired or dysfunctional role behaviours (e.g. advices of curative care professionals contradicted those of others such as OPs).

Third, bottlenecks such as psychosocial complaints (e.g. conflicts between employees and employers) influenced work resumption directly.

Conclusions

Employees and employers often ask other actors such as OPs to take over the typical employee and employer responsibility to realize early and proper work resumption. At the same time, actors such as curative care professionals and OPs often hamper them to take their responsibility by untimely interventions for instance. This interaction results in psychosocial bottlenecks, (persistence of) medical complaints, and eventually in prolonged duration of absence. Based on these findings, innovative interventions should be developed.

Sickness absence as a tool for occupational epidemiological surveillance of influenza A/H1N1 in Catalonia (Spain)

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Background

The virological and epidemiological features of the new A/H1N1 flu pandemic forecast a strong impact on businesses, given its incidence on the young adult population.

Methods

An ecological surveillance study was conducted of cases of sickness absence due to non-occupational illness among the insured population in Catalonia. The number of incident cases per week during the pandemic period [week 40 (2009)–52 (2009)] was represented graphically, together with the median number of cases in previous years [1 (2007)–39 (2009)] and the maximum and minimum value as limits of an endemic interval, for diagnoses of influenza and influenza-related illness by total cases, sex, age and economic activity. The endemic-epidemic index (EEI) was computed as $EEI_i = O_i / E_i$, where O_i are observed cases in the i -th week (1–52) and E_i are the expected cases in the same week, calculated as the median of the cases over the three previous years.

Results

Of 3 101 131 cases of non-occupational sickness absence that occurred before the pandemic (cases), 107 227 (3.5%) were diagnosed as influenza. During the pandemic period (319 907 cases) there were 45 429 (14.2%) cases of influenza. The EEI was greater for influenza than for either influenza-related illness or total cases (21.0, 3.1 and 1.6, respectively). In addition, EEI was higher in women ($EEI_{44} = 1.5$ for total cases; $EEI_{44} = 2.9$ for influenza-related cases and $EEI_{46} = 17.6$ for influenza cases in man vs. $EEI_{44} = 1.7$ for total cases; $EEI_{46} = 3.5$ for influenza-related cases; $EEI_{46} = 25.3$ for influenza cases in women). By economic activity, 'education, health and other social activities' yielded the highest EEI_{45} for influenza cases (114.3).

Conclusions

The flu pandemic has had an important impact—in terms of sickness absence, greater than expected cases in October and November, as compared to previous years, especially in service activities.

A 4 years follow-up study of multiple sites pain and its effect on work ability among food factory employees

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Background

The work environment of the food manufacturing industries includes much repetitive movements, lifting, carrying and unfavourable working postures which may be the prime causes of pain in different part of the musculoskeletal system. Especially multiple sites pain may affect work ability and causes sickness absence and loss of productivity. Present study evaluates the association between the number of pain sites and work ability during a 4-year follow-up period.

Methods

The survey was carried out in 2005 and 2009 in a large food industry in Finland. A total of 615 workers (64.6% female), in the same job during the follow-up participated in the study. The response rate in the survey was 78%. The mean age was

41 years (SD=9.5) ranging from 20 to 62 years in the beginning of the follow-up.

Results

The prevalence of four-sites pain increased by 6% while no pain decreased by ~5% during the follow-up. Meanwhile, poor work ability increased by ~9% and good and excellent work ability decreased by ~9 and 3%, respectively. The probability of moderate, good or excellent work ability increased with decreasing number of pain sites. Number of pain sites also increased with age especially among 41–50 years age group workers. Compared with one-site pain people with no pain had 4.75-fold probability of having excellent work ability in comparison to the poor work ability in the base line. Similarly, people with 4-sites pain had 0.05-fold probability of having excellent work ability in the base line and 0.04-fold in the follow-up year.

Conclusions

The result of this study suggests that there is an association between multiple-sites musculoskeletal pain and work ability especially among middle age group workers.

The association between poor organizational climate and high work commitments, and sickness absence in a general population of women and men. Data from the Health Assets Project

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Background

Little research has been addressing the combination of organizational climate and work commitments and its association with sickness absence. The objectives of the study were to investigate (i) the prevalence of organizational climate and work commitment in a general working population, (ii) the association with sickness absence, and (iii) the interactive effects among women and men.

Methods.

This cross-sectional study consisted of employed women and men in two cohorts, (i) randomly selected individuals in a general population of workers (G-WP=2763) and (ii) consecutively selected employed sick-listed >14 days (E-SL=3044) during 2 months. Registered-based data and questionnaire data including questions of organizational climate and work commitment was analysed with descriptive statistics and logistic analysis.

Results

There was a significant larger proportion with an over all good organizational climates among women with 81% in the G-WP compared to 75% in the E-SL. Corresponding figures among men were 83 and 69%. Among men, poor organizational climate (experiences of supervisor not considering your views, conflicts at work, a feeling of uneasy to go to work and bullying) was associated with increased odds of belonging to the E-SL, with an adjusted OR of 2.33 (95% CI 1.86–2.92) and among women the figure was 1.49 (95% CI 1.25–1.77). While perceived high work commitments (engagement in work, high demands on yourselves, difficulties setting limits and too high responsibility for work) only had an increased OR among women with an adjusted OR of 1.25 (95% CI 1.08–1.46). The increased adjusted OR for the combinations of poor organizational climate and high work commitment was among women 1.80 (95% CI 1.36–2.37) and among men 2.74 (95% CI 1.84–4.08).

Conclusions

There were interactive effects of organizational climate and work commitment among both women and men, especially

among women. Among men the organizational climate seemed most important.

Workplace health promotion and absence culture are more important than structural factors as determinants of local differences in sickness absence among social care employees in Swedish municipalities

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Background

In Sweden there are large unexplained differences in sickness absence between regions as well as between employers within the same trade. The aim was to study sickness absence differences between municipalities in their social care staff in relation to internal workplace factors as well as external structural factors in the local society.

Methods

A questionnaire with focus on perceived organizational climate, health, absence culture and workplace health promotion (WHP) was sent out to 15 871 social care employees in a random sample of 60 out of Sweden's 290 municipalities. The response rate was 58%. A database of the 60 municipalities was constructed with aggregated data from the questionnaire and official registers.

Results

In a Structural Equation Model analysis, lower sickness absence level was related to internal factors (access to and utilization of a broader repertory of WHP measures, a more restrictive absence culture, and better self-rated health) as well as external structural factors (lower rates of sickness absence in the population). Multivariate analyses indicate that WHP measures was the most important predictor followed by absence culture which, however, was mostly determined by external structural factors such as a more favourable situation concerning prosperity, labour market, and standardized mortality rate in the local society. Better self-rated health was determined by encouraging leadership mediated by better social climate at the workplace.

Conclusions

Although the staff sickness absence level is related to local structural factors beyond the control of the manager such as the level of sickness absence in the general population and the local absence culture, the managers' measures concerning WHP, leadership and organizational climate matter irrespective of these external circumstances.

Improving the quality of information on GP's certificates for sickness insurance—results of an experiment in Sweden

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Background

Information about functional incapacity associated with sickness is communicated to Sweden's national sickness insurance through the doctor's medical certificate. Recent studies indicate that >40% of the certificates do not provide an adequate description of the functional capacity of the patient. This means that the Social Insurance Agency (SIA) has to gather additional information for a large number of certificates. This results in more work for the doctor, the SIA and may lead to longer spells of sick leave. The study reports the result of an experiment designed to improve the quality of certificates.

Methods

The study base consisted of GP's at all medical clinics in 40 Swedish medium-size municipalities. Twenty of the

40 municipalities were randomly selected for 'treatment.' A letter explaining the importance of relevant and adequate information in the medical certificate was sent from the SIA to all primary care units (PCU) in the 20 'treatment' municipalities. The letter also stated that the SIA would increase control of certificates and intensify its contacts with GP's when the information in the certificate was inadequate. All certificates in all 40 municipalities were collected during one month. Two experienced SIA doctors assessed blindly and independently all 539 certificates for new cases.

Results

In the control group 43% (95% CI 0.38–0.48) of the certificates were inadequate as regards the patient's functional capacity. In the treatment group 8% (95% CI 0.01–0.15) more certificates had inadequate information.

Conclusions

A letter from the SIA to PCU about the SIA's need of adequate information on functional incapacity to determine the patient's right to sickness insurance had the opposite effect than that intended.

Health related and socio-demographic risk factors for disability pension due to low back disorders: a 30-year prospective Finnish twin cohort study

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Background

Low back disorders (LBD) are common reasons for disability pensions (DP). More knowledge is warranted regarding risk factors for DP due to LBD to provide basis for interventions. We aimed to investigate health related and socio-demographic risk factors for future DP due to LBD in a twin cohort, enabling evaluation of familial influences.

Methods

Questionnaire data gathered at baseline 1975 was used to study selected risk factors for future DP due to LBD. Information on DP with specific diagnoses during follow-up in 1975–2004 was obtained from the Finnish nationwide official pension registers. The study sample consisted of 24 043 twin individuals from the Finnish Twin Cohort Study, aged 18–65 years at baseline. Data was analysed by Cox proportional hazard model on individuals and by conditional Cox proportional hazard model to examine within-pair differences.

Results

During the follow-up, 600 individuals were granted DP due to LBD. Musculoskeletal pain sites (HR=2.36–2.39; 95% CI 1.97–2.88), smoking (HR=1.82; 1.49–2.22), frequent use of analgesics (HR=1.67; 1.38–2.02), and presence of other chronic condition (HR=1.44; 1.22–1.70) at baseline increased the risk of DP due to LBD. Additional years of education reduced the risk (HR=0.81; 0.77–0.85). Within-pair analysis showed similar results.

Conclusions

Health related and socio-demographic risk factors for future DP due to LBD can be identified early in the life course, and they seem to be independent from the familial effects. This study implicates that accumulation of health problems and negative health behaviour during the life course increase the probability for future DP due to LBD.

Managing work-related stress: an evaluation of a project targeting small and medium enterprises (SMEs)

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Background

One in five British employees suffers from work-related stress at any given time and it is the reason for one out three GP appointments (CIPD, 2008). Small and medium enterprises (SMEs) may be particularly vulnerable, as they often have neither structures nor capacities to address stress-related issues. We present results of the evaluation of a project, which provided stress management support to London-based SMEs.

Methods

Mixed-method evaluation (telephone survey and participants' contact/feedback forms) focusing on (i) the number and profile of SMEs, (ii) stress-related sickness absences and (iii) users' perceptions and satisfaction

Results

A total of 126 SMEs were engaged between 09/07 and 03/09 (median number of employees/collaborators = 12. Range = 1–240). Of the SMEs, 60.3% were non-for-profit; a third each was owned by people with disabilities and by women and 7% by members of ethnic minorities. Sixty-six per cent attended workshops; one quarter received face-to-face interventions. Findings from the 15-min telephone survey (54% response rate): Only 15% reported stress-related absences in the last 3 months (mean days = 2.5). 40% assessed the impact of stress-related absences as low/moderate; the key effect being on team creativity (31%). The numbers of SMEs reporting no/insufficient information and no/insufficient support fell from 18 to 6, and 19 to 12, respectively. The numbers of those reporting good/very good information and good/very good support rose from $n=9$ to 33 and from 9 to 14, respectively. Access to information sources and formal advice increased from 34 to 55% and 30 to 55%, respectively. Ninety-six per cent of participants were satisfied/very satisfied with the workshops.

Conclusions

The project engaged a variety of SMEs; non-for-profit organizations were more likely to participate. The impact of interventions was largely on raising awareness about stress and increasing information levels. Measuring the impact on sickness absences proved to be challenging. Alternative measures of impact need to be considered for interventions of this scale and type.

Students, residents and academics: the problem of musculoskeletal pain and health-related quality of life in a faculty of dentistry

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Background

The prevalence of musculoskeletal complaints in dentists is high although relatively few studies had focused in this profession in Turkey. In terms of occupational health and life satisfaction, musculoskeletal pain and its negative consequences on health-related quality of life (HRQOL) is an important issue.

Aim

It is aimed to determine the frequency of musculoskeletal pain and its impacts on HRQOL of dentistry students, residents and academics of a faculty of dentistry.

Methods

This cross-sectional study was conducted among 312 dentistry students, 40 residents and 25 academics. The self-reporting questionnaire distributed to all students, residents and academics was consisted of items on socio-demographic characteristics, life style, working conditions and HRQOL (MOS SF-36 scale).

Results

Sixty-six per cent of the students, 88% of residents and 76% of academics were females. Of the study group, 58% of students, 85% of residents and 88% of academics reported musculoskeletal pain during last year ($P<0.001$). The frequencies of musculoskeletal pain in last month among residents and academics were significantly higher than their student counterparts (72.5, 68.0 and 39.3%, respectively, $P<0.001$). In the last year, female students and residents reported significantly more musculoskeletal pain ($P<0.05$). Female residents' musculoskeletal pain complaint was significantly higher than others ($P<0.05$) in the last month. The mean of physical component score of SF-36 Scale was significantly low for participants who had musculoskeletal pain in all groups except academics ($P<0.05$). The mean of mental component score of SF-36 Scale was significantly low only for students who had bodily pain ($P<0.05$).

Conclusions

Musculoskeletal pain problem which may lead to serious physical mental disability is common not only among academics and residents but dental students in this academic dentistry setting. Since musculoskeletal pain occurs early in dental training, and continue during professional life more detailed studies are needed to examine the mental, physical and ergonomic factors that may be contributory.

Duration of non-occupational sickness absence by medical diagnosis. Catalonia, 2006–08

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Background

Sickness absence (SA) costs in Spain have been increasing, surpassing eight billion € in 2009. In order to better control SA, good information systems that allow monitoring of trends and determinants of SA duration are needed. Some countries have developed useful guidelines describing duration of SA by medical diagnoses; in Spain, research in this area has been limited.

We analysed the duration of SA episodes of non-occupational origin in Catalonia over a 3-year period (2006–08), by medical diagnosis and its determinants.

Methods

A retrospective cohort study of 2 646 426 medically certified SA episodes and of at least 3 days' duration, registered by the Catalan Institute of Medical Evaluations, was followed to closure. Duration of episodes was analysed by ICD-10 diagnostic groups (3-digit) and codes (4-digit), sex, age, health region, industry and social security scheme.

Results

Overall median duration in days (MD) of SA was 9 (25th percentile, 4; 75th percentile, 29). Musculoskeletal disorders were the most frequent diagnostic group (22.5%), followed by respiratory (21%) and infectious diseases (12%). Neoplasms

had the longest MD (56), followed by haematological-immunological (34), mental health (32) and circulatory (31) disorders. The 4-digit codes with the highest frequencies were diarrhoea-gastroenteritis (8.2%; MD 3) and acute rhinopharyngitis (5.2%; MD 4). Variables that increased SA duration were female gender, increasing age and being self-employed.

Conclusions

There are important differences in duration of SA by medical diagnosis, further modulated by demographic and administrative variables; the number of SA episodes is dominated by acute, short-term conditions. Results will be expanded to include multivariable analyses that account for repeated episodes in the same individual, effect of each independent variable and interactions. These results represent the first step in the development of draft disability guidelines that can help guide both the clinical and administrative management of SA.

Length of sick-leave and relative risk of mortality

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There are few population-based studies of consequences of being sickness absent, e.g. in terms of premature death. Moreover, most of them have not considered health aspects. The aim was to examine the relative risk (RR) of mortality stratified on different duration of sick leave among women and men.

Methods

A prospective cohort study of all people living in Sweden in 1995 and aged 16–64 years; 2 275 987 women and 2 393 248 men were followed to 2006. Number of days with sick-leave benefit in 1995 was classified in 0, 1–15, 16–75, 76–165 and 166–365 days. Days of hospitalization in 1990–95 serve as the measure of health. The RRs, 95% confidence interval (CI), were estimated for all-cause mortality using Poisson regression models adjusted for age and hospitalization.

Results

The number of deaths in 1996–2006 among men was 82 492 of which 63 403 without sick leave and among women 49 178 and 35 829, respectively. Women were more sick listed, short- and long-term. Using no days with sickness benefits in 1995 as reference group, the age-adjusted RR for death 1996–2006 was 1.24 (1.20–1.29) among women and increased with number of days so that those with >165 days had a RR of 3.55 (3.43–3.67). Among men the age-adjusted RR increased from 1.47 (1.43–1.52) to 3.36 (3.27–3.46). When adjusting for any hospitalization in 1990–95, the RRs decreased somewhat; RR for women with 1–15 days 1.13 (1.09–1.18), with >165 days RR 2.81 (2.71–2.90) and for the same durations, men RR 1.28 (1.24–1.32) and RR 2.23 (2.17–2.30).

Conclusions

The RR of mortality increased with duration of sick leave, also when adjusting for hospitalization and age. The results suggest that length of sick leave might predict premature death.

Worker's perception in return to work after non-work-related sick leave episode. A prospective cohort study in Spain

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Background

Long-term sick leave episodes are responsible for 75% of the cost of sickness absence and have been linked to a lower rate of

return to work (RTW). Knowledge on its prognostic factors benefits the worker, employment, economic and social situation. The objective of this study was to determine if worker self-perception about the sick leave episode is a prognostic factor for RTW after long term sickness absence non-work-related.

Methods

Study base were 210 285 workers from 22 626 companies associated with a work compensation health insurance (mutua) in Spain. A case was defined as a worker on non-work-related sickness absence exceeding 15 days and with a first medical check-up in 2007–08. The final sample included 663 workers, after excluding non participants ($n=592$) and participants with missing values ($n=125$). A specific questionnaire was designed and self-administered. Information on each episode was obtained from the mutua's register. The outcome was time to first RTW and the independent variables were health status and self-perceived work ability, expectations and time required to RTW, self perception on the cause of the health problem and self-efficacy. A multivariate analysis was performed using Cox Regression, and hazard ratios (HR) and 95% confidence intervals (95% CI) were calculated. A HR <1 express a longer time to RTW.

Results

Poor perception of health status (HR 0.69, 95% CI 0.53–0.88), extremely reduced work ability (HR 0.71, 95% CI 0.59–0.85), perception of a longer period of time to RTW (HR 0.36, 95% CI 0.25–0.52) and lack on expectation of returning to the same job (HR 0.13, 95% CI 0.06–0.31) were associated with an increased time to RTW, after adjusting for sex, age, cohabitation status, physical activity and job insecurity.

Conclusions

The worker's opinion on the sick leave episode is a prognostic factor in non-work-related sickness absence.

Long-term sick leave in Sweden 1992–2008 and the role of economic conditions, legislation, demography, work environment and alcohol consumption

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Background

In Sweden, absence from work due to disease or injury has fluctuated considerably and this pattern is more pronounced than in most other European countries. Over time there has been a shift from short-term to long-term sick leave, more mental disorders, and increasingly more women than men are on sick leave. The aim of the study was to identify potentially important factors behind variations in long-term sickness absence.

Methods

Aggregated monthly data 1992–2008 were used to assess factors correlated with the number of ongoing cases of sickness absence lasting more than 59 days among women and men. OLS-regression on first-differenced time-series was applied. Associations with potential explanatory factors were analysed using statistics from national social insurance records, labour force and working conditions surveys, and other official statistics.

Results

Some changes in the sickness insurance and disability pension schemes were important, but the results showed no consistent associations for the study period. Instead, there was an upward trend during the 1990s and a downward trend from 2003 and onwards, regardless of whether the amendments entailed more generous or more restrictive rules. Compared with earlier findings, workforce composition were weakly associated with variations in long-term sickness absence. On the other hand,

increased alcohol sales, high work pace and among men also disorders caused by stress and strain at work, were associated with increased long-term sick leave.

Conclusions

In general, amendments to the social insurance schemes, and the composition of the labour force were only weakly associated with the variations in long-term sickness absence

during the last decades. Amendments to legislation tend to lag behind rather than lead changes in long-term sick leave. Notably, our findings imply that public health indicators such as alcohol consumption and factors related to working conditions and worker health are more strongly associated with prolonged periods of sick leave.

Public health epidemiology

Smoking during pregnancy—which behaviour has the highest risk?

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Background

Smoking during pregnancy has of course been recognized for many years to cause major health problems to both mother and foetus. This study aims to identify smoking behaviour carrying the highest risk in order to provide a suitable focus for remedial action through raising awareness.

Methods

An extensive lifestyle survey was conducted on post-partum mothers throughout Poland in 382 maternity hospitals before and during pregnancy regarding smoking. The study being part of the EU's 'Warsaw Declaration' policy of removing health disparities in Europe undertaken by the Polish State Sanitary Inspectorate. Questionnaires were based on the PRAMS-CDC model and completed by 3280 women during 24 h. Clinical data on the pregnancy was also included. Results were evaluated by Chi-squared and Cramer's V.

Results

Overall, half the women studied had smoked sometime in life, 62% smoked in the last 2 years with 60% smoking daily. Findings showed that women smokers (41%) did not limit smoking when pregnancy was confirmed late (>10 weeks) compared to confirmation at 1–4 weeks (19%); the former group showing the highest non-awareness that smoking is harmful (7.3%) compared to others (<3%). The smallest number of women in their first pregnancy that smoked daily in last 2 years were also observed (56%) compared to second (62%), third (60%) and >3 (79%) pregnancies; the former also showing the greatest tendency to limit their smoking during pregnancy (28%) compared to others at 14–16%. Women smoking daily or those exposed to passive home smoking, more frequently admitted to: (i) continuing smoking during pregnancy (14%) than those not smoking daily (<5%) and; (ii) attempting cessation (50%) compared to 25% where nobody smoked at home. In the latter case the highest number (88%) claimed to have limited their smoking.

Conclusions

The pin-pointed areas as described will be duly targeted in a major educational campaign.

Correlates of ever cigarette smoking among youth in Uzbekistan: findings from the Uzbek global youth tobacco survey 2008

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Introduction

Tobacco smoking among adolescents is of public concern because of the immediate and long-term deleterious health effects such as pulmonary diseases, cancers and cardiovascular diseases. The prevalence figures alone without information on

the predictors of smoking will fail to provide further understanding of youth's behaviours. It is therefore important also to identify socio-demographic factors that are associated with cigarette smoking.

Objective

To explore socio-economic differences in the prevalence of ever smoking (defined as trying or experimenting with cigarette smoking, even one or two puffs) among youth in Uzbekistan.

Methods

In 2008, 2133 youth aged 13–15 were surveyed about tobacco use habits using the Global Youth Tobacco Survey methodology. The nature of the associations between ever smoking and explanatory variables was explored through logistic regression analyses.

Results

The prevalence of ever-smoking in this sample was 9.8% (95% CI 8.6–11.1)—2-fold higher among boys (15.0%) than girls (7.1%), and higher among older adolescents (34.9% among >17 year olds), youth with two smoking parents (65.2%), and those with a majority of friends who smoke (61.7%). Results of multivariate logistic regression indicate that 12 years (Adjusted OR = 7.5, 95% CI 2.2–26.4), 13 years (AOR = 4.03, 95% CI 1.68–9.68) and 14 years old (AOR = 3.72, 95% CI 1.63–8.53) remain the strongest predictor of ever smoking upon controlling for sex, parents and friends smoking habits. Other significant predictors include male gender, both parent smoking, teenagers' friends smoking status, particularly most, some, all (AOR = 1.2, 95% CI 0.68–3.66); most importantly father smoking habit (AOR = 1.3, 95% CI 0.78–4.79) influence on ever smoking behaviour of teenagers compare to mother smoking habit (AOR = 1.4, 95% CI 0.88–3.10).

Conclusions

The observed associations between ever smoking peer smoking, friend smoking, age and sex should be considered in the design of public health interventions aimed to reduce adolescent cigarette smoking.

Clinical trials with anticoagulants—are bleeding complications and thromboembolic events well known or SUSAR's?

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In clinical trials Investigators have to inform the sponsor of the trial concerning all serious adverse events (SAE). Furthermore, the sponsor has to inform the competent authorities and ethics committees of all suspected unexpected serious adverse reactions of the investigational product including unexpected changes in the frequency of expected reactions. Thereby the sponsor has to monitor and classify the incoming SAE data to extract the SUSAR's and changes in frequency of reactions required to be reported to the competent ethics committees and authorities to ensure a permanent benefit risk evaluation of the corresponding clinical trial.

The SUSAR reports sent to the ethics committee of the medical faculty of Technische Universität Dresden for one trial testing a new anticoagulant were evaluated and checked if they contain suspected unexpected SAR. In total more than 300 SUSAR reports were evaluated.

The majority of the reports received contained either information on different bleeding episodes (e.g. haemoptysis, gastrointestinal haemorrhage, haematuria, haematoma, epistaxis and brain haemorrhage) or thrombo-embolic events (e.g. lung embolism, deep vein thrombosis, phlebitis, and stroke).

As the indication to use anticoagulants is to reduce the risk of thrombo-embolic events in patients with e.g. bone surgery, atrial fibrillation, tumours, previous thrombo-embolic events it is not unexpected that such events happen in such a population (low or insufficient efficacy of the investigational product). On the other hand reducing the clotting risk by prolonging the bleeding time includes the risk of bleeding episodes (a somehow elevated INR is the therapeutic goal in that population) and again these events are not at all unexpected but are an inherited risk of such a therapy.

The vast number of untruly SUSAR reports do not allow a conclusive permanent risk benefit evaluation of the trial, in the contrary the tremendous work load and large number of inconclusive reports blurred the vision for important safety risks. A much more appropriate report format for these SAE would be the inclusion in developmental safety update reports (DSUR) which allow statistical analyses of the frequency of adverse reactions

Potentially detrimental lifestyle behaviour and complications to infant health in Polish women before and during pregnancy (2009)

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Background

The adversely serious impact of smoking, drinking alcohol and substance abuse during pregnancy on the health of the foetus and mother is self evident and such behaviours are often linked together. In Poland this situation was assessed by analysing the effects during pregnancy of smoking and passive smoking in conjunction with drinking, using marihuana and sleeping pills in post-partum women and offspring.

Methods

The study was performed through the Polish State Sanitary Inspectorate as part of the EU's 'Warsaw Declaration' policy of removing health disparities in Europe. Post-partum women ($n=3280$) in 382 maternity hospitals were surveyed during one single 24-h period in late 2009. Questionnaires for the mothers were based on the PRAMS-CDC model plus clinical data was obtained concerning the pregnancy, e.g. previous pregnancies, infant weight, APGAR rating, congenital problems, prematurity, etc. Statistical analysis used Chi-squared and Cramer's V.

Results

The principle effects on newborns were; women (8%) smoking for the last 2 years but not daily had lower birth-weight newborns than normal compared to women smoking daily (5%). In the latter group, (16%) had infant APGAR ratings below a healthy level compared to (11%) of women who smoke but not daily. Also women with birth complications had higher awareness of passive smoking harm. Caesarean section was highest in those mothers (26%) who had ever taken antidepressants or sleeping pills compared to 14% who had not. During pregnancy 92% of non-smokers and 82% smokers did not drink whereas women who drank, 23% ceased smoking

but 20% continued. Women smoking marihuana was highest when pregnancy was confirmed early (1–4 weeks) and in women with their first pregnancy. The highest occurrence of taking sleeping pills were for women who continued to smoke (17%) compared to those that did not (8%).

Conclusions

Formulation of a preventative educational strategy was thus facilitated.

Health observation resources at the regional and local level in France

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Issue/problem

In 2010, decentralized health and social administrations were integrated in each of the 26 French Regions into a Regional Health Agency (RHA), in charge of all health policy aspects: ambulatory, hospital, rehabilitation and long term care, health promotion. Regional implementation of health policies will be structured in a 5-year regional health project with significant inputs from various health systems' actors. Developing and monitoring programmes relevant to local and regional health issues will require collecting and sharing appropriate information regarding the population's health and its main determinants.

Description of the problem

We recognized the need to identify existing organizations involved in the observation of health and its determinants at the regional and local levels, and to analyse interactions between them and with policy makers. All organizations identified by Regional Health Observatories were included in a mail survey. In-depths interviews of varied health information producers and users were conducted in 10 regions.

Results

A total of 1215 organizations were identified (22–93 by region), including observation units within regional institutions (23%), regional observation structures covering both health and social issues (10%), and structures focusing on health (20%), social/health and social (12%) or training and employment (11%) issues; 384 (32%) answered the mail survey (78% of the regional structures); 50 declined explicitly. Interviews pointed to the lack of a common culture and methods, and to barriers and opportunities for improved coordination.

Lessons

A rich variety of regional and local organizations can supply relevant data to the development and monitoring of comprehensive health programmes and policies. Ensuring information relevance, validity and comparability within and across regions while making optimal use of limited resources will require to develop partnerships between information producers as well as between producers and users, and to develop shared references and methods at the national and international level.

Given examination time to the health examination survey effects on participation. Results from the Finrisk 2007 survey

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Background

The declining participation rates are a general problem in all kinds of surveys, also in health examination surveys. The reasons behind the non-participation vary both in individual and group level. It was investigated does the pre-scheduled examination time effect on participation rate and which population groups most often change the given appointment.

Methods

The Finrisk 2007 health examination survey is a population-based survey of Finnish adult population aged 25–74 years. The sample is a random sample from the Finnish population register. For each person selected to the survey, a pre-scheduled examination time was given in the invitation letter. Times were from Monday to Friday between 11:00 and 18:00. Persons had a possibility to change the time given to them if it was not suitable. The information about the pre-scheduled examination time and the actual examination time was recorded and compared between participants and non-participants.

Results

From 9952 person selected for the survey, 68% participated. From those who participated, 28% changed their pre-scheduled examination time. Women changed their examination times more often than men as well as persons from younger age groups. Also single persons with higher education and those employed at the time of the survey were more prone to change their examination time. Most often the changes were within few days from given time and morning hours were changed to late afternoon hours.

Conclusions

Some population groups are more prone to change their pre-scheduled examination time. It is also evident that for employed population, participation to the health examination survey during the working hours is more difficult than in the evening. In future surveys, these findings should be taken into account while planning the recruitment strategies for the selected persons.

Clustering of lifestyle-related cardiovascular risk factors in the Greek population: Hellas Health I study

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Background

Cardiovascular disease is one of the main causes of death worldwide. Having multiple risk factors has been associated with significantly higher mortality and morbidity. Objective of the present study was to explore the clustering of cardiovascular risk factors in a representative sample of Greek adults.

Methods

A representative sample of the Greek adult population was randomly selected and interviewed. 89 individuals were excluded from the analysis due to missing data. Data on lifestyle-related risk factors (being obese, consumption of less than five servings of fruit and vegetables per day, being physically inactive and smoking) were analysed for a total of 916 adults (48% male, mean age 47.3 ± 18.2).

Results

A total of 92.9% of our sample had at least one lifestyle-related cardiovascular risk factor and 63.6% had two or more. Having multiple risk factors was not associated with gender, age, education, socio-economic or marital status ($P > 0.05$). When smoking, which is highly prevalent in Greece, was excluded from the analysis, women ($P < 0.05$), older (< 0.001) and married (< 0.001) individuals and people of low educational level ($P < 0.001$) were significantly more likely to have multiple risk factors.

Conclusions

Most of Greek adults have multiple lifestyle-related risk factors for cardiovascular disease. Urgent action and the implementation of nationwide health promotion interventions are needed in order to improve the Greek population's health.