4.M. Pitch presentations: Health care workforce

How many medical doctors do we need?

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Problem

European countries have much diversity at cultural, economic and social level and health systems operate independently in each country and even within the European Union (EU) health remains responsibility of member states and only recently circulation of health goods is coming on agenda.

Description of the problem

Migration of medical doctors (MDs) and nurses from south-east to northwest of Europe was present for decades and became greater than before with the EU enlargement in 2004.Croatia is faced with an exodus of its workforce: since the accession to EU in July 2013, more than 1300 MDs (almost 10%) requested and were handed out certificates in order to

work abroad and 400 of them already left their workplaces while many students are ready to work abroad in future.

Results

Due to overproduction during 1980-ties and surplus of MDs in Croatia, simulation modelling approach was employed within an operational research project started in 1989 with the task to predict needs and supply by the year 2006 and to inform decision making on enrolment policy. It resulted in drop of enrolment quotas in early 1990-ties from about 620 to less than 500 first-year students altogether at all four medical schools. It led to the relative shortage in comparison with EU countries 15 years later when the quotas were reconsidered and elevated to 600 students per year in 2009.

Lessons

Simulation modelling proved to be useful tool for projection of needs, demands and supply and planning of human resources for health (HRH). Long-term but also flexible policies are necessary in HRH planning at national as well as at the EU and wider European region. The exchange of information between national HRH registries end even the establishment of an EU registry would certainly improve our understanding of pull and push factors and motivation for migration and permit more equity among countries together with better quality of services and improved satisfaction of both, MDs and patients.

Key messages:

- Use of predictive simulation models can help to inform policy makers about future needs and demands in health care provision and support health manpower planning at national and EU level
- Careful planning of human resources for health and long-term policy adaptable to future challenges is needed along with information interchange and cooperation within EU and wider European Region

Circular migration of the health workforce - an overview

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Background

The increasing demand for health workers in high income countries is producing a net migration loss of these workers from low income countries, many of whom also experience an increase in demand for healthcare. This situation weakens the sustainability of health systems. Circular migration - a form of migration that allows migrants some degree of mobility back and forth between two countries - is advocated as a potential 'triple win' solution, bringing benefits to source and destination countries and migrant workers. Yet, no overview exists of circular migration of the health workforce, its formal and informal cooperation mechanisms, and effects on all parties involved.

Methods

An explorative review of the literature and analysis of evidence produced in the framework of the Joint Action on Health Workforce Planning & Forecasting on circular migration of the health workforce was undertaken, focusing on circulation migration from non-EU countries and intra-EU circular migration. The five main health professions were covered, but it is acknowledged that most data available relate to nurses and doctors.

Results

There is a lack of data and research on (cooperation in) circular migration of health workers, its prevalence and health workforce impacts in sending and receiving countries. Immigration policies are still the traditional mechanism for managing international migration flows. Mobility partnerships, specifically focused on circular migration, are rarely used. Many initiatives and collaborations take place outside the realm of formal mechanisms, are temporary and often involve NGOs to help execute them. Evidence on the impact and effects of the various cooperation forms is limited.

Conclusions

Based on good practices identified, the following preliminary guidance on circular migration is presented:

- Consider it as one option among others
- Base it on the principles of the WHO Global Code
- Aim for a 'triple win' outcome
- Involve all relevant parties

Key messages:

- Circular migration can be a 'triple win' solution with benefits for countries and health workers
- Cooperation structures for circular migration should be adapted to this envisioned goal

Physicians Migration from Western Balkan

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Background

Migration of health workforce personnel is a global phenomenon and it is important to investigate the reasons that motivate healthcare workers from Western Balkan countries to seek employment abroad. We analyzed the causes behind the increasing trend of physician migration in four Western Balkan countries - Macedonia, Serbia, Kosovo and Albania, and incentives to return to their home country.

Methods

Both qualitative and quantitative research techniques were utilized. The questionnaire assessed economic, professional, political, and social reasons behind migration, and was emailed to a sample of physicians identified from the medical chambers in each country. In total, 1227 physicians responded, including 145 who migrated abroad over the past three years. Focus group discussions were conducted with younger and older physicians to determine attitudes towards migration. Representatives of embassies of recipient countries were interviewed about physicians' recruitment policies in their countries.

Results

We estimate that between the years 2012 and 2014 some 1700 physicians, predominantly younger bellow age of 30, from Serbia, Macedonia, Albania and Kosovo have left to work abroad. The key reasons behind the migration are opportunities for professional development, higher economic standards, unstable political situation and influence in home countries. Motivators to return are limited, and mainly related to higher salaries and better working conditions.

Conclusions

Our research reveals that certain western countries have carefully planned policies and mechanisms that aim to recruit and integrate physicians from Western Balkan countries (or elsewhere), in order to compensate for local shortages. Donor countries lack specific human resources policies for health personnel. The impact of a global code of ethical recruitment of healthcare personnel remains limited and has yet to reduce migration of the healthcare personnel.

Key messages:

- The migration of physicians is mainly focused among younger doctors, posing a potential problem for the replacement rate of physicians over the next 10 years
- Improved coordination and planning between the health-care and health-education sectors is vital, as is national policy development and implementation

Degree of coordination across care levels and associated factors in Latin American health networks

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Background
The aim is to determine the degree of care coordination across levels of care perceived by doctors and to explore influencing factors in public healthcare networks of six countries: Argentina, Brazil, Chile, Colombia, Mexico and Uruguay.
Methods
A cross-sectional study was carried out based on a questionnaire survey to a sample of primary and secondary care doctors working in the study healthcare networks (348 doctors per country). Outcome variables: general perception of care coordination across levels of care; coordination of information and, of clinical management across levels of care. Explanatory variables: sociodemographic, labor conditions and attitudes. Bivariate analyses to describe the outcomes by level of care and a logistic regression model to assess factors associated to perception of care coordination.
Results
The results show relatively low levels of care coordination across levels of care, particularly in information transfer and communication between professionals regarding patient follow-up, lower in Brazil, Chile y México. Care coherence was better rated. However, they also perceived shortcomings, mainly the secondary care doctors: duplication of tests in Chile and Colombia and inappropriate referrals in Chile and Mexico. Factors associated with the perception of higher levels of general care coordination were: being a secondary care doctor, knowledge of doctors from the other care level and trust in their skills, be satisfied with the work and salary and perceiving sufficient time to coordinate.
Conclusions
Limited transfer of information and presence of inconsistencies in care, indicate insufficient coordination between levels of care and deficiencies in the quality of primary care, with differences between countries. Together with the associated factors, indicate the need to implement mechanisms to promote mutual knowledge and direct communication between professionals and reforms to improve their working conditions and motivation.

Key message:

- This is the first survey conducted among doctors in Latin America on coordination between care levels and reveals major flaws affecting the quality and efficiency of health systems

Attitudes and misconceptions of Occupational Physicians towards vaccinations of Health Care Workers

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Background
The present study aims to characterize personal attitudes and knowledge of a sample of Italian Occupational Physicians (OPh) towards immunizations practice in healthcare workers (HCWs).
Methods
A total of 90 OPh (42.2% males, 57.8% females, mean age of 50.1±8.3 years) compiled a structured questionnaire through a telephonic interview. They were asked about the official Italian recommendations for HCWs, their general knowledge of vaccine practice, their propensity towards vaccines (both in general and about specific immunizations), their risk perception about the vaccine-preventable infectious diseases. Eventually, a regression analysis was performed in order to identify factors predictive for vaccine propensity.
Results
Only 12/90 subjects correctly identified all the seven recommended immunizations. The HBV vaccine was correctly identified by 95.6% of the sample, and was also associated with the more positive attitude and the more accurate risk perception. Influenza vaccine had the lowest acceptance (75.9%). Eventually, pertussis, measles, parotitis and varicella vaccines were insufficiently recognized as recommended ones (all cases <50% of the sample). General knowledge of vaccine and knowledge of official recommendations were significantly correlated with attitude towards immunization practice ($r = 0.259$; $p = 0.014$ and $r = 0.438$; $p < 0.0001$). In regression analysis general knowledge ($B = 0.300$, 95%CI 0.090-0.510; $p = 0.006$) and risk perception ($B = 0.579$, 95%CI 0.155-1.003; $p = 0.008$) were significant predictors of the propensity to vaccinate.
Conclusions
Vaccinations gaps in HCWs may found their roots in OPh incomplete knowledge of evidence-based recommendations. Specific training programs and formations courses should then be planned.

Key messages:

- Vaccinations gaps in HCWs may found their roots in OPh incomplete knowledge of evidence-based recommendations
- Specific training programs and formations courses for OPh may contribute to address vaccine hesitancy

Reforms in the Dutch health care system: changes in the demand of Out-of-Hours Primary Care in 2012-2015

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Background
In 2014 and 2015 the healthcare system in the Netherlands has been majorly reformed. The motivation for these reforms is to

yield sustainable long-term care provision. Individuals are expected to be more self-reliant. We expect that these healthcare system reforms might have an adverse impact on socioeconomically disadvantaged people, and that healthcare demand shifts to general practice as easily accessible healthcare provider. In that respect, we also expect an increasing demand of acute primary care in out-of-hours (OOH). Consequently, the aim of the present study is to gain insight in whether the demand of primary OOH care provisioned by Primary Care Cooperatives (PCCs) has changed after the healthcare reforms, and evaluate whether changes turn out different between patient groups and PCCs.

Methods

Data are derived from routine electronic health records form patients that attended 21 (in 2012) to 28 (in 2015) PCCs participating in the NIVEL Primary Care Database. Data concerning health problems and urgency of these health problems from 2012-2013 were used as baseline to compare with data from 2014-2015 after the reforms have been effectuated. Patient characteristics (age and gender), patients' living area characteristics (e.g. proportion of low income households), and characteristics of PCCs (e.g. proximity of an emergency department) are explored to establish their association with changes in demand. Multilevel linear regression analysis will be conducted to assess associations between demand and living area and PCC characteristics.

Results

Preliminary results based on data of approximately 2.3 million contacts (in 2012), and 2.5 million contacts (in 2014), show a moderate increase in contacts for injuries, somatic health problems and psychosocial problems. The urgency assigned to the contacts shifted to more high-urgency contacts during the years. For the highest urgency level, the number of contacts per 1000 inhabitants doubled. The distribution of urgency-levels varies greatly between PCCS.

Conclusions

Clearly there is a shift to more high-urgency contacts in the demand of primary OOH care. Insight in changing demand of primary OOH care is required in order to evaluate whether the healthcare reforms affect patient groups and PCCs differently.

Key messages:

- Between 2012-2014 there has been a shift to more high-urgency health problems in the demand for primary out-of-hours care in the Netherlands
- The distribution of assigned urgency-levels varies between Primary Care Cooperatives

Organisation of and payment for emergency care services in five high-income countries

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Background

Increasing numbers of emergency department (ED) visits in Europe have led to several governments reviewing the organisation of emergency care provision and the impact of payment incentives. This study aimed at comparing the organization of and payment systems for emergency care services in five countries based on a predefined framework in order to identify promising approaches for a reform of the Belgian emergency care system.

Methods

Based on a scoping review, five countries (Australia, Denmark, England, France, and the Netherlands) were selected for analysis. A survey was designed to collect information from national experts on (1) organization and planning of emergency and urgent primary care services, (2) payment systems for EDs and urgent primary care providers, and (3) recent reform initiatives to improve care coordination or to rationalize emergency care provision.

Results

The proportion of acute hospitals with EDs ranges from 70% in the Netherlands to about 40% in Australia. Urgent primary care is increasingly coordinated with emergency care provision through joint call centres (e.g. in France) and co-located urgent primary care centres at hospitals (e.g. in the Netherlands and England). Denmark, England, France, and the Netherlands have concentrated care for life-threatening conditions (e.g. stroke, myocardial infarction, major trauma) at centres with specialised facilities and expertise. Payment systems for EDs usually consist of a mix of global budgets and payments per case but the size of each component varies considerably.

Conclusions

Recent reforms in several countries show that it is possible to improve coordination of urgent primary care and emergency care and to rationalize emergency care provision. Experiences from the reviewed countries have provided inspiration for a proposal to reform the organisation of and payment for emergency care services in Belgium.

Key messages:

- Recent reforms in several countries show that it is possible to improve coordination of urgent primary care and emergency care and to rationalize emergency care provision
- Differences across countries in the organisation of and payment for emergency care services can motivate change by providing inspiration for reforms

Reasons for emergency department visits – Results of a patient survey

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Background

Internationally, the number of patients in emergency departments is steadily increasing. The reasons for patients to visit emergency departments (ED) instead of statutory health insurance (SHI) office-based physicians, in particular in Germany, are little examined and predominantly based on assumptions so far.

Methods

During a period of four weeks in 2015, 2.010 walk-in patients have been anonymously surveyed in two major emergency departments in Berlin hospitals using a standardized questionnaire. Descriptive statistics have been used for data analysis.

Results

More than 90% of patients assessed themselves as an emergency and three-quarters of patients indicated pain. The majority of patients (57%) tried to contact SHI office-based physicians in advance and 59% of patients would make use of ambulatory emergency facilities if they were available and well established. However, 55% of patients had been unaware of the emergency service of the association of SHI physicians.

Conclusions

The results indicate that centralized ambulatory emergency facilities should be available 24/7 at hospitals with EDs. Therefore, the future planning of emergency services should integrate providers of the ambulatory and inpatient sector. International experience suggests that different instruments

aiming at better coordination of care, such as integrated call centres, extended ambulatory services and facilities for less urgent cases within or nearby hospitals should also be implemented in Germany.

Key messages:

- Ambulatory emergency facilities have to be closly related with emergency departments and available 24/7
- Future emergency planning has to be cross-sectional and coordinated centrally