

year residency is 100% ($p = 0.014$). There was not a statistically significant difference among these three groups considering the complications but the success rate should a difference between level 1 and 3 ($p = 0.936$). Multiple attempts did not increase the rate of complications. Mortality were dependent to hypotension ($p = 0.019$) and age ($p = 0.001$).

Conclusion: In our study we did not find the results of RSI to be operator dependent as long as it was done by emergency residents. It is recommended to compare the results of RSI and non- RSI methods in a future.

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(A181) Process Improvement in Disaster Relief: Implementation of a Fast Track in a Haitian Tent Hospital

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Study Objective: To determine if instituting an Emergency Department (ED) fast-track area would increase efficiency in patient flow, improve utilization of limited resources, and identify critical versus non-critical patients during disaster relief in Port au Prince, Haiti.

Methods: A survey was conducted at L'Hôpital de l'Université d'Etat d'Haïti (HUEH) in Port au Prince, Haiti by Emergency physicians and nurses from SUNY Downstate Medical Center on a disaster relief mission following the 2010 earthquake. The following variables were obtained to assess ED effectiveness: number of patients, acuity level, chief complaints, critical interventions, waiting times, length of stay, specialty service coverage and physical plant space. Additionally, existing practitioners were surveyed regarding existing ED practices. ED operation flow maps were created.

Results: The assessment revealed a large volume of low-acuity patients mixed with high-acuity patients without identification of acuity level, time of arrival, or designated area for treatment. Although literature reports routine use of START triage, this was not being implemented in this setting. Results of implementing a fast track area included: (1) Improved identification of patients needing immediate treatment. (2) Increased flow of low acuity patients in designated fast track areas. (3) Improved triage protocols maximized appropriate use of resources, and expedited subspecialty consultation.

Conclusion: By instituting well-accepted, validated patient flow systems and reinforcing communication regarding resources available and the use of geographic space, better management of incoming emergency patients was achieved.

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(A182) Model to Assess Geo-Temporal Spread of Disease by Air Travel from Major World Cities to the United States

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With increasing numbers of international flights and air travelers arriving in the US annually, the rapid spread of communicable

diseases has grown. Epidemics of novel infectious diseases have emerged and rapidly spread globally in association with air travel, including the severe acute respiratory syndrome (SARS) outbreak in 2003 and H1N1 in 2009. In order to anticipate and mitigate the consequences of future rapid disease spread, the MITRE Corporation, in collaboration with the (US) Centers for Disease Control and Prevention, developed a risk assessment tool using a Susceptible-Exposed-Infectious-Recovered model and detailed flight and population data. The emergence and spread of prototypic pandemic influenza was simulated based on a theoretical geographical point of origin and its communicability. More than 50 international metropolitan areas were analyzed as potential points of origin to simulate the rapidity of spread to the US. The basic reproduction number (R_0), defined as the average number of persons to whom one infected individual transmits disease in an immune naive population, was varied from 1.4 to 1.9. The starting numbers of infectious persons at each origin also were varied (100 or 500 persons, 5% infectious may travel). Waves were computed as aggregate across metropolitan areas modeled in the US. The visualization of the first pandemic wave was most apparent in simulations of $R_0 = 1.9$, resulting from 500 infectious persons at each origin. More than 50% of origins indicated that aggregate waves peaked around Day 125, while 30% of origins peaked around Day 90. Additionally, the time, in days, from its origin in six continents into the US was compared, and a two-week delay was found from South America compared with other continents. This simulation tool better equips policy makers and public health officials to quickly assess risk and leverage resources efficiently via targeted and scalable border mitigation measures during a rapid global outbreak.

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(A183) Umbrella” in a Small, Developing Country - A Case Report on Pandemic Influenza Preparedness in Bosnia and Herzegovina

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Cooperation between veterinary and public health authorities in Bosnia and Herzegovina and their respective field services has historically been weak and inefficient. As is the case in many countries, animal health and public health fall under separate ministries with animal health the responsibility of the ministry of agriculture and public health the ministry of health. This model has promoted interagency competition for funding for disease surveillance and control. It has also resulted in poor information exchange, lack of efficient utilization of diagnostic resources, and poor harmonization of policies. Political decentralization, established in Bosnia after the Dayton peace agreement, resulted in the lack of a national-level responsibility for animal or public health. This was instead placed at mid-governmental levels. A state (national) veterinary office was created in 2000, but there still remains no national public health agency. The H5N1 Avian Influenza (AI) outbreak which began in Southeast Asia in 2003 and reached Europe in 2005 raised concerns about Bosnia and Herzegovina's (BiH) preparedness to combat pandemic disease.

Accordingly, the state (national) veterinary service of Bosnia and Herzegovina (BiH) conducted exercises which resulted in increased monitoring of wild and domestic bird populations and the drafting and adoption of a contingency plan (CP) for AI. The activities prescribed by the CP were implemented in February 2006 when the H5N1 virus was diagnosed in wild swans. However, no cooperation was established with public health authorities during this incident, further underscoring the need for a one health approach to disease control activities. Adoption of the One Health concept is challenging, and there is no simple plan that can be applied across all cultures. To prevent it from simply existing as an idealistic theory, some revision is needed and practical guidelines must be developed. The authors will include suggestions as to how this might be achieved.

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(A184) Survey of Knowledge, Attitudes and Risk Perceptions (KAP) of Healthcare Personnel, in the Event of an Outbreak of H1N1 Influenza, in Limited Resource Environment

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Introduction: Little is known about the risk perceptions and attitudes of healthcare personnel, in the event of an epidemic of H1N1 influenza. It is acknowledged that perception of risks, as opposed to actual risks, alters behaviour. Indian data on KAP is needed as the scenario of working in limited resource environment, can have a different risk perception and attitudes amongst the healthcare workers. This will help in chalking out a ‘model response planning’ The study is designed to investigate the Knowledge and attitudes amongst healthcare workers in Mumbai, India during H1N1 pandemic of 2008–2009.

Methods: Questionnaire based interviews were given to healthcare workers, selected by their place of work, level of education and income group. This is based on the priori hypothesis that KAP differs amongst these groups. Surveys were distributed randomly to 20% employees from each of the above categories. Also healthcare officials, making policy decisions and guidelines, and the patients approaching these healthcare centres for treatment were interviewed for their perceptions of adequacy of the response measures. The questions designed included assessment of demographic characteristics, individual’s knowledge about swine flu, perceived adequacy of training, perception of preparedness to tackle the epidemic situation and perception of risk to them and their families during epidemic conditions. The responses were graded as ‘adequate or inadequate knowledge’, perceived ‘high or low risk’ and ‘tendency to apathy’. Results were analysed using statistical software (SPSS17).

Conclusion: Understanding the concerns and responses of healthcare personnel to a major infectious disease outbreak is critical to maintaining response capacity.

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(A185) Did the Ministry of Health’s Intervention Increase Compliance of Medical Teams to be Vaccinated against H1N1?

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Background: Pandemic influenza poses a great challenge to healthcare systems. Vaccinating medical teams and the population against pandemic influenza is the global recommended strategy to contain spread of the disease. As part of the efforts made to overcome the H1N1 pandemic, the Israeli Ministry of Health (MOH) initiated a general vaccination program for medical teams and the total country population. Due to low compliance rates of the medical staff, the MOH conducted regional conferences aimed at providing knowledge and encouraging staff to be vaccinated.

Objectives: To evaluate the effect of the regional conferences on the compliance rates amongst medical providers to be vaccinated against H1N1.

Methods: Medical providers from the primary health care services were invited to conferences that were conducted in 3 regions. Attitudes of the teams regarding compliance to be vaccinated were assessed pre and post the conferences. Additionally, the actual rates of vaccinations were recorded over the period of vaccination program. Actual compliance rates before and after the conferences were compared to detect differences as well as the relationship between teams’ attitudes and actual vaccinations.

Results: Vaccination rates of medical providers remained low during the full vaccination period. Among the non-vaccinated, 24% to 29% reported before the conference that they agree to be vaccinated versus 57% to 62% following the conference. Analysis of the actual vaccination data among the medical providers did not demonstrate a change in compliance following the conferences and an overall decrease was noted after the first two weeks of the vaccinated project.

Conclusions: A statistically significant relationship was not found between reported attitudes of medical providers regarding readiness to be vaccinated and their actual vaccination. The MOH intervention did not achieve the expected result and did not raise compliance to be vaccinated.

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(A186) Edward via College of Osteopathic Medicine (VCOM) Honduras Dengue Outbreak Emergency Response Case Study

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In July 2010, the government of Honduras requested VCOM assistance with a widespread Dengue Outbreak. At the time of the mission trip, over 33,000 Hondurans had been hospitalized for Dengue Fever and a National State of Emergency declared. VCOM sent a team of medical students, faculty and volunteers to