



“The role of the Universities in Public Health Surveillance in a middle developing country”.

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Objectives

1. List some areas of Universities-Public Health System (U-PHS) collaboration
2. Present cases
3. Discuss the U-PHS relationship

Roles of Universities in public health surveillance

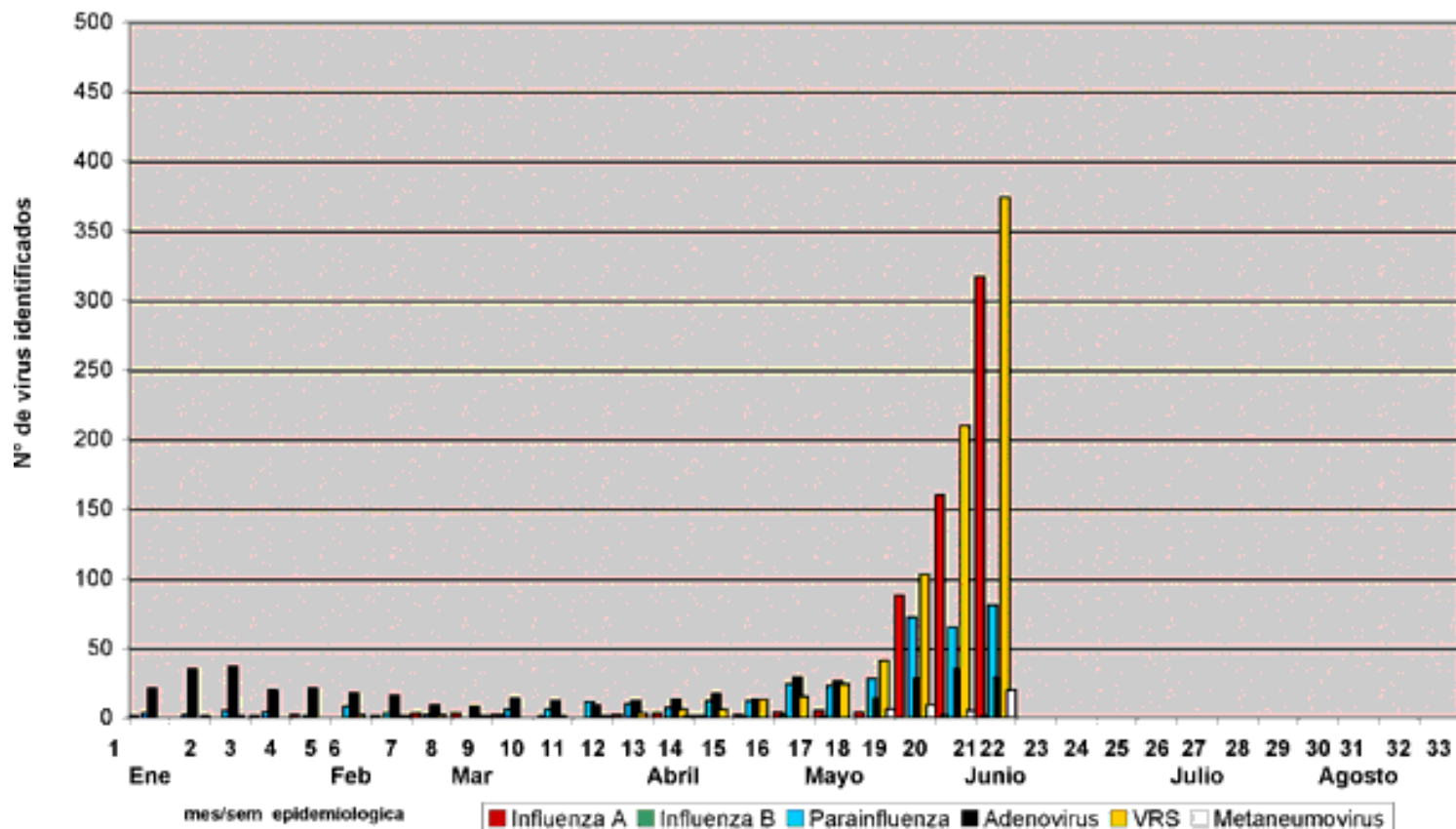
1. Train of Public Health resources.
2. Provide data to the system (University clinics)
3. Run a surveillance system
4. Conduct research
5. Advise: norms & standards of surveillance, plan to respond to emergent diseases

Examples of recent collaborations in Chile

1. National population-based Surveys: National Health Surveys, Burden of Diseases, Quality of life, Nutritional, Food consumption, Smoking and drug consumption
2. Baseline assessment of Environmental pollutants (PM10, Arsenic, Boron, Lead, pesticides),
3. Outbreak investigations: clusters of environmental associated diseases, adverse reactions to EPI vaccine, H1N1 epidemic.
4. Surveillance systems: conducting surveillance of agents of respiratory infections.

Identificación Virus Respiratorios en Adultos y Niños, ambulatorios y hospitalizados Santiago, 2009 *Red de Vigilancia Metropolitana

* Pontificia U. Católica de Chile, Clínica Alemana-Universidad del Desarrollo, Integramédica, Hospital Padre Hurtado y Consultorio N°5



Case 1:

Fast spread of the H1N1 Flu in Chile.

Health system under pressure report the outbreak: who is affected, and how, how serious, need of drugs or vaccination or quarantine.

University Collaboration

- Epi study of first 100 Cases
- Epi Study of first 3 school outbreaks (2,000 students and their families)
- Clinical characterization of serious cases
- Biological description of the Virus

Case 2

Cluster Guillain-Barré in La Cañamera

- **public alarm**, and demand to be moved to another building, lot of political and media pressures over the MOH.
- **Request** for an independent group of experts to study the situation, find the causes and make recommendations for the MOH
- **Result:** experts found that the highest levels of As in urine were caused by eating fish no relation with the site contamination.
Probably cause: outbreak of Campylobacter infection transmitted by chicken illegally sold in the site.

Case 3: Unexpected Adverse reactions to the EPI DPT vaccines

- Increased frequency and severity of adverse reactions to the EPI DPT vaccines in some regions of Chile. The surveillance system of the EPI could not provide determine its magnitude or characteristics. Pressure of doctors, media and public to remove the vaccine. (Table)
- The collaboration: University conducted retrospective case-control and cohort studies
- Result: experts found that a new vaccine was in fact 4 times more reactogenic, especially in older children. The new vaccine was removed. (Table).
- Authorization for publication was delayed two years

Unexpected adverse reactions to a EPI DPT vaccine. Chile 2008

		Case	Control	OR	IC 95%
All	Vaccine 1	14	34	7,1	2,5–20,2
	Vaccine 2	8	137	1	
18 months	Vaccine 1	6	23	3,1	0,7–13,2
	Vaccine 2	5	59	1	
4 years	Vaccine 1	8	11	18,9	3,7–108,6
	Vaccine 2	3	78	1	

Discussion: the Public Health System-Academic relationship

Issues in that interfere with a more fruitful collaboration. We have different

- perspectives and goals of the same problem
- interests: knowledge vs action
- background: academic vs professional
- audiences: students and academia vs politics and media
- timing: time for reflection vs immediate responses
- pressures: need to publish vs avoid public questioning or alarm
- networking: easier interdisciplinary cooperation among academics vs competition for areas of decision-making among the public servants

Conclusion

- Need of formal agreements of collaboration with clear TORs: roles and responsibilities.
- Universities could take direct responsibility of some tasks
 - Conducting Health Surveys for the Ministry of Health.
 - training and coaching of public health officers
- Discuss the potential problems that these agreement could face and how to prevent them
- Role of APRU in promoting these agreements:
- Conduct a demonstration project?

Valparaiso Chile for the next meeting ?



Thank you
Gracias

