

PANDEMIC ETHICS

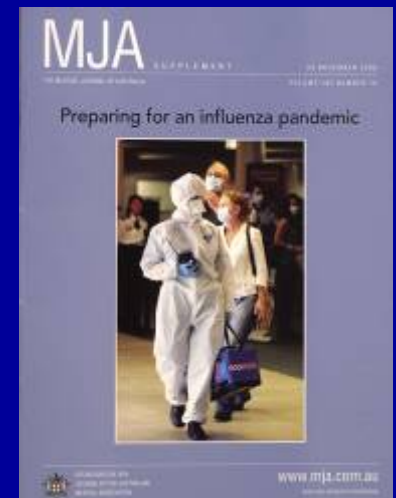
- Implications for clinicians



Dr Richard Ashby
Executive Director Medical Services
Princess Alexandra Hospital

What is Pandemic Influenza?

- Genetic shift in H5N1 Avian Influenza creates a flu virus capable of human-to-human transmission with a high attack rate and high lethality



BIRD FLU

- Emerged in South Africa 1961
- Now in Asia, Africa, Europe
- First human fatalities – Hong Kong 1997
- 300 million birds and poultry DEAD



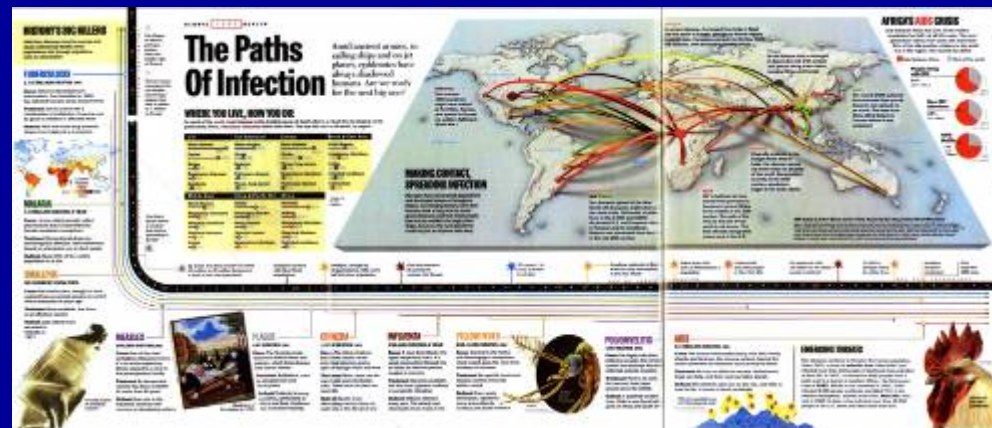
PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

HUMAN FLU PANDEMICS

- Spanish influenza 1918 (25 – 100 Million)
- Asian influenza 1957 (1 Million)
- Hong Kong influenza 1968 (2 Million)

H5N1 FLU

- Hong Kong 1997 (18 cases 6 DEAD)
- Worldwide since December 2003 (273 cases 167 DEAD)
- Affects young adults
(like Spanish Flu)



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

H5N1 FLU PANDEMIC

- Could reach all Continents in 2 – 3 months
- Attack rate and fatality rate unknown
- Efficacy of antivirals unknown
- Efficacy of vaccines unknown
- Efficacy of personal protective equipment unknown
- Efficacy of critical care unknown



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

H5N1 FLU PANDEMIC

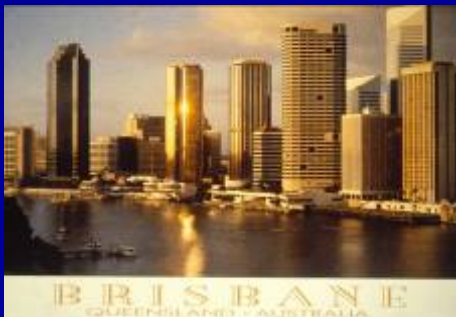
- 7 Million – 360 Million dead
- \$200 Billion - **\$1 TRILLION** + economic loss **WORLDWIDE**
- **QUEENSLAND TOURISM \$3.9 BILLION**
- Major disruption of all affected societies and economies



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

MODEL : BRISBANE

- Population : 1 Million
- Attack rate 25% = 250,000 infected over 8 weeks
 - = 31,250 infected each week (avg)
 - = 15,000 hospital bed days p/w
 - = 1,000 at risk of needing support facility each week
- Fatality rate 5% = 12,500 Deaths



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

MODEL : BRISBANE

■ Current routine surge capacity

- Emergency Department : NIL

- Hospital Beds : NIL

- ICU Beds : NIL

Current disaster surge capacity : 7000 bed days p/w

(Decrease Elective Surgery 50%)



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

PANDEMIC ETHICS = DISASTER ETHICS

“Greatest Good for The Greatest Number”



PANDEMIC ETHICS – KEY ISSUES

- The duty to care
- Allocation of scarce resources
- Restriction of rights
- International obligations

PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

THE DUTY TO CARE

- Moral and contractual obligations
- Codes of ethics
- Reciprocity

“When pestilence prevails it is their duty to face the danger....”



American Medical Association 1930's

PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

ALLOCATION OF SCARCE RESOURCES

- Hospital admission
- ICU admission
- Antivirals
- Vaccinations



Doctors whose patients travelled overseas regularly were caught short when demand went "ballistic".

Anti-viral supply runs dry

by Rada Rouse

SUPPLIES of oseltamivir (Tamiflu) have dried up in Australia following huge demand fuelled by the avian bird flu threat in South-East Asia. Roche Products confirmed last week that it was currently experiencing a temporary shortage of Tamiflu, driven by "the extensive media coverage of the threat of an avian influenza pandemic".

Supplies will not be replenished for more than a month, with some stock becoming available in November and December.

Doctors with patients who travelled regularly or worked overseas were caught short "when demand suddenly went ballistic", according to Dr Tony Gherardin, national medical adviser to the Travel Doctor Group clinics.

Demand surged following media stories and a statement by the Indonesian health minister, later retracted, that Indonesia was experiencing an "epidemic" of avian flu, he said.

Dr Gherardin said his clinics had no sooner decided to stock up on oseltamivir than found that they could not obtain supply.

Supplies of Tamiflu will not be replenished for more than a month

"Our initial order was going to be for 300 doses, but within a week it was apparent we

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PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

ALLOCATION OF SCARCE RESOURCES

PRINCIPLES:

- Efficiency : Maximise health benefits
- Equity : Avoid unreasonable discrimination
- Accountability: Fair and transparent procedures

Utilitarianism vs Individualism

PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

ALLOCATION OF SCARCE RESOURCES

- Hospital Admission
- ICU Admission

Triage Dependent on:

- Scarcity of resources
- Futility of treatment (Existing disease & flu)
- Utility of treatment (Individual, aggregated)

LIVES SAVED vs QALY's SAVED vs TOTAL BENEFITS

PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

TREAT THE YOUNG BEFORE THE OLD

- May have greater clinical need
- Fewer comorbidities
- Greater aggregate utility
(consequentialism)
- “Fair Innings” principle



ANTIVIRALS

ISSUES:

- Efficacy
- Prophylaxis vs Post Exposure vs Treatment
- Priority groups and timing
- Global considerations

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ICU ADMISSION

“TIERING”*

TIER 1 Do not treat or withdraw treatment if:

- Respiratory failure + Shock + Other Organ Failure
- No response to treatment after 72 hours
- Multi organ failure

= LIKELY TO DIE TODAY

**TIER 2 Respiratory failure + Serious chronic disease
(Cancer, COAD, Cirrhosis, HIV/Aids etc)**

= LIKELY TO DIE THIS WEEK

*(*After Hick and O’Laughlin 2006)*



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

HOSPITAL ADMISSION/EXCLUSION

ADMIT

- “Life Savers”
- Young with treatable illness
- Others with treatable illness

PROBABLY EXCLUDE

- Any patient likely to die within a year
- Institutionalised patients
- Major comorbidities



VACCINATION

- Pre pandemic
- Timing and availability
- Priority groups - Children and young adults
 - Health care workers
 - High risk

PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

PANDEMIC ETHICS – IMPLICATIONS FOR THE FUTURE

■ “TSUNAMI OF CHRONIC DISEASE”

ISSUES:

- Ageing ↑
- Workforce : Dependents ↓
- Economic growth (GDP per capita) ↓
- Health costs ↑

CONCLUSION: Pandemic ethics will become routine



PANDEMIC ETHICS - IMPLICATIONS FOR CLINICIANS

SUMMARY & QUESTIONS