Ethical Principals and Reasoning for Infection Control
Dr. Loreen Herwaldt, University of Iowa
A Webber Training Teleclass www.webbertraining.com

Ethical Principles and Reasoning for Infection Control
Loreen A. Herwaldt, MD

Ethics
Unregulated and pluralistic, yet vital
♦ Clinical Contexts for Today’s Session
  ♦ An outbreak
  ♦ MRSA & contact isolation
  ♦ Influenza vaccination distribution
♦ Main Issues in Today’s Session
  ♦ Role-specific obligations
  ♦ Individuals vs. populations
  ♦ Questions about justice

Definition
♦ Ethical decisions compel us to chose between competing moral values
  ♦ I think that ICPs make ethical decisions every day
    Yes No Undecided

Types (Taxonomy) of Ethical Problems in Infection Control
♦ Control patients to limit spread of pathogenic organisms
♦ Control HCWs limit spread of pathogenic organisms
♦ Mandate or recommend practices & interventions
♦ Allocate resources
♦ Manage conflicting & competing interests

Roles and Goals
Infection Control Professionals & Hosp Epi
♦ Goal: protect groups of patients
♦ Strategy: control spread of infectious organisms
Clinician
♦ Goal: improve health of individual patients
♦ Strategy: care for individual patients
The challenge of dual identities…

Potential Tensions
♦ Containing microbes ↔ compromise care
♦ Protecting population ↔ minimize individual freedom
  ♦ “Greatest good of the greatest number”
  ➢ Population protection + patient respect

Hosted by Sharon Krystofiak sharon@webbertraining.com
www.webbertraining.com
Ethical Principals and Reasoning for Infection Control
Dr. Loreen Herwaldt, University of Iowa
A Webber Training Teleclass  www.webbertraining.com

Approach to Case Study
♦ What is the problem?
♦ Is this an ethical problem?
♦ What data should I gather?
  ♦ Context
  ♦ Patient preferences
  ♦ Epidemiological goals
  ♦ Epidemiological facts
  ♦ Interests of pts, HCWs, hospital, community

Approach to Case Study
♦ Is more information or dialogue needed?
♦ What is the best supportable course of action?

An Ethical Dilemma: When Should an Outbreak Investigation become the Public’s Right to Know?

Case Study
♦ You just learned that a baby discharged 2 days ago from the newborn nursery was readmitted and died of Salmonella bacteremia
♦ You:
  ♦ Form exposed and unexposed cohorts
  ♦ Begin notifying parents and physicians
  ♦ Plan detailed investigation
  ♦ So far, it’s “routine”

Case Study, continued
♦ But then a very close friend calls and says her OB gave her the choice of delivering her baby (in the next few days) at your hospital or at a hospital in the suburbs
♦ You take a deep breath, think for a moment and then say

The Ethical Questions
I’d recommend you deliver:
a. At our hospital so I can visit you
b. At the other hospital because the birthing rooms are nicer
c. At the other hospital . . . .
d. It’s a toss up. Go wherever you feel most comfortable
e. I plead the 5th amendment

Hosted by Sharon Krystofiak  sharon@webbertraining.com
www.webbertraining.com
The Ethical Questions
If you picked “other hospital,” would you:
- Close the unit to new admissions so you offer all women the same “protection”
- Leave the unit open and work like a dog to solve the outbreak
- Punt the question to the hospital’s lawyers but don’t tell them about your friend
- Resign your position & shred documents before the press finds out

What is the Problem?
- As a hospital epidemiologist (HE) or infection control professional (ICP) can I give information to my friend that I don’t give to the general public? OR
- Do I have an ethical obligation to give the public the same information as I give to my friend?

Is This an Ethical Problem?
- Is this a question of:
  - Moral values,
  - Commitments,
  - Obligations, or
  - Rights?
- My answer is YES, thus, this IS an ethical issue.

Context
- You work in a medium-sized private hospital.
- The decision you make could hit the news.
- How would your decision look as a headline?

Patient Preferences
Women want their babies delivered safely with NO intra- or post-partum complications

Epidemiological Goals
HEs and ICPs want to protect their whole population of patients from nosocomial infections, particularly those that can cause serious morbidity or death
Ethical Principals and Reasoning for Infection Control
Dr. Loreen Herwaldt, University of Iowa
A Webber Training Teleclass www.webbertraining.com

**Epidemiological Facts**
- Salmonella infections in neonates range from asymptomatic carriage to fatal bacteremia or meningitis
- *Salmonella* spp. can cause prolonged outbreaks in nurseries
- *Salmonella* spp. have been spread:
  - On the hands of healthcare workers
  - By contaminated environments & fomites
  - By careless carriers

**What You Know & Don’t Know**
- You know that one baby died of Salmonella bacteremia
- You don’t know:
  - How many babies and healthcare workers are colonized or infected
  - The extent of environmental contamination
  - Whether a fomite related to a common procedure is contaminated

**Your Inner Thought Process**
- You would feel safer if you delivered elsewhere
- You want to tell your friend to have her baby at the other hospital
- You don’t want to close the nursery
- You wonder if this “plan” is fair & are afraid it will backfire

**Your Inner Thought Process**
- You do this all the time when friends ask which surgeon should do a lap chole or CABG.
- Is this situation any different?
- Why can’t you give your friend information that you don’t give other pregnant women?

**If Asked at this Point, You**
- a. Feel it’s OK to treat your friend differently than other pregnant women
- b. Feel you must treat your friend the way you treat all pregnant women
- c. Feel confused
- d. Feel nothing; consult the lawyer

**Guiding Ethical Principles**
- Respect for autonomy
  - Allowing patients to make their own informed decisions
- Justice
  - Treating similarly situated patients similarly
- Fairness

Hosted by Sharon Krystofiak  sharon@webbertraining.com
www.webbertraining.com
**Ethical Principals and Reasoning for Infection Control**  
Dr. Loreen Herwaldt, University of Iowa  
A Webber Training Teleclass  [www.webbertraining.com](http://www.webbertraining.com)

### Guiding Ethical Principles

- **Beneficence**
  - Positive beneficence—taking action to benefit patients’ welfare
  - Utility—balance benefits & drawbacks
- **Nonmaleficence**
  - Do not inflict harm intentionally

### Guiding Ethical Principles

- **Respect for autonomy**
  - Most informed women would choose to deliver where their babies’ risk of serious infection was as low as possible
- **Justice**
  - Your friend and other women are similarly situated

### Guiding Ethical Principles

- **Beneficience**
  - Investigating the situation and closing the nursery are both active steps to benefit patients
  - Closing the nursery is a more active step and decreases the risk further
- **Nonmaleficence**
  - HEs & ICPs don’t intend to hurt patients
  - HEs & ICPs could foresee possible harm

### Guiding Ethical Principles

- **Where there is a bond there is an ethical obligation**
  - You have a bond of friendship with your friend
  - You have a fiduciary bond with the women who deliver in your hospital
  - These two obligations should inform each other

### My Ethical Conclusions

- All four ethical principles point towards closing the nursery
- Friendship and fiduciary bonds point towards closing the nursery
- Lost revenue & bad press may result
- More lost revenue and really bad press could result if you don’t close the nursery

### At this Point, Would You

- a. Tell your friend to deliver elsewhere and close the nursery
- b. Tell your friend to deliver elsewhere and leave the nursery open while investigating
- c. Tell your friend to deliver at your hospital and work like a dog to prevent more cases
- d. Let the lawyer decide

Hosted by Sharon Krystofiak  sharon@webbertraining.com  
[www.webbertraining.com](http://www.webbertraining.com)
Ethical Principals and Reasoning for Infection Control
Dr. Loreen Herwaldt, University of Iowa
A Webber Training Teleclass  www.webbertraining.com

An Ethical Dilemma: Should patients with MRSA be in Contact Isolation?

Question: MRSA and Isolation
Given that enhanced infection control practices can control transmission of MRSA, do you think it is unethical to not implement such measures?

a. Yes
b. No

MRSA and Contact Isolation

- Challenge: Balancing interests
  MRSA (+) versus MRSA (-) persons
- Legitimate Discrimination
  MRSA: a rational basis for differentiation
- Justice (one aspect)
  …treat similarly situated people similarly

Isolation: Beyond Autonomy

- Expectation: patients should be willing to accept practices that decrease the risk of transmission
- Patients have rights and responsibilities
- The Common Good (eclipsed by autonomy)

But what if isolation is harmful? ...

Question: Harm of Isolation-1
Do you believe that isolation of patients with MRSA worsens their medical outcomes (morbidity and mortality)?

a. Yes, isolation worsens outcomes
b. No, isolation does not worsen outcomes
c. I am not sure

Question: Harm of Isolation-2
If you agree that isolating patients who are MRSA (+) worsens their outcomes, which option best reflects your opinion:

a. The negative impact of isolation is unavoidable
b. The negative impact of isolation can be remedied if staff are more willing to accept the extra work that comes with isolation
c. I don’t agree that isolation worsens outcomes

Hosted by Sharon Krystofiak  sharon@webbertraining.com
www.webbertraining.com
Empirical Studies

  - Attending MDs half as likely to examine patients in isolation
  - Isolation: more preventable adverse events, greater dissatisfaction, less documented care.
  - No differences in hospital mortality.
  - Letters to editor: JAMA 2004;291:420-422 (various criticisms)

Inconvenience is no excuse

Dr. William Jarvis says:

“We should not tolerate a physician not examining a patient because of the inconvenience of donning appropriate gowns and gloves.”

Am J Infect Control 2004;32:496-503

But what if physicians behave intolerably?

Question: Harm of Isolation-3

Assume that isolation DOES worsen medical outcomes. Do you believe that patients who are MRSA-positive should have to accept an increased risk of poorer outcomes because of isolation, so that patients who are MRSA negative can have a lower risk of acquiring MRSA?

a. Yes
b. No
c. I am not sure

An Ethical Dilemma: Who should receive influenza vaccine when supplies are limited?

Influenza Vaccine Distribution When Supplies are Limited

First, a few questions...

Question: Flu Vaccine for Health Care Workers

If available, should influenza vaccination be a mandatory vaccine for all health care workers (HCWs)?

a. Yes, to all HCWs
b. Yes, but only to HCWs with clinical responsibilities (direct patient care)
c. No
d. Undecided
Question: Vaccine Distribution

Should infection control professionals be in charge of distribution of antibiotics or vaccine to health care workers and patients in the setting of a limited supply?

a. Yes, we have the best understanding of the competing risks and benefits
b. Yes, but we should share the responsibility with others
c. No, this should be left to others

Vaccine Distribution

♦ Need: Science integrated with ethics
♦ Fundamental ethical questions re justice
♦ Other contexts for resource allocation
  ♦ ICU beds, organs for transplant

Distribution Criteria for Risk Stratification

CDC Proposal Based on Mortality and Hospitalization Rates

Group 1a:  
- Age >= 65 years with comorbid conditions
- Long-term care facility residents

Group 1b:  
- Age 2-64 years with comorbid conditions
- Age >65 years without comorbid conditions
- Age 6-23 months
- Pregnant women

Group 1c:  
- Health care personnel
- Close contacts of children < 6 months

Group 2:  
- Contacts of high risk children and adults
- Healthy persons age 50-64 years

Group 3:  
- Age 2-49 years without high-risk conditions

Keiji Fukuda (CDC), Internal Medicine News, March 15, 2005

Additional Criteria

Distribution based on:
  - high risk of complications
  - high risk of transmitting the virus (school-age children)

♦ Cosgrove et al. JAMA 2005;293:229-232
- Risk stratification, Vaccination of HCWs
- Persons unlikely to respond adequately
- Extending existing supply of inactivated vaccine
- Role of live, attenuated influenza vaccine

Which Priorities Should Guide?

♦ Those at highest risk of:
  a. Mortality
  b. Morbidity
  c. Hospitalization
  d. Those most likely to benefit
  e. Those at highest risk of transmitting
  f. Those at highest risk of lost productivity
  g. National security
Ethical Principals and Reasoning for Infection Control
Dr. Loreen Herwaldt, University of Iowa
A Webber Training Teleclass www.webbertraining.com

Justice
♦ Greatest good of the greatest number … but we also want fairness
♦ Fairness
  ♦ Procedural justice = due process (law)
  ♦ Substantive justice = normative principles (ethics)
  ➢ Treat each person according to their … need.

Principles of Justice for Vaccine Distribution
Distribute …
♦ according to degree of threat (need)
♦ according to capacity to benefit (effectiveness)
♦ to maximize health of population (greatest good)

We need a combination of principles … somehow

An Ethical Approach to Infection Control
♦ Strive for an adequate evidence base
♦ Role fidelity: fulfill your primary obligation
♦ Clear articulation of goals
♦ Clear articulation of stratification criteria
♦ Clear communication to profession & public
♦ Allow professional and public review (trust)
♦ Educate: make the connection between individual and public health

The Next Few Teleclasses

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker/Partners</th>
</tr>
</thead>
</table>
| October 4 | Green Cleaning Strategies for Healthcare  
  ... with Dr. Lynne Sehulster, CDC  
  Sponsored by JohnsonDiverse  
  www.johnsondiversey.com |
| October 10 | Infection Prevention Among Refugees  
  ... with Dr. Mark Birch |
| October 18 | Hot Issues in Hand Hygiene Improvement  
  ... with Julie Storr, World Health Organisation  
  Sponsored by Deb Canada  
  www.deb.ca |
| November 6 | Commissioning Infection Control Strategies  
  ... with Yvonne Sawbridge, National Health Service (UK) |
| November 8 | Hazard Vulnerability Analysis for Infection Control  
  ... with Andrew Streifel, University of Minnesota |

For the full teleclass schedule – www.webbertraining.com
For registration information  www.webbertraining.com/howtoc8.php

Hosted by Sharon Krystofiak  sharon@webbertraining.com
www.webbertraining.com