

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

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Hosted by Sharon Krystofiak
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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 choose 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

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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

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//// The Ethical Questions

If you picked "other hospital," would you:

- a. Close the unit to new admissions so you offer all women the same "protection"
- b. Leave the unit open and work like a dog to solve the outbreak
- c. Punt the question to the hospital's lawyers but don't tell them about your friend
- d. 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

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■■■■ 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

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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

- ◆ Beneficence
 - ◆ 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

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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

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Empirical Studies

- ◆ Saint et al. Am J Infect Control 2003;31:354-6.
- Attending MDs half as likely to examine patients in isolation
- ◆ Stelfox et al. JAMA 2003;290:1899-1905.
- 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

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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 \geq 65 years with comorbid conditions
 - Long-term care facility residents
- Group 1b:
 - Age 2-64 years with comorbid conditions
 - Age \geq 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

- ◆ Longini & Halloran. Am J Epidemiol 2005;161:303-6

Distribution based on:

- high risk of complications
- *high risk of transmitting the virus*
(school-age children)

Additional Criteria

- ◆ 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*

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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

Cookson R, Dolan P. Principles of justice in health care rationing.
Journal of Medical Ethics 2000;26:323-329.

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

- | | |
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| October 18 | Hot Issues in Hand Hygiene Improvement
... with Julie Storr, World Health Organisation
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| November 6 | Commissioning Infection Control Strategies
... with Yvonne Sawbridge, National Health Service (UK) |
| November 8 | Hazard Vulnerability Analysis for Infection Control
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