Simplifying Research: Observations and Advice from a Chaplain Who Chairs an IRB

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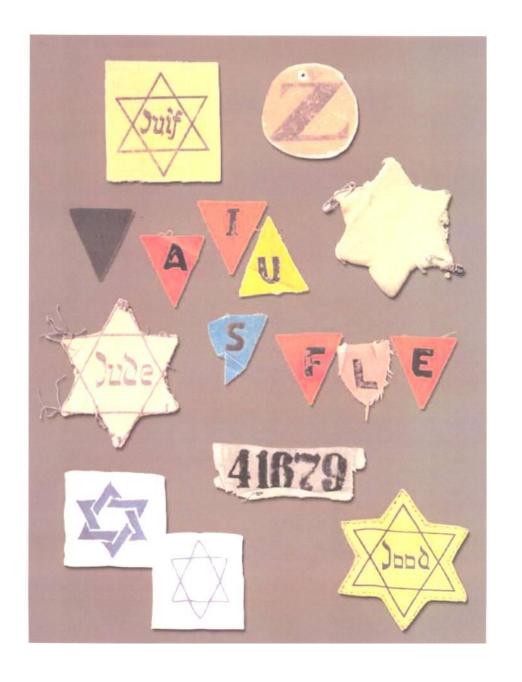
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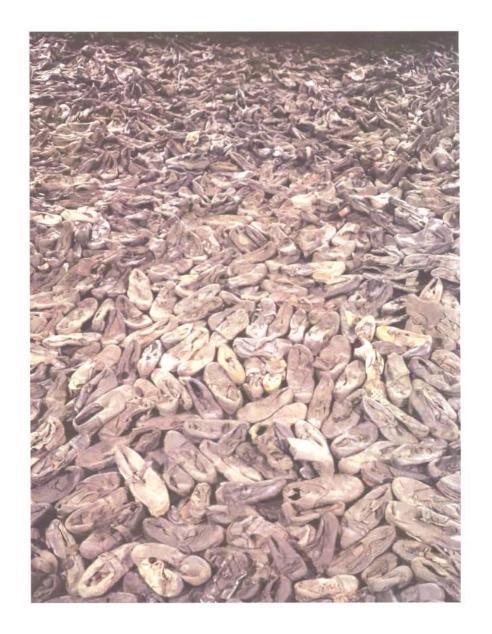
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Objectives

- Participants will review the history of human subjects research and the mandated establishment of Institutional Review Boards.
- Participants will understand the basic inner-workings of an Institutional Review Board.
- Participants will strategize how to overcome some of the basic barriers to research that many chaplains face.







1.5 Million Children Died in the Holocaust (Shoa)

Nazi Experiments

- Experimental group injected with vaccine for typhus while control group injected with typhus-infected blood
- Bones transplanted from one prisoner to another to evaluate regeneration of nerve, muscle and bone
- Prisoner shot in order to study ballistics
- Prisoners starved to study physiology
- Prisoners submerged in tubs of freeze water till death to evaluate how long a downed pilot could survive
- Prisoners were put in to pressure chambers and subjected to lethal extremes of atmospheric pressure

Nuremberg Trials

- 23 Nazi physicians and bureaucrats placed on trial
- 16 convicted of war crimes
- 7 sentenced to death

Research in the United States

- Many though we did not need any externally imposed ethics codes.
- Hence there were many harmed individuals as a result of research.

Human Radiation Experiments 1944-1974

- 74 male residents of Fernald School belonging to "Science Club"
 - Fernald was a residential institution for mentally retarded
 - Fed radioactive iron and calcium in cereal
 - Parental Permission
 - "We are considering the selection of a group of our brighter patients . . .to receive a special diet rich in the above mentioned substances for a period of time . . "
 - Special diet did not mention radio isotopes or risks
 - Final Report
 - "in some non-therapeutic tracer studies involving children, radioisotope exposures were associated with increases in potential lifetime risk of developing cancer that would be considered unacceptable today."

Willowbrook Studies

- Dr. Saul Krugman, 1950-1960
- Willowbrook—institution for mentally retarded children
- Wanted to study natural history of hepatitis
- Infected new arrivals with virus
- Established a special unit
 - Less crowded, better nutrition, cleaner
- Long waiting list except if parents enrolled
- Did not enroll wards of state

Willowbrook (con't.)

- Krugman justified this harm by stating:
- Greater than 90% would eventually become infected
- Thought that induced infection with attenuated strain may protect against severe effects of hepatitis
- Expedited entry represented a benefit to those participating
- His results helped develop a vaccine
- He did create a consent process
 - Parents interview a social worker and attended a group meeting introducing project
 - Encouraged to talk with private physician before consent
 - Could not sign consent for 2 weeks to allow ample time for consideration

Code of Federal Regulations: 45 CFR 46

- Research must be reviewed by IRB
- Only human subjects research requires review by IRB
- "a living individual about whom an investigator conducting research obtains:
 - (1) data through intervention or interaction with the individual
 - (2) indentifiable private information"

IRB at Children's Mercy

- One IRB with two "panels."
- Two co-chairs (ID doc, chaplain).
- Board members are classified as "scientist" or "non-scientist."
- Members include physicians, surgeons, psychologist, nurses, pharmacist, social workers, IS specialists, and attorneys and clergy from the community.
- Everyone work with an alternate. To maximize our psychosocial presence, my alternate is a child life specialist.

ALL BOARD MEMBERS HAVE A GREAT INTEREST IN THE PROMOTION OF RESEARCH!

The IRB is an integral part of our research enterprise!





The IRB is the keeper of the holy grail, the gnosis, the eternal flame:

Research, as defined by federal regulations, is categorized by its intentions rather than by its level of risk or its innovation. Research is any activity that has as its goal the creation of generalizable knowledge. The activities that lead to this goal generally involve systematic collection of data and analysis of the data. Something is considered research if there is an intention to publish or share publically the results of new information that is being gathered by an investigator. Sharing the data publically is a necessary aspect of making it "generalizable."

Sharing and Replication

The reason why data should be shared is that it allows others to try to replicate the study. This is an important component of the scientific method. The science behind research is designed to assure that the conclusions being suggested by an investigator can be repeated and thus that the data are generalizable and, therefore, valid. When results can be repeated they can be studied for their effectiveness, the results of which continue improvement of the quality of care and establishment of "best practice." While the aim of internal quality improvement initiatives also seeks to define best practice, research has a broader and less defined audience.

Broader Definition of Research

- Adding to "generalizable knowledged."
- INTENT to share information through publication or presentations.
- Systematic collection of data (numbers or narratives).
- Demonstration of validity through replication of research methods.
- Defining best practice.

Research vs. Quality Improvement

- External vs. Internal
- INTENT to publish or share.....vs.....
- INTENT only to improve products or processes
- QI often leads to Research

Activities outside of Human Subjects Research

- Animal research
- Deceased patients
- Unidentifable samples or data
 - More on this later

IRBs differ from HECs!

Most HECs engage in non-binding mediation.

IRBs have complete, protected authorization to approve, change, disapprove or stop any research protocol.

The chair, singularly, also has these powers!

Caveat investigador!

PRIMARY RESPONSIBILITIES of an IRB

- Review and analyze risk/benefit ratio.
 - Is there equipoise?
- Review scientific merit of protocol.
- Review qualifications of the study team.
- Review necessary resources.
 - Can the research be done?

- Review process of informed consent.
 - Can subjects and families understand the proposed research?
- Will subjects be informed of new information?
- What happens to identifiable data/tissues/blood?

Great focus on RISK AND BENEFIT

• The federal regulations require that the potential risk to research participants must be **indentified and minimized**, the prospect of direct benefits to research participants must be maximized, and the potential benefits of participating in the research must compare favorably with the risks of participating in the research.

Research Catagories

• With adults:

Minimal Risk or Greater than Minimal Risk

• With minors:

- Category #1: Research not involving greater than minimal risk
- Category #2: Research involving greater than minimal risk but with prospect of direct benefit to individual participants
- Category #3: Research involving an increase over minimal risk with no prospect of direct benefit but likely to provide generalizable knowledge of the subject's condition or disorder that is vital to understand or ameliorate it

Research Categories

- Category #4: Research not falling into one of the categories cannot be approved by local IRB (think: research in futile situations with no identified benefit to the subject):
 - The local IRB finds that the research provides a reasonable opportunity to improve the understanding, prevention, or alleviation of a serious problem affecting the health and welfare of children
 - The protocol must be approved by the Secretary of Health and Human Services, after soliciting the opinions of an expert panel and providing for a period of public comment

Minimal Risk is Contextual

- Where the probability and magnitude of harm of discomfort anticipated in the proposed research are not greater, in and of themselves, than those ordinarily encountered in daily life or during the performance of a routine physical or psychological examinations or tests
- Xray, blood draw
- When performed solely for research purposes—catheterized urine collection, lumbar punctures, many blood draws, sedation for radiologic procedure is greater than minimal risk
- Question: If both arms of a comparative protocol are minimal risk and both are standard of care, is there need for IRB review?

All elements of risk and possible or lack of benefit to the subject must be discussed.

Case: Jessie Gelsinger

Other Elements of Informed Consent

- Purpose of research
- Research procedures and how they differ from standard of care
- The risks and anticipated benefits of the research procedures
- Alternative to research participation
- Voluntariness

Informed Consent, Parental Permission and Child Assent should be thought of as a process not an event.

...and who benefits?

The language of consent:

- Subjects (competent adults as individuals) can only give consent for themselves.
 - The word "consent" has connotations of understanding in its origins.
- Legally authorized representatives (LARs) or parents give permission (not consent) for their charge or child.
 - The word "permission" has connotations of ownership, as to own land and allow some to cross it.
- Minors and incapacitated individuals assent by agreeing or disagreeing to the permission others have given.

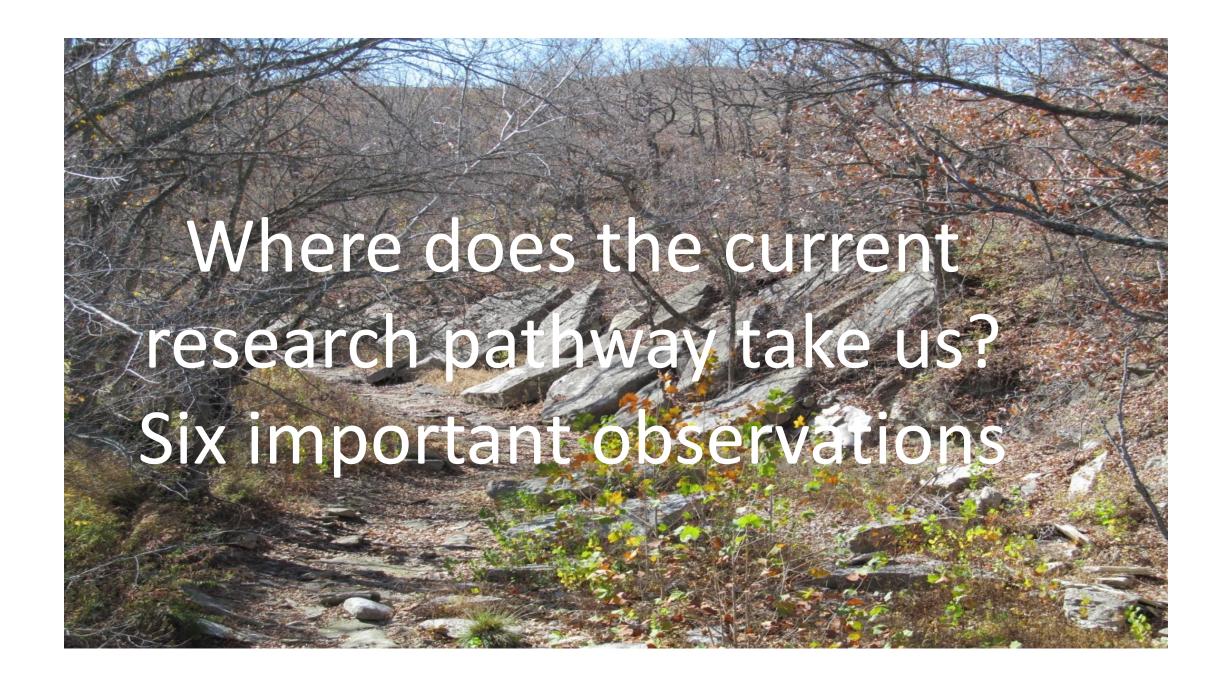
Assent

- A child's voluntary affirmative agreement to participate in research
- When an IRB requires assent, the child's refusal is binding
- Most children can provide assent to participate in research by the time they reach seven years old.

Two reasons to waive assent

- "the intervention or procedure involved in the research holds out a prospect of direct benefit that is important to the health or well-being of children and is available only in the context of the research"
- Children below a certain age, in a certain situation or with a certain condition have limited capacity to participate in the decision about research participation that they cannot reasonably be consulted.

- Assent should not be equated with consent
- The purpose of assent is not to treat children as if they are capable of making informed, autonomous decisions
- It is to remind us that children should be treated with dignity and respect















New Frontiers

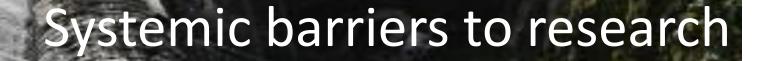
- Human Genome Research
 - Creation of DNA Repositories
 - Data Banks
 - De-identified data
 - Presumption of consent/permission/assent
 - Community awareness
 - Trademarks, copyrights, patents
 - Profit
 - Pharmaceutical influence



"TREMENDOUS PRESSURES THREATEN EXISTENCE OF INSTITUTIONAL REVIEW BOARDS"

Systemic barriers to research

- Not part of the culture.
- Lack of mentors.
- No infrastructure for learning about research.
- No designated time.
- Other priorities (productivity, efficiency,
- Too much on one's plate.
- Too much is being demanded from us.



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Notions from Tillich (by which I live)

Freedom and Destiny

Dynamic and Form

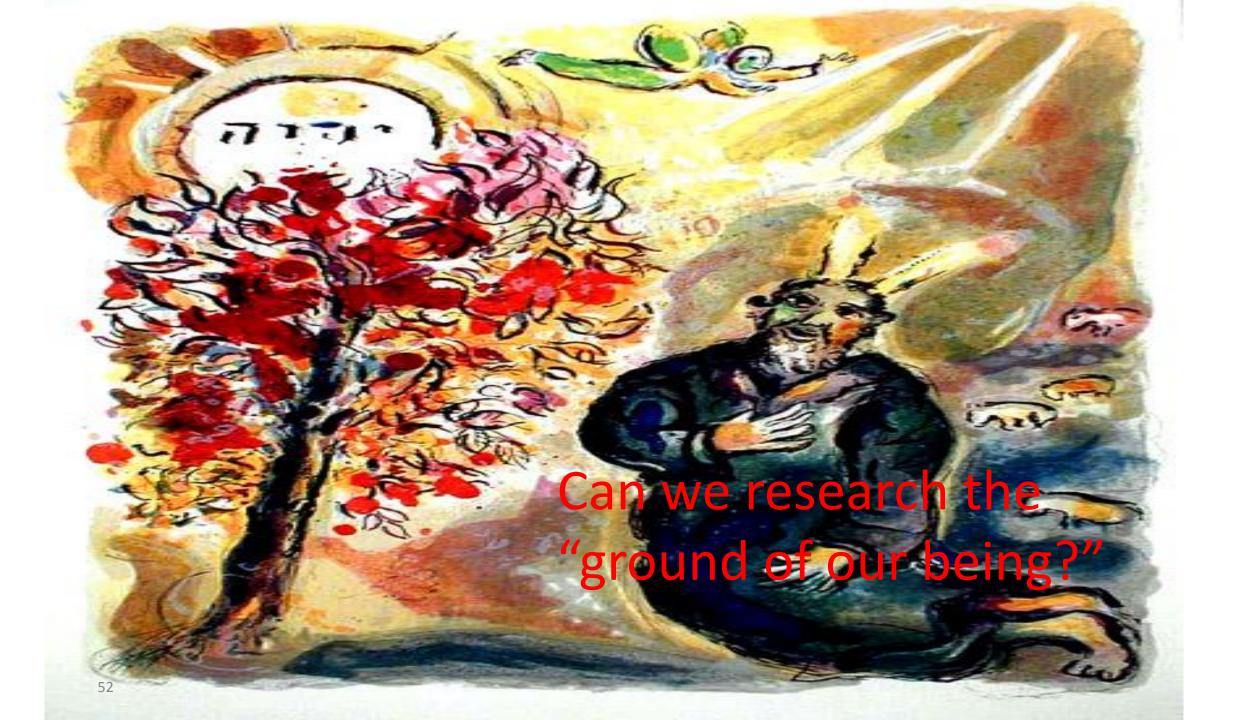
Individuation and Participation

Spirituality is the dynamic dimension of human life that relates to the way persons (individual and community) experience, express and/or seek meaning, purpose and transcendence, and the way they connect to the moment, to self, to others, to nature, to the significant and/or the sacred.

Prior research

 "Unlike other health professionals, the chaplain has no agenda to explain, cure, or eliminate disease. The chaplain seeks only to engage the sufferer and to reframe his/her suffering in the context of life's incongruities. The chaplain serves as witness to their story and attentively and diligently mirrors unconditional love."

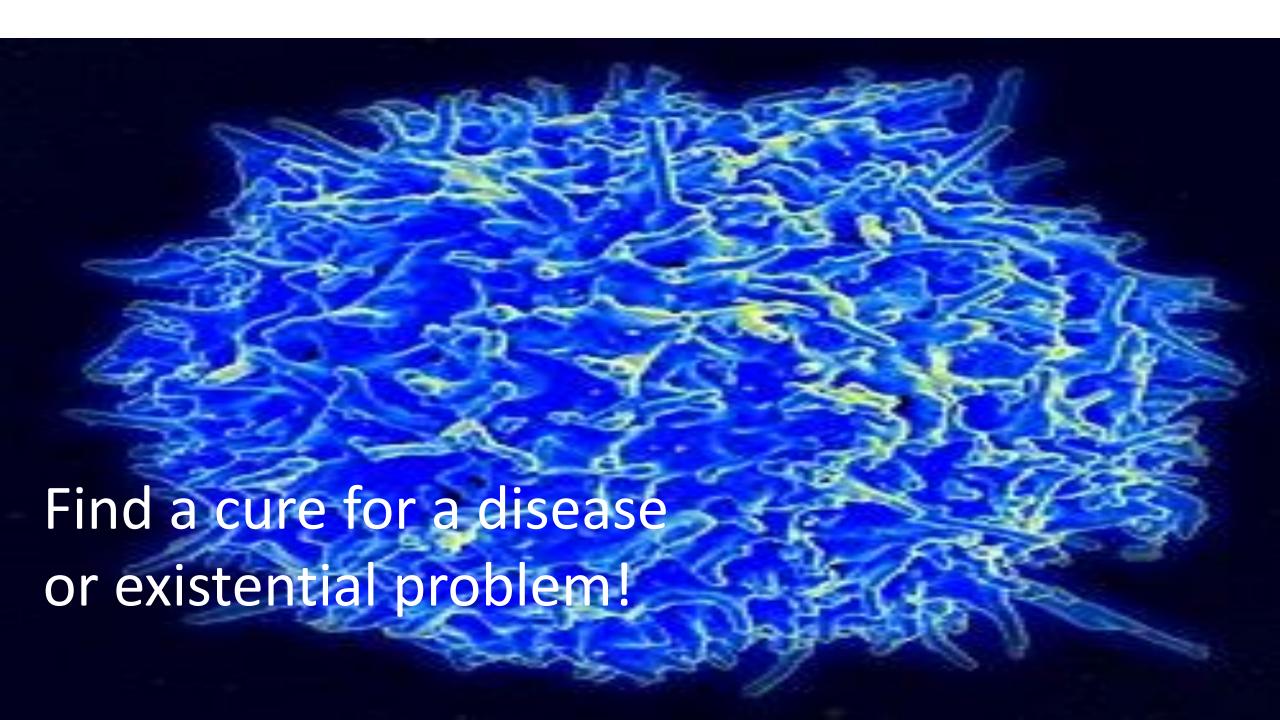
• Puchalski CM, Lunsford B, Harris MH, Miller T. Interdisciplinary Spiritual Care for Seriously III and Dying Patients: A Collaborative Model. *The Cancer Journal*, 2006; 12:398-405.



Of course we can!







Overcoming the barriers

- 1. Find a research mentor.
- 2. Connect with an IRB member
 - 1. IRB members are experts in research!
- 3. Learn about qualitative or narrative research
 - 1. Chaplains have many stories to tell.
- 4. Become "fluent" in research.
- 5. Start with something that you believe makes a difference.
- 6. Start with something small.
- 7. Start slow and taper off.

Overcoming the barriers #2

- Connect with other Psych-social team members.
- Become familiar with APC standards for research.
- Start with your job description and leverage time.
 - (At CM) Chaplain managers have a 5% research requirement.
 - This translates to on day per month to reach, write and talk.
 - Build a workshop/publishing requirement into your work.
- Finally, boldly face the reality that research is our future!

We're all in this together!

Strangers passing in the street By chance two separate glances meet And I am you and what I see is me And do I take you by the hand And lead you through the land And help me understand the best I can.