Looking Out For #1 in a Time of Coronavirus?

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Looking Out for #1 in a Time of Coronavirus?

facilitated by

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Wednesday, April 15th
3:30 – 4:30 p.m.

Supported by the De La Salle Institute for Advanced Teaching and Learning
Explorer Café at the Speed of ZOOM

- Please keep your microphone muted unless called upon
- You are encouraged to share video, but do not feel pressured to do so
- Please use the “raise hand” feature to indicate a desire to speak
- Please make use of the chat!
Lasallian Guiding Principles

- Teaching and learning
- Spirit of faith and zeal
- Service rooted in solidarity and justice
- Association
Ethical Characteristics of Public Health

- Public vs Individuals’ rights
- Scarcity of resources
- Socio-political factors
  - Poverty, illiteracy, minorities, vulnerability
  - Abuse of power
- Socio-cultural factors
  - Local beliefs vs “international guidelines”
  - Role of families and community leaders
- Urgency to contain public health threats
- Inequities (national and international)
COVID19 UPDATE

• Current status
  – Numbers, recommendations
  – Therapy and vaccine progress
• Breaking the Chain
• Prevention measures
  – Community
  – Individual
• Moving forward: Policies & Guidance
CURRENT STATUS
WE ARE JUST BEGINNING TO FLATTEN THE CURVE
WE ARE NEAR THE EPICENTER OF US EPIDEMIC
COVID-19 is a top cause of daily death in the USA today.
BREAKING THE CHAIN

…and flattening the curve
The Chain of Infection

Public health officials use the following model to think about how to prevent disease spread.

- **Infectious Microbe**: Bacteria, Fungi, Virus, Prion, Protozoa
- **Reservoir**: Place where the microbe lives and replicates. Such as people, equipment, water, food, animals
- **Susceptible Host**: Non-immune person, immune deficiency, babies, elderly, immunosuppressed by drugs
- **Portal of Entry**: Entry point such as wound/opening in the skin or mucosa of the mouth via sutures, catheters, IV lines
- **Portal of Exit**: Place where the microbe leaves reservoir. Such as coughing, sneezing, bleeding, feces
- **Modes of Transmission**: Contact (hands, sharps injury), airbourne, vehicle (DUWL), insect vector

COVID-19
COVID-19 is not the Flu

- Infectious Agent: virus “SARS-CoV-2”
- Transmission: droplet & airborne
- Asymptomatic transmission
- NO VACCINE, NO CURE
- Symptoms: fever, cough, shortness of breath, loss of the sense of smell

How seasonal flu and Covid-19 compare

<table>
<thead>
<tr>
<th></th>
<th>FLU</th>
<th>COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>R0 number</td>
<td>1.3</td>
<td>2-2.5</td>
</tr>
<tr>
<td>Estimate of how many people will be infected by an average individual with the disease</td>
<td></td>
<td></td>
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<tr>
<td>Incubation time</td>
<td>1-4</td>
<td>1-14</td>
</tr>
<tr>
<td>The time from exposure to first symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalization rate</td>
<td>2%</td>
<td>19%</td>
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<tr>
<td>Average percentage for total cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case fatality rate</td>
<td>.1% or less</td>
<td>1-3.4%</td>
</tr>
<tr>
<td>Percentage of reported deaths among total cases</td>
<td></td>
<td></td>
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</tbody>
</table>

Sources: CDC, WHO, NCBI
THERAPIES AND VACCINES

• Currently no proven therapy
  • Some clinical trials for certain drugs
  • Plasma transfer is being investigated

• No current vaccine
  • Many are in progress
  • Probably won’t have a vaccine for another 18 months
WHAT CAN YOU DO TO BREAK THE CHAIN?

- Wash hands, surfaces, etc.
- Limit exposure (Social distancing)
- Aggressively self-isolate
- To mask, or not to mask
- Don’t assume you are non-infectious
Imperial College London has best prediction model, two takeaways:

- Doing nothing will be catastrophic
- We are in this for 12-18 months

Suppression scenarios

Models from researchers at Imperial College London suggest that wide adoption of measures to reduce the transmission of the novel coronavirus can reduce the demand for critical health-care services, in part by spreading the demand over a longer period. The major challenge is that those measures will need to be maintained until a vaccine becomes available, or transmission will quickly rebound.
WHO ARE YOU PROTECTING?

• Elders and the middle aged
• The immunocompromised
• Those with respiratory disease
• Those with diabetes, high blood pressure, etc.
• Economically & racially vulnerable populations
WHAT IS THE COUNTRY DOING?
CURRENT RECOMMENDATIONS

• Essential vs non-essential
  • Essential workers must be supported and protected
  • Non-essential workers must stay home
• Limits on social gatherings
• Travel advisories
• Testing and reporting of cases
TESTING

We are far behind the world in testing
THE COST OF SOCIAL DISTANCING

- Disruptions to work, schools, etc.
- Unemployment (and loss of healthcare)
- Extra burdens on those with extra needs
- Mental health challenges
- Serious economic repercussions
HOW DO WE BALANCE THE NEEDS OF THE INDIVIDUAL AGAINST THE NEEDS OF THE GROUP?

ARE THE COSTS OF SOCIAL DISTANCING WORTH IT?
BREAKOUT SESSION #1 GUIDELINES

• You will be sorted randomly into groups of 6-7
• The prompt will be shared in the chat. Jot it down in case you don’t have access to chat during the Breakouts.
• Please accept the invitation to join a Breakout Room
• Discuss the prompt with your group.
• Decide on one person to report for your group
• You will have 15 minutes to discuss
• You will automatically be returned to the main call
• After the breakout session is over, have your group reporter “raise hand”
HOW DO WE BALANCE THE NEEDS OF THE INDIVIDUAL AGAINST THE NEEDS OF THE GROUP?

ARE THE COSTS OF SOCIAL DISTANCING WORTH IT?
TWO ETHICAL FRAMEWORKS TO CONSIDER

Bioethics vs Public Health Ethics
Ethical Characteristics of Public Health

- Public vs Individuals’ rights
- Scarcity of resources
- Socio-political factors
  - Poverty, illiteracy, minorities, vulnerability
  - Abuse of power
- Socio-cultural factors
  - Local beliefs vs “international guidelines”
  - Role of families and community leaders
- Urgency to contain public health threats
- Inequities (national and international)
BREAKOUT SESSION #2 GUIDELINES

• You will be sorted randomly into groups of 6-7
• The prompt will be shared in the chat. Jot it down in case you don’t have access to chat during the Breakouts.
• Please accept the invitation to join a Breakout Room
• Discuss the prompt with your group.
• Decide on one person to report for your group
• You will have 15 minutes to discuss
• You will automatically be returned to the main call
• After the breakout session is over, have your group reporter “raise hand”
WHAT ARE WAYS THAT WE CAN SUPPORT OURSELVES AND OUR COMMUNITY AT LARGE?
WHAT ARE WAYS THAT WE CAN SUPPORT OURSELVES AND OUR COMMUNITY AT LARGE?

Please share, via “Raise Hand”
EXPONENTIAL DYNAMICS;
SMALL CHANGES HAVE BIG EFFECTS
WHAT CAN WE DO?

• Personal Health
  • Go outside (six-foot distance)
  • Sleep and eat well
  • Find creative ways to connect
    • Provide support to those who are most vulnerable

• Community Health
  • Stay home if able
  • Get involved in politics
 SOURCES WE TRUST

• World Health Organization (WHO)
• Centers for Disease Control (CDC)
• State & Local Health Departments
• Johns Hopkins Daily Update (coronavirus.jhu.edu)