From the Broad Street Pump, to *Call the Midwife*, to the Ebola Crisis: Lessons for Partnerships in Religion and Public Health for the COVID-19 Pandemic

David B. Larson Memorial Lecture
Duke University
March 11, 2021

Ellen Idler
Emory University
On October 25-27, 1989, The Carter Center of Emory University held a meeting of 200 faith leaders to focus on “The Church’s Challenge in Health”. President Carter said, “There is no church or synagogue in America that could not coordinate and carry out an immunization drive against measles.”
IHP works at the intersection of faith and health to generate knowledge and apply practice that transforms communities

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1854

The Cholera Epidemic in St. James Parish
Dr. John Snow
“The Father of Epidemiology”

Dr. John Snow, 1813-1858

humble origins in York, one of 9 children
attended the Hunterian School of Medicine, London
developed the science of anesthesia
administered ether to Queen Victoria for childbirth
member of the Royal College of Physicians
published frequently on his discoveries
sought to disprove the Miasma Theory of contagion
INSTANCES OF THE COMMUNICATION OF CHOLERA THROUGH THE MEDIUM OF POLLUTED WATER IN THE NEIGHBORHOOD OF BROAD STREET, GOLDEN SQUARE

(August 31 – September 9, 1854)

The most terrible outbreak of cholera which ever occurred in this kingdom, is probably that which took place in Broad Street, Golden Square, and the adjoining streets, a few weeks ago. Within two hundred and fifty yards of the spot where Cambridge Street joins Broad Street, there were upwards of five hundred fatal attacks of cholera in ten days.

The Golden Square or Soho District of London

The wealthy lived in grand houses on the avenues of Regent Street and Oxford Street.

The poor working people lived in crowded tenements in the narrow streets behind the avenues.
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>31 Aug/1 Sept</td>
<td>Cholera outbreak overnight</td>
</tr>
<tr>
<td>3 Sept</td>
<td>Collected water from Broad St pump</td>
</tr>
<tr>
<td>4 Sept</td>
<td>Analysed water samples</td>
</tr>
<tr>
<td>5 Sept</td>
<td>Collected from Registrar-General’s office a list of deaths from cholera for week ending 2 Sept</td>
</tr>
<tr>
<td>6 Sept</td>
<td>Investigated where deceased obtained water from</td>
</tr>
<tr>
<td>7 Sept</td>
<td>Attended vestry meeting</td>
</tr>
<tr>
<td>8 Sept</td>
<td>Pump handle was removed</td>
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Note: the date in the title is a typo; the Broad Street outbreak occurred in 1854, not 1864.
The Famous John Snow Map

The number of deaths that occurred at each address is indicated by the stacked bars.

Deaths are clustered around the Broad St. pump.

Snow based his map on one drawn by Edmund Cooper, Metropolitan Engineer. Snow’s was published with the Vestry Report.
Rev. Henry Whitehead
Senior Curate
St. Luke’s Church
Berwick St
1825-1896
He was 28 years old in 1854

Snow’s Partner in the Investigation: Whitehead

Whitehead’s Timeline of the Outbreak

Thursday August 31 – Wednesday September 6, 1854

visited many parishioners who were sick and dying
one was his good friend James Richardson, the Scripture reader
he noted that those who had drunk water from the Broad St. well before
Friday Sept. 1 had mostly died
he also noted that some victims drank a great deal of water and survived

Thursday September 7, 1854

St. James Parish Vestry meeting, John Snow attended
the Board voted that the pump handle be removed, to prevent more deaths

Friday September 8, 1854

preached his daily sermon on the outbreak
observed that many elderly women survived

October 1854

Whitehead published “The Cholera on Berwick Street”, his own investigation
noted an apparent lack of connection between the deaths, and sanitation

November 1854

the St. James Parish Vestry commissioned Whitehead and Snow to prepare a final report
Whitehead was able to track down survivors who had fled the neighborhood

February 1855

Whitehead discovers the “index case”: baby Lewis, who became sick on Monday August 28, died on Saturday September 2
The sermon Rev. Henry Whitehead preached at the evening service on Friday of the first week of the outbreak, September 1854.

SERMON IV.

PERIL A BOND OF UNION.—THE CHOLERA.

FRIDAY EVENING, SEPTEMBER 8, 1854.

JONAH, III, 5.

“So the people of Nineveh believed God, and proclaimed a fast, and put on sackcloth, from the greatest of them even to the least of them.”

The report that Whitehead wrote a month after the epidemic, October 1854

Note the lead weights used to hold open rare books
Whitehead notes the uneven location of deaths by address. Few inmates of the workhouse died.
Rev. Whitehead’s careful study of the death records identified the “index case”, Baby Lewis, an infant who had survived for four days after contracting cholera. Others had died in the three days prior because they drank from the water that was contaminated by the water from the cesspool where her mother washed her diapers.

This is the above and below-ground drawing showing the close distance between the cesspool and the well.

After Whitehead’s discovery of the index case, the street was excavated and the opening (deteriorated masonry) between the two was discovered.

Prior to 2018 this replica of the original Broad Street Pump (missing its handle) was located a block away on what is now called Broadwick Street. It has been reinstalled in its original location. The pub in the background is the John Snow Pub.
London

1948

The National Health Service and the Community of St. John the Divine
The Community of St. John the Divine began in 1848. This Order of the Church of England trained nurses and staffed King’s College and St. John’s Hospitals in London. In 1928 they began training as midwives and focused their services on the East End of London, where dock workers and their families lived.
The East End of London during and after World War II. The Docklands were the site of intense bombing by the Nazis.

The bomb sites were known as “adventure playgrounds” for the many children who lived in Poplar, the children of the dockworkers. Birth rates were very high following the war.
The National Health Service began in 1948. It provided ‘cradle to grave’ coverage for all, and services were ‘free at the point of service’.
In 1948 the National Health Service contracted with the midwives of the Community of St. John the Divine to continue providing midwifery services and to house the additional NHS midwives.

Jennifer Worth was one of the original NHS midwives to be assigned to work in Poplar, and to live with the Community of St. John the Divine. Her memoirs were the basis for the BBC / PBS series “Call the Midwife”.
Scenes from the PBS series *Call the Midwife*, based on the memoirs of Jennifer Worth, now in its 9th season.

“Mingling the spiritual and the secular with a deftness that might be unique on television, the stories address moral challenges like prostitution and the contraceptive pill with bracing pragmatism.... The quotidian challenges of the poor and pregnant are enough to guarantee a swift return to narrative equilibrium.” Jeannette Catsoulis, *NYT* 5.23.2016
Sierra Leone

2014

The Ebola Crisis
THE FIRST EBOLA PATIENTS ARRIVE IN THE U.S.

Many, if not most, Americans first learned of the Ebola crisis in West Africa when two American missionaries were transported to Atlanta.
Religion was also playing an important role in spreading the disease. 28 attendees at the funeral of a pharmacist in Sierra Leone contracted Ebola from contact with the body.

The Ebola Crisis in West Africa

Faith leaders played important roles in the Ebola crisis.

There was a significant delay in engaging them at the start of the outbreak. Initial WHO guidelines for “safe burial practices” were being disregarded.

International FBOs and WHO developed a new protocol for “safe and dignified burial practices” in October 2014. FBO FOCUS 1000 organized a meeting of the Islamic Action Group (ISLAG) and the Christian Action Group (CHRISTAG) to prepare messages for faith communities and distribute them.

Once they became involved, faith leaders played a transformational role.

http://reliefweb.int/sites/reliefweb.int/files/resources/Keeping%20the%20Faith%20-%20the%20role%20of%20faith%20leaders%20in%20the%20Ebola%20response.pdf
Banner representing interfaith leaders organized by FOCUS 1000 and international public health organizations.

http://cdcmuseum.org/exhibits/show/ebola/summary
The family of the deceased look on and say a prayer before the body is removed for safe and dignified burial in Sierra Leone, November 7, 2014. From October 2014, families were allowed to attend burials again, and to invite an imam or minister to pray at a safe distance. Photograph by Lisa Pattison, IFRC
In two days of events in April 2017 we highlighted the work of World Vision, the United Methodist Church, and faith-based organizations in Sierra Leone in combating the Ebola epidemic. The work faith groups and their work in developing a “safe and dignified burials program” with the World Health organization and the CDC was critical to ending the epidemic. Video available at: http://www.rphcemory.org
At the panel discussion, Mohamad Jalloh, CDC epidemiologist and son of the founder of Focus 1000, told us about an upcoming exhibit at the CDC’s David J. Sencer Museum: “EBOLA: People + Public Health + Political Will” June 19, 2017 – May 25, 2018

Digital version available at: http://cdcmuseum.org/exhibits/show/ebola/

The sign in front of the Qu’ran says: “Qu’ran marked with religious passages supporting Ebola prevention and control measures, presented to CDC by the Islamic Action Group (ISLAG) through FOCUS 1000.”
He knew about the exhibit because he would be bringing one of the Qu’rans, and one of the Bibles that the Focus 1000 group had used to identify passages for teaching “in a time of plague”.

See Mohamad Jalloh and Louise Shaw, the curator of the exhibit, here: https://www.facebook.com/CDC/videos/10155703844596026/

The marked passage from Leviticus 13:4 says: “But if the spot is white in the skin of the body, and appears no deeper than the skin ... the priest shall shut up the diseased person for seven days.” (the hand written word is Quarantine).

- Traveler with Ebola comes to US (Dallas), 2 nurses infected
- Spread to Nigeria and Senegal, CDC teams help stop the outbreak
- CDC expands Ebola testing among US labs
- CDC organizes healthcare worker safety course in Anniston, Alabama for West Africa volunteers
- Rapid Isolation and Treatment of Ebola (RITE) teams help rapidly control new outbreaks in Liberia
- Spread to Mali, CDC teams help stop the outbreak
- CDC deploys 1000th staff member
- Liberia outbreak declared over

**REPORTED NEW CASES OF EBOLA PER WEEK**

- **Guinea**
- **Liberia**
- **Sierra Leone**

MAR 2014
- Pre-EOC Activation

APR 2014
- 1st Quarter EOC

MAY 2014
- 2nd Quarter EOC

JUN 2014
- 3rd Quarter EOC

JUL 2014
- 4th Quarter EOC

**Early reports of Ebola virus disease from Guinea, CDC field team deployed**

**CDC Emergency Operations Center activated, CDC deployments surge**

**CDC laboratory established in Sierra Leone**

**CDC issues Level 3 Travel Warnings for West Africa**

**Dr. Frieden travels to Guinea, Liberia, and Sierra Leone**

**Microplanning workshops with county leaders held in Liberia**

**CDC implements enhanced screening at airports, new tracking program for people coming from countries with Ebola outbreaks**

**CDC works with states to improve hospital readiness**

**New cases reported in Liberia**

**CDC recommends reduced screening for passengers from Liberia**

*Approximate numbers*
"Finding Common Ground: Partnerships in Religion and Public Health"

Rollins School of Public Health, Emory University, April 3, 2019

Ellen Idler, Emory University
Alfredo Morabia, AJPH Editor-in-Chief

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March 2019

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Five Lessons for the COVID-19 Response
1. Faith communities are expert organizers

Vaccine Centers in Cathedrals, Stadiums, and Parking Lots

The Atlantic
2. What may start as conflict can end as cooperation

An anti-government demonstration in Jerusalem.

*New York Times Sunday Magazine*
3. Partnerships depend on trusted messengers and familiar spaces

Salt Lake County taking COVID vaccines to Black churches, mosques to reach wary minority communities

Officials hope the locations will build trust among underserved populations.
4. Interfaith alliances have the most reach

Covid-19: Guide for Governments
Working with Religious Leaders to Support Public-Health Measures
5. A preference for the most disadvantaged

In Pope Francis’ address to the empty chamber of the United Nations, he spoke forcefully on behalf of the poor.

“The pandemic has highlighted the urgent need to promote public health and to make every person’s right to basic medical care a reality,” Francis said, renewing his appeal that vaccines for the coronavirus be administered with every effort “to the poorest, the most vulnerable, those who so often experience discrimination because they have neither power nor economic resources.”
Five Lessons for the COVID-19 Response

The social determinants of health are on full display: wealth, education, income, race, ethnicity, gender, ... and religion.
Words of Comfort, Prayers for the People

From the National Council of Churches
February 25, 2021
https://www.youtube.com/watch?v=LqDxc15uOQU

“For those who have died and their loved ones
  For stillness and silence
  For lamenting the season
  For those who are sick
For those suffering around the world house
  For first responders and essential workers
  For those struggling with economic loss
  For comfort
For communities of faith searching for wholeness
  For successful and equitable vaccine distribution
  For words of hope”