Cultural considerations in Covid-19 occurrence in special populations—implications for Indian country (?)

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Game plan

- Review a couple of MMWR articles centered on special population groups with extremely high occurrence of Covid-19 and invite you to consider if any of the findings may be relevant to your own clinic population/s or tribes you serve in Indian country
- The articles center on Covid-19 among Marshallese, Hispanics, and Ohio Amish

Objectives

- Recognize that special population groups outside of Indian country have some risk factors in common with tribal groups, and some unique cultural concerns related to transmission, disease incidence, and mortality from Covid-19
- Describe some of the common epidemiologic and behavioral factors for Covid-19 among disparate communities with very dissimilar backgrounds
- Suggest studies or intervention programs that could/should be done to mitigate occurrence of Covid-19 in these communities, and in your practice community/ies

Take home messages

- SARS-CoV-2 has taken a remarkable toll in many special population groups that are not commonly on the public health 'radar screen'
- Many risk factors for disease and for death in these minority groups are similar to those we have seen in rural tribal populations, in particular
- On the other hand, some of the risk factors and barriers to prevention among special population groups considered today are dissimilar to many tribal groups
- Some of the study findings and interventions from Marshallese, Hispanic, Amish communities might be useful for your efforts to assist with community Covid-19 control

Disclaimer

- I am not Marshallese, Hispanic, or Amish and do not mean to represent any of these groups or imply anything negative
- I apologize if any comments I make may be considered inappropriate due to my ‘outsider’ status
- I am from Amish country, right in the middle of the most dense concentration of Amish in the US
- I also do not mean to lump special populations all together or imply that tribal people are just like those whom we will discuss today

Introduction

- We now have substantial information about Covid-19 transmission and control in many minority groups in the US, including tribal people in different parts of the country
- We have recently been losing the battle with sharp rises in disease occurrence and mortality nationwide
- Although tribal people have experienced (and reported) barriers to reduction of disease occurrence, many other special population groups have been ignored/not reported
- Rural communities comprised of Pacific Islanders, Hispanics, and Amish have their own challenges related to Covid, and we in Indian country may be able to use information gained from study of these populations to improve Covid control among tribal people

Huge mushroom cloud hangs over Bikini Atoll during an American atomic bomb test in a colourised image, 1946.

Methods, Marshallese and Hispanic study in Arkansas

- Convenience sample focused on two special population groups, data derived from all Covid-tests in a 2 county area in a defined time period
- Focus groups to determine common themes re: facilitators and barriers to Covid control (n=6)
- Key informant interviews from each special population, from business leaders, faith leaders, elders, others
- Simple analysis reporting descriptive info and % positivity (no regression analyses, etc)
- Numerous limitations to the approach, well described by authors

- Source: Center et al, MMWR, Dec 4, 2020

Results, Marshallese and Hispanic study in Arkansas

- High proportion of cases among younger people (working age) in each ethnic group, compared to whites in the same catchment
- High proportion of cases among poultry workers
- Numerous examples of multi-household infections (4 or more Covid cases per household)

Results

Marshallese

- 'Incidence' 71 times higher than whites
- Mortality 65 times higher than whites
- 8390/100,000 Marshallese 'incidence'

Hispanic

- 'Incidence' 15 times higher than whites
- Mortality 3 times higher than whites
- 1795/100,000 'incidence'

Qualitative results--Arkansas

- Little knowledge about transmission and disease characteristics
- Unaware of how to tap social services
- Confusion about changing shut-down policies
- Most info from social media
- Business owners reported difficulties with enforcement of mask wearing/distancing
- Unclear about difference between isolation and quarantine, and when to go back to work post quarantine/isolation
- Reluctance to miss work

Qualitative results—barriers, Arkansas study

- High occupancy apartments/houses, multi-generational
- Hard to maintain separation at job sites, like poultry processing
- Lack of social safety nets, extended family members who could lend a hand if someone were ill (financial or other)
- Language issues/challenges, particularly for Marshallese
- Transportation challenges to get to health care facilities
- Insurance deficits…current lack of access to Medicaid and employers' insurance may be set up to cover only the worker, not the family, due to cost

Need for increased understanding and awareness about all aspects of prevention, testing, isolation, and treatment of COVID-19

- Inconsistent messages from authorities, reopening the state, and communication barriers led to miscommunications and misunderstandings
- Need more knowledge of health care systems, resources, and support services to access and navigate
- Need more translated communication and resources describing
  - Modes of transmission of COVID-19
  - How specific prevention behaviors decrease COVID-19 risk
  - Factors that increase risk for COVID-19–associated complications or death
  - Testing, including how to get results
  - When to seek emergency care
- Messaging needs to come from local sources in a variety of ways
- Messaging needs to be repeated

messaging among Marshallese and Hispanics in Arkansas

- Public health education campaign centered on keeping elders safe

Background on Ohio Amish

- High concentration of Amish people …tho they can be found in 31 states, Canada, Central America, Bolivia, and Argentina
- More than one sect, divided generally into Older and more modern sects, multiple languages/dialects
- Swiss roots and still elements of Swiss farming and dairy culture, as well as Swiss German-based language ("Dutch")
- Adherence to strict traditions, language, healing practices (more like naturopathy); multi-generational families; usually no insurance
- Mostly isolated from the rest of people in the State

Background, cntd

- Economic base: farming, dairy products, employment in local businesses (restaurant industry and furniture-making among other occupations)
- Patriarchal, primarily
- Not quick to seek western medical care
- Not interested (mostly) in social media, although I suspect that is widely variable by sect and by family composition

Covid-19 outbreak among Ohio Amish, 2020, methods

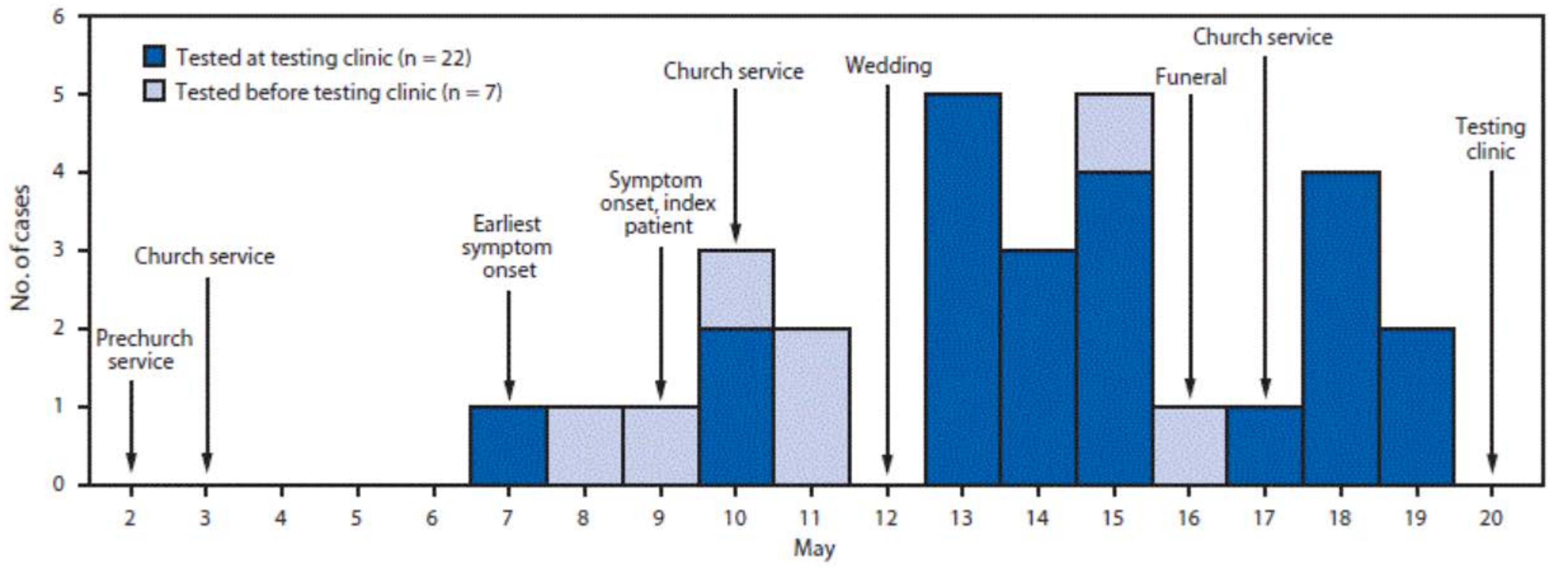
- Case reports led to further evaluation of the community and development of a testing clinic at an Amish school
- 11 key informant interviews with community leaders
- Summary of key messages using qualitative methods techniques

- Source: Ali et al, MMWR, Nov 13, 2020

Results, Ohio study

- After a family outbreak of Covid-19, 30 community members tested at a local venue, ¾ positive
- A later group of 30 were tested, 2/3 positive
- Males>female prevalence of positives and of tested persons
- Social events without mitigation strategies were considered to be important to community transmission

FIGURE. Date of symptom onset among 30* persons in an Amish community who received 2 test results, dates of social gatherings in that community — Ohio, May 2–20, 2020



Qualitative results, Ohio study

- Distrust of almost any outside agency seemed to be common theme
- Lack of established relationship with (trusted) public health officials was apparent
- They wanted culturally-tailored, accurate, consistent messages, presented via their own newspapers and radio stations
- The Amish respondents understood about transmission and transmission risks
- They were not content to embrace physical distancing and mask wearing…'not what we do'
- They felt they had adequate access to health care, but not to good information about infection/disease

TB's key informant interview with a RN who currently works in that same part of Amish country

- Reluctant to wear masks
- Will follow employers' direction to mask and physical distance in business settings when business owned by 'English'
- Infrequent use of social media for any reason
- In Amish-owned restaurants and businesses, mask wearing is inconsistent
- The cultural differences and distrust of outside agencies will likely remain a difficult set of challenges for Covid-19 control
- Not sure what will happen with vaccine roll-out

Among the three high-risk groups in mmwr reports, there are more similarities than differences re: Covid-19 epidemiology and prevention

- Language barriers among all three groups, tho Amish can speak both Swiss German and English, along with other German-based dialects
- Different cultural norms than majority population
- Lack of trust of outsiders
- No established relationships with public health agencies
- Employees at p.h. agencies may not be fully aware of the cultural barriers and how to help navigate them
- Living patterns/multi-generational households make home transmission more likely to occur
- For many occupations, physical distancing is difficult or impossible

How might any of this info be relevant to you?

- Some important vaccine-related messages will need to be delivered, and consistency of message and depth of penetration into your communities should be of paramount concern
- Determine if all segments of your patient population use social media, and which media, to deliver messages, before you invest in education that relies on such platforms
- Work with local/regional TV/radio stations to make tribal people visible in the vaccine effort
- Determine how to get info to businesses/churches/tribal community centers/traditional healing organizations that is accurate and timely
- Be ready for evolving Covid-19 control challenges and how to best reach community with accurate messages; meanwhile, encourage trust building between tribes and public health agencies

Take home test

- Do you know everything you need to know about the cultural beliefs and behaviors of your patient population, to help them navigate this pandemic?
- Is your local or regional public health system appropriately knowledgeable about tribal protocols to improve testing, improve health messaging? What can you do to facilitate, as a clinician?
- What are the main barriers to effective testing programs and education in the three special communities from today, and are they relevant to where you live and work?

References

- Center et al, Multidisciplinary community-based investigation of a Covid-19 outbreak among Marshallese and Hispanic/Latinos. MMWR Dec 4, 2020
- Ali et al, Covid-19 outbreak in an Amish community—Ohio, May 2020. MMWR, Nov 13, 2020

- Internet has good information on Marshallese on the mainland, health issues, migration/s. Also, much information on Amish in the US, including origins, languages, sects, acceptance/non-acceptance of modern conveniences (by sect and geography).

- Thanks to Grazia Ori and JoAnn Tsark