Vaccine Hesitancy in Pandemic Times

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Objectives

- Look at where we stand with respect to COVID-19 vaccination
- Learn proven approaches to the vaccine discussion
- Discuss COVID-19 vaccine concerns and how we can address them
- Review recent updates regarding COVID-19 vaccines
COVID-19 Vaccination Rates in Oregon

DATA CURRENT AS OF OCTOBER, 2021

https://ourworldindata.org/covid-vaccinations?country=OWID_WRL

Share of people vaccinated against COVID-19, Oct 22, 2021

Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

- Share of people fully vaccinated against COVID-19
- Share of people only partly vaccinated against COVID-19

United States:
- 57% fully vaccinated
- 8.8% partly vaccinated

World:
- 37% fully vaccinated
- 12% partly vaccinated

Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute numbers. CC BY

https://ourworldindata.org/covid-vaccinations?country=OWID_WRL
62.4% of Oregonians are fully vaccinated

Source: State and county health departments, Centers for Disease Control and Prevention


Current vaccination rates by rarest race and ethnicity
Labeled with % people vaccinated at least one dose

Legend
- Lighter shade: in progress
- Darker shade: Series complete

Native Hawaiian / Pacific Isl.: 89.4%
Asian: 64.6%
White: 59.9%
Black: 54.7%
American Indian / Alaska.: 53.9%
Hispanic / Latina/o/x: 49.0%

https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonCOVID-19VaccineEffortMetrics/AgeData
How do we convince those that are still unconvinced?

BEFORE YOU ENTER INTO A VACCINE CONVERSATION...

Remember...

- Make no assumptions
- Maintain an open & inviting posture
- Acknowledge the spectrum of vaccine acceptance
- Recognize that people are just trying to make the best decisions they can with the information they’ve been given
  - Sometimes they are using misguided information
- Approach with empathy and an attempt to understand
  - With all the information that is out there, discerning the truth can be difficult
Remember...

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Maintain an open & inviting posture
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**Continuum of Vaccine Acceptance**

- refuse all
- refuse but unsure
- delay/refuse some
- accept but unsure
- accept all
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Proven Approaches to the Vaccine Discussion

- Use the Presumptive Approach
- Bundle your recommendations
- Use motivational interviewing techniques
- Make it personal
- Practice persistence
- Be patient
Presumptive vs Participatory approach

- Presumptive approach – presumes that the patient/parent is going to go along with recommendations.
  - “It’s flu season so we’ll get you your flu shot before you go.”

- Participatory approach – invites the patient/parent to guide the decision making.
  - “It’s flu season. What do you want to do about a flu shot?”
How might this be different for a COVID vaccine discussion?

- More presumption... in the form of a question
  - “We don’t have your COVID vaccine information in the chart yet. Do you have your vaccine card with you?”

- It depends on whether you’re dealing with someone who is already eligible or who is newly eligible for a vaccine
  - “COVID vaccines are finally available for our younger kids! Let’s get the vaccine for Jacob before you go.”

Bundling your recommendations

- Also called... discussing vaccines in the "same way on the same day"
- Particularly helpful for vaccines that are harder to convince people to get
- Would not have been possible with COVID vaccines earlier on - thankfully, that has changed!
The Bundled vs Unbundled Approach

- **Bundled:**
  - "You’re due for your Tdap, COVID and pneumonia vaccines. If you haven’t already had those done elsewhere, we’ll get those for you before you go."

- **Unbundled:**
  - “You’re due for your Tdap and pneumonia vaccines. We also have the COVID vaccine to offer.”

Motivational interviewing techniques

- Different frameworks to accomplish the same task
  - Clarify concerns
  - Validate feelings
  - Provide confidence in your expertise
  - Refute myths
  - Offer a **strong recommendation**
3As Approach to Motivational Interviewing

- **Ask**: Don’t just stop with a “no” response. Dig deeper.
  - “Tell me what worries you about the COVID vaccines. What are you hearing?”

- **Acknowledge**: restate the concern and acknowledge its importance.
  - “If I understand you correctly, you are worried about…. Is that correct?”
  - “I can see why that would concern you. If that were true, I wouldn’t want you getting the vaccine either. **May I share with you** what I know about that concern?”

- **Advise**: share the facts about their concern and offer a strong recommendation.
  - “Researchers have looked at this question and find no evidence that it is true. In fact, the risk of this from the COVID infection itself is significantly greater than the very rare risks of the vaccines. That is why I took the vaccine myself, gave it to my family, and **strongly recommend** it for all of my patients.”

**Make it personal**

- Let patients know that you vaccinate yourself and your family
- Tie recommendations to something personal in the patient’s life
- Use real-life anecdotes to discuss harm from vaccine-preventable disease
Practice Persistence

Be patient

- It’s a marathon, not a sprint (sort of)
  - It takes time to develop trust
  - Some people will want time to review more information
  - Experiences may affect patients’ choices
  - Children will grow up hearing your pro-vaccine message
Common COVID-19 vaccine concerns and how to address them

"The vaccines were developed too quickly."
EFFICIENCIES
CREATED
NOT
CORNERS
CUT

- Pre-Clinical phase efficiencies
- SARS-COV-2 is not our first Coronavirus
- International scientific cooperation
- mRNA platform already under development – just plug in the spike protein mRNA sequence
- Doesn’t require growth in cells or inactivation – replicated in vitro and rapidly scaleable
- Money makes the world go round
- Redundancy recognized and red tape cut
- A high infection rate is a good thing for vaccine production
- Pre-authorization production speeds delivery of vaccine

“The mRNA vaccines are so new. I don’t want to be a guinea pig.”

- These vaccines have undergone the same rigorous safety testing as all other vaccines before them
- And they are not new! Messenger RNA vaccines have been in development for the last decade – even in early phase human trials
  - Influenza, Rabies, Zika, CMV
  - They are also under study for use in treating cancer
- These are just the first mRNA vaccines that have gained authorization/approval
“How do we know the vaccines are safe?”

Pre-marketing safety monitoring
- Institutional Review Boards (IRB)
- Data and Safety Monitoring Boards (DSMB)
- FDA – Vaccines and Related Biological Products Advisory Committee (VRBPAC)
- CDC – Advisory Committee on Immunization Practices (ACIP)

Post-marketing safety monitoring

“How can we know they won’t cause health problems in the future?”

- We won’t entirely know for sure. But here’s why that doesn’t worry me.
  - No matter what type of vaccine we are talking about, killed or live-attenuated or mRNA, the immune system responds to it in much the same way
  - And we have decades of experience with other vaccines and don’t see any long term adverse consequences
  - Rare but potentially serious adverse events happen in 1st 6 weeks
  - We’ve had these vaccines now for over 9 months - no common safety signals noted

- What worries me more are the long term effects of COVID itself!
  - We know about long COVID
  - We know that other viruses can cause problems decades later – chicken pox, polio, measles
“I’ve heard the vaccines can alter our DNA.”

- Two things would have to happen for this to occur... And they don’t!
  - The mRNA would have to enter the nucleus
  - The vaccines would have to carry reverse transcriptase enzymes with them

“These vaccines were too politicized. I can’t trust them.”

- At times, it has definitely seemed like they were being used as pawns in a political game
- This has done such a disservice to the American people
- Here’s what gave me confidence:
  - Vaccines were NOT released by election day
  - Testing was paused for AstraZeneca when a single patient developed a serious neurologic condition – this wouldn’t have happened if being pushed through
  - Vaccine manufacturers put out a joint statement (when have they ever worked together on anything?) vowing to not let the development process be impacted by outside pressures
I’ve heard the vaccines can make you really sick.”

- There is no actual SARS-CoV-2 virus in either of the vaccine types and the adenovirus vector of the J&J vaccine is altered so that it is not infectious
- We need to give patients realistic expectations
- Help them reframe their thinking about vaccine side effects
  - While uncomfortable, reactogenicity is actually a sign that they are having a robust immune response. This is a good thing!

“What about the heart problems and blood clots that are happening?”

- First, we should recognize that these are rare events
- When they happen, they can certainly be serious (especially blood clots in the brain)
- These clotting/low platelet issues have NOT been seen with the mRNA vaccines – so we have a very good alternative to the J&J if people are concerned about this issue
- The myocarditis/pericarditis mRNA vaccine concerns are rare but real for teen and young adult males. But...
  - They are much less common AND less serious that COVID-related heart events.
  - All have recovered – there have been NO deaths
People aren’t used to seeing science play out in front of their eyes.
- We think of science as fixed and certain b/c we traditionally only see the end product after decades of research
- Science is much more of a verb than a noun – a fluid process that is sometimes messy
- Pre-print studies and the role of media in explaining research hasn’t helped
- We wouldn’t want to treat people with COVID the same way now as we did in the beginning of the pandemic – we know so much more now
- As we learn more about the virus and the vaccines, we should expect our approach to them to change accordingly

This refers to breakthrough infections
- No vaccine is 100% effective
- The goal of a vaccine is two-fold:
  - Prevent severe illness and death (of self)
  - Reduce transmission (to others)
“Can’t COVID vaccines affect fertility?”

- Claim: because a tiny stretch of genetic code is shared between the spike protein and a placental protein, somehow antibodies to the spike protein will attack the placenta
- Telephone number analogy
- Even if it did, it would happen after COVID infection as well!!!
- COVID infection is MUCH more likely to cause you harm or harm a pregnancy
- Researchers consider these types of questions when developing vaccines
  - DART studies
  - Pregnancy registries
- Research shows no effect on male fertility either

“I’m pregnant/breastfeeding so I can’t get the vaccine.”

- Women did get pregnant during the trials – Pfizer trial had 23 pregnancies. The only adverse outcomes were in the placebo group
- >150,000 pregnant women have elected COVID vaccination – no increased risk of adverse outcomes beyond expected background rates
- Studies show that vaccinated pregnant moms can pass protective antibodies to their infants
- Protective antibodies are also found in breast milk of vaccinated moms
- COVID itself is highly dangerous for pregnant moms and babies
“My beliefs/religion won’t let me take a vaccine that has aborted fetal cells in it.”

- With the mRNA vaccines, human cells used only in pre-clinical trials
- mRNA vaccines have no actual virus in them – cells are not needed
- The J&J vaccine does have to be grown in cells and human cells are used, but the virus is then extracted and purified – no human cells make it into the vaccine
- The Catholic Church supports COVID vaccination, though recommends the mRNA vaccines, if available, b/c of their more remote association with abortion
- The cells used for scientific research were taken from fetuses aborted decades ago – not for the purpose of vaccine production. The descendant cells never formed part of the fetus

If you had COVID earlier on the pandemic, you likely did not have the Delta variant

- Antibodies to the earlier variants do not necessarily protect against the Delta variant
- Delta is more highly transmissible, possibly more virulent
- Immunized people are less likely to get infected and less likely to transmit virus compared to unimmunized people
- We vaccinate for ourselves but also to protect others

“I already had COVID so I don’t need a vaccine.”
“This is my body and no one should be able to tell me what to put in my body.”

- True – to a point
- We absolutely have the right to do or not do things that affect our health alone
- But when our choices can negatively impact the health of others, that’s where freedom has its limits
  - You can smoke, but you can’t smoke indoors around others
  - You are free to drink yourself into a stupor, but get behind the wheel of a car and that freedom ends
- Others have the right to not live in fear of death from COVID

COVID-19 vaccine updates!!!

- 3rd doses for immune compromised people = FULL dose
- Boosters for the following groups:
  - Pfizer/Moderna:
    - 65+ years old
    - 18+ living in long-term care facilities
    - 18+ with high risk medical conditions
    - 18+ with high risk work/living conditions
    - Booster 6 months after primary series
  - Johnson & Johnson:
    - 18+
    - Booster 2 months after primary dose
- Mixing and Matching
- Pfizer vaccine for kids 5-11
# Mixing and matching vaccines

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https://www.medrxiv.org/content/10.1101/2021.10.10.21264827v1

Thank you!