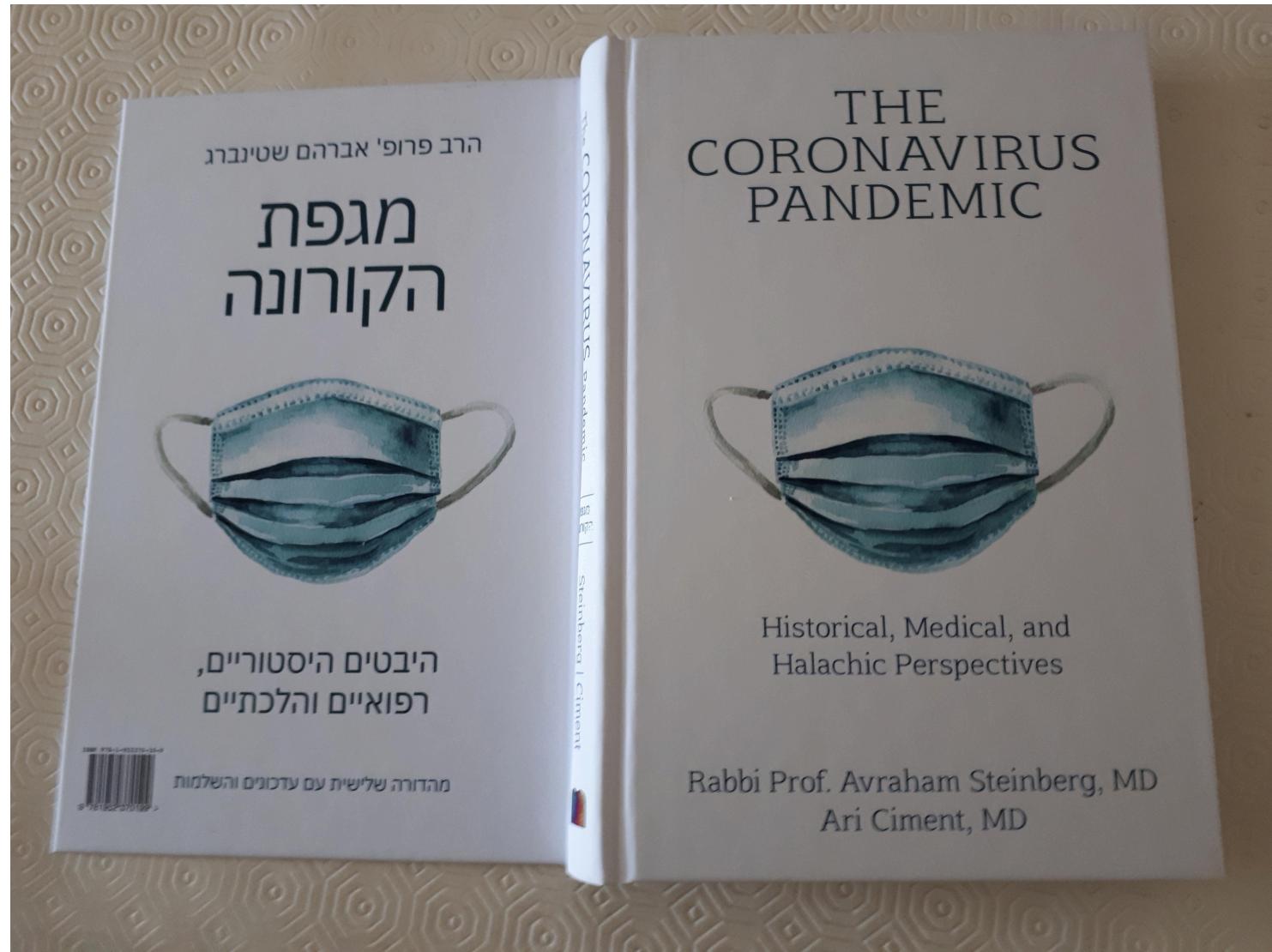




MGN

COVID-19 VACCINATION & HALAKHAH

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Slide 1: Faculty/Presenter Disclosure

Faculty/Presenter: Avraham Steinberg

List all relationships/affiliations with for-profit and/or non-profit organizations.

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- Grant/Research Support: organization name
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Slide 2: LEARNING OBJECTIVES

1. At the conclusion of this presentation, participants will be able to comprehend the importance of vaccines, including the vaccines against COVID-19
2. At the conclusion of this presentation, participants will be able to understand the halakhic justification in favor of vaccinations

VACCINES

IMPORTANCE

TRIAGE

VACCINES - IMPORTANCE

- A vaccine is a biological preparation that provides active immunity to a particular infectious disease.
- A vaccine typically contains a biological or synthetic preparation from disease-causing microorganism. This preparation is often made from weakened or killed forms of the microbe, its toxins, or one of its surface proteins.
- The agent stimulates the body's immune system to recognize the agent as a threat and starts producing antibodies against it and destroying it.
- Vaccination is **the most effective method of preventing infectious diseases**; widespread immunity due to vaccination is largely responsible for the worldwide eradication of **smallpox** and the restriction of diseases such as **polio, measles and tetanus** from much of the world.
- The effectiveness and safety of vaccines have been widely studied and verified.
- Currently there are licensed vaccines available for **about 25 different preventable infections**.
- **Vaccines are the greatest life-savers**: 2M annually are saved; hundreds of millions have been saved throughout the generations; Smallpox killed over 300M people – today – 0; Polio killed over a billion people – today – a few hundred annually.

VACCINES – ARGUMENTS

- BENEFITS

Millions of lives saved

Fetal diseases saved (German Measles)

Recent measles outbreak

- BENEFIT/HARM RATIO

Benefit – tremendous and proven

Harm – mild side-effects; rare serious adverse events

the story of autism

- APPROVED BY ALL IMPORTANT PROFESSIONAL REGULATORY BODIES AND BY MOST OUTSTANDING EXPERTS

THE STORY OF AUTISM AND MMR

- **In 1998, a study on 12 children by A. Wakefield was conducted and published in The Lancet, which suggested a link between MMR vaccination and autism spectrum disorder = ASD.**
- **The study underwent further inspection, found to be false (apparently bribed by parents of ADS children to claim compensation from vaccine producing companies) and has since been retracted.**
- **The provider's medical license was taken away due to falsified information.**
- **Since then, there have been over 25 studies, the most important one published in JAMA in April 2015, that disprove any connection between autism and MMR vaccine.**

VACCINES – HALAKHIC/HASHKAFIC

- **Obligation to treat and prevent diseases by proven scientific/medical measures – prevention more important than treating**
- **Not to rely on miracles**

A pious fool who refuses to allow a physician to help him but relies totally on G-d's help, is like a hungry man who refuses to eat bread and hopes that G-d will heal him from the illness of hunger; the sick person who is not following medical advice and dies of the disease is equated to someone who enters into a fire which surely will kill him, so he is responsible for his death

[Maimonides, Mishnah interpretation Pesachim 4:10]

- **One should take a small and remote risk in order to save himself from a certain and great risk [Tiferet Yisrael Yoma 8:7:3, Regarding smallpox vaccine]**

תפארת ישראל - בועז סוף מסכת יומא [פרק ח אות ג]

- ומזה נ"ל היתר לעשות אינאקולאטיאן של פאקקען, אף שא' מאלף מת ע"י האינאקולאטיאן עכ"פ שאם יתהוו בו הפאקקען הטבעיים הסכנה קרובה יותר, ולכן רשאי להכניס א"ע בסכנה רחוקה כדי להציל א"ע מסכנה קרובה. וראיה ברורה לדברי ממ"ש רב"י בטור ח"מ סוף סי' תכ"ו בשם הירושלמי דחייב אדם להכניס א"ע בספק סכנה כדי להציל חבירו מודאי סכנה, והרי ברואה חבירו טובע בנהר אינו מוחלט ודאי שיטבע אם לא יציל הוא, וכי לא אפשר שינצל ממקום אחר. ואם להציל חבירו יש חיוב להכניס א"ע בספק סכנה, מכ"ש שיהיה רשות בידו להציל את גוף עצמו ע"י הכנסו א"ע לספק סכנה. ואף לרי"ף ורמב"ם וטור שלא הביאו הך ירושלמי י"ל היינו מדס"ל כר' יוסי נדרים ד"פ ע"ב, דחייך קודם לחיי חבירו, אבל להצלת גוף עצמו, אף על גב שאינו חיוב רשאי.

Obligation to be vaccinated

Halakhic foundation:

- "ונשמרתם מאד לנפשותיכם"
- "לא תעמד על דם רעך"
- חמירא סכנתא מאיסורא
- פקוח נפש

- רודף
- חב לאחריני
- דינא דמלכותא דינא
- חילול השם, ובח"ל גם משום איבה

COVID-19 VACCINES

MAIN TYPES

Numerous technologies used to produce a vaccine against COVID-19.

- **Pfizer; Moderna - use a synthetic mRNA**
- **The mRNA is coded to produce a specific protein. In the COVID-19 case it produces a specific harmless piece of the “spike protein“, which is found on the surface of the Coronavirus.**
- **The mRNA used for this vaccine is cleared totally from the body within a few days.**
- **The mRNA works in cells but cannot enter the nucleus and has no influence on the DNA.**

Hence, it cannot affect the genetic system in any way.

- **When this vaccine is injected into a muscle, the instructions are transmitted into the Ribosomes in the cells that start to make the protein piece. Next, the cell displays the protein piece on its surface. The immune system recognizes that this protein is foreign to the body and begins making antibodies, just like what happens in a natural infection against COVID-19. At the end of the process, the body has learnt how to protect against future infection.**
- **As of June 11, 2021 – over 800,000,000 fully vaccinated worldwide; Over 5,000,000 fully vaccinated in Israel.**
- **The mRNA vaccine is very effective and safe.**
- **Side-effects are mild and transient.**

MAIN TYPES

- **AstraZeneca and Johnson & Johnson vaccines** – uses a chimpanzee adenovirus to carry spike proteins from the coronavirus into the body to create an immune response.
- **Scientists engineer a harmless adenovirus (a common virus that, when not inactivated, can cause colds, bronchitis, and other illnesses) as a shell to carry genetic code on the spike proteins to the cells (similar to a Trojan Horse). The shell and the code can't make you sick, but once the code is inside the cells, the cells produce a spike protein to train the body's immune system, which creates antibodies and memory cells to protect against an actual SARS-CoV-2 infection.**

COVID-19 VACCINES - PROBLEMS

QUICK EXPERIMENT AND APPROVAL

- Usually developing and approving new vaccines takes several years; here it took less than a year.

Response:

- No short-cuts were taken in the fundamental requirements of the experiment – it included 3 phases with thousands of volunteers and strict scientific critique. The quick approval was because of cutting red-tape and in tremendous monetary investment which helped recruit many volunteers in a short time. Also, because of a huge number of COVID-19 sick people it was easy to recruit volunteers.
- The FDA is the most reliable regulatory body in the world. Hence their final approval is reliable

COMPLICATIONS

- **Mild, transient – aches, fever, flu-like symptoms, allergic reactions**
- **Pfizer** – in youngsters 18-24 myocarditis 2-5 days after 2nd vaccine
- **USA** – after 3.6 million 2nd vaccine – 233 myocarditis cases (25 expected)
- **Israel** - 1:6000 males (females very rare); In 95% very mild

- **AstraZeneca/J&J** – Thrombosis with Thrombocytopenia Syndrome (TTS)
- **1:100,000 – 1:250,000** females (almost none in males)

COVID-19 VACCINES - PROBLEMS

UNKNOWN LATE COMPLICATIONS

- Since there is only a relatively short time of exposure
- Response:
- So far, all complications of vaccines occurred shortly after the injection
- Billions of people already vaccinated and several months already passed, with no complications except those cited
- The method of mRNA is scientifically not expected to create any late complications, since only the protein and the antibodies remain; the mRNA disappears within hours/days; no genetic involvement since it does not affect the nucleus DNA

COVID-19 VACCINES - PROBLEMS

- Two so far unknown issues:
- Does the vaccine only prevent disease but not infectability?
- For how long is a vaccinated person protected?

- It seems clear that within a short period of time we will find out the answers

COVID-19 VACCINES - JUSTIFICATIONS

- **The mortality and morbidity rate of COVID-19 is terrifying**
- **The economic, emotional, educational and social damage of the pandemic is tremendous**
- **All measures to stop the pandemic have failed**
- **The only way to stop the pandemic is vaccination**
- **The approved vaccines have been tested according to all standard experimental requirements, and have been approved by the most authoritative regulatory bodies throughout the world**
- **So far millions have been vaccinated with outstanding positive benefits and safety**

COVID-19 VACCINES – HALAKHIC PERSPECTIVE

- Based on the justifications - there is a **halakhic obligation** to be vaccinated with approved vaccines, both for the sake of the person to keep healthy, and for the sake of others to prevent their infection.
- This is certainly true for Pfizer/Moderna vaccines because of no serious side-effects; AstraZeneca/J&J – when serious epidemic exists and no chance to get Pfizer – benefits much outweigh the rare TTS complication; when epidemic is controlled – personal preference.
- All **conspiracy claims and fake news** are unfounded and halakhically irrelevant.
- The approach to **those who refuse to be vaccinated** can be at a criminal level – enforce them and/or punish them; or at the torts level – enact sanctions and/or deny benefits and employment.

COVID-19 – HALAKHIC PERSPECTIVES

- **Criminal level:** Halakhically – it seems that a government is allowed to enforce vaccination not only for the sake of the person's own health, but especially to avoid harm to other innocent persons. However, it seems that democratic countries will not adopt such policies.
- **Tort level:** Halakhically – the government is obligated to avoid harm to others by **denying access to public places** (i.e., hotels, restaurants, businesses theaters, etc., and even shuls and schools); to **deny employment with the public** (i.e., school, police, business, etc.).
- If people are infected by those who refuse to be vaccinated, they have a right to **claim compensation** for damage.
- However, if those who refuse to be vaccinated became ill with Corona – they **should be treated appropriately.**

VACCINATING 12-15 YO
IN ISRAEL
MAY 2021

EXPERIMENTAL SITUATIONS - ETHICAL PRINCIPLES

Balance between:

Protection of the individual

Promoting the good of the individual

Advancement of science

Advancement the good of society

GOOD ETHICS STARTS WITH GOOD FACTS

CON / PRO IN ISRAEL

CON

Low rate of infected people*

Usually asymptomatic / mild illness

Myocarditis

Unknown late complications *

*not any more

*Almost all vaccine-related complications occur in close proximity to the vaccination

*Theoretically, mRNA type of vaccines should have no late complications

*There seems to be no fundamental biological difference between 16-19 and 12-15; 16-19 yo have been vaccinated.

PRO

Approved by FDA

Used in several countries

mortality in children, although low

Known late complications of the disease

Infecting high-risk people

Expected increase in COVID-19 due to new variants through incoming people; decrease in protective serology

New outburst might not be controlled

Quarantine of pupils / classes – emotional/social/educational problems

Trips abroad

Most vaccines are given to children and at a time of no pandemic

CONCLUSIONS

- **Medical benefit / risk ratio** – clearly in favor of vaccinating 12-15 yo in Israel - strong
- **Social benefit / risk ratio** – fear of unknown late complications during a low rate of infection - weak

Ethics:

- Strongly recommend to vaccinate all 12-15 yo.
- Strongly recommend high risk children or high-risk relatives, and travelers abroad
- Transparency and full disclosure of the known and unknown

COVID-19 – VACCINES - TRIAGE

The assumption is that there will be enough vaccines for everyone, but the question is who gets earlier and who gets later.

The priority in timing is for the people in greater risk of morbidity and mortality.

Hence –

1. **Health-care providers** – are more susceptible to becoming infected, and they are needed to save others.
2. **Older than 60 years of age**, and patients with **significant underlying diseases** – statistically most severely ill people belong to these groups.
3. People who are **in contact with others**, i.e., teachers, policemen, essential businesses.
4. All the rest

COVID-19 – VACCINES - TRIAGE

- **The medical priority should be kept; people with lower priority should not skip their turn.**
- **If there is a choice one should be vaccinated with the most effective vaccine; if there is no choice one should be vaccinated with any approved and safe vaccine even if less effective.**
- **A person who recovered from Corona should still be vaccinated after a few months at least with one buster injection.**
- **Pregnant women should be fully vaccinated.**
- **A person with risk factors who can be vaccinated on Shabbat otherwise he'll have to wait a long time – should be vaccinated on Shabbat – driving to the spot by a non-Jew and being vaccinated – if possible – by a non-Jew.**

