



Department of Political Science

Course of Behavioural Economics and Psychology

Nudging strategies on vaccines: How governments
can increase the effectiveness of vaccination
programs

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1) Introduction

1.1 Introduction

In 2019, health authorities in the city of Wuhan in China found the first cases of an unknown pneumonia. The disease, caused by the SARS-CoV-2 virus, belonging to the coronavirus family, has been called Covid-19.

In a very short time the disease spread to Asia but also to the western world such as Italy, France, Germany, Belgium, Switzerland, Great Britain, Sweden, Spain, Portugal, USA, Brazil, Mexico, Turkey, Albania, etc.

In Europe, a truly worrying situation arose on 11 March 2020: Tedros Adhanom Ghebreyesus, director general of the World Health Organization (WHO), announced the state of a global pandemic.

Fortunately, since the beginning of 2020, there has been an acceleration in the study of the vaccine against the thanks to a collaboration between governments.

Vaccination is a public health intervention that aims to¹:

- protect the community from infection;
- reduce the incidence of numerous diseases.

There are two ways to acquire immunization:

- active: obtained by administering a vaccine. Instead, it allows a very long immunization;
- passive: obtained by administering antibodies consisting of heterologous animal sera or human antibodies that come from hyperimmunized subjects.

In fact, by achieving herd immunity, i.e. by immunizing the majority of the population, the chain of infection should be interrupted.

Herd immunity²:

- it can be permanent, partial or temporary;

¹ Ministero della salute, www.salute.gov.it.

² Ministero della salute, www.salute.gov.it.

- it cannot be extended to all vaccinations: in fact it requires a biological demonstration;
- has the advantage of reduced transmissibility;
- has the advantage of reducing the infection;
- determines the reduction of the contagion of the single individual protecting also the unvaccinated individuals and those who, following vaccination, have not developed immunity.

If a vaccine is able to provide individual protection from an infection but does not prevent its spread, a person's refusal to undergo the vaccine falls as a risk not on the population but only on the same.

In June 2020, due to the rapid growth of Covid-19 worldwide, several governments, public and private companies and even private investors invested billions of dollars in researching vaccines and preparing global vaccination programs in order to isolate the 'Covid-19 infection.

Around the same time, China approved the CanSino vaccine for limited military use only³.

Russia announced the approval of its Sputnik V vaccine.

On December 2, 2020, the UK was the first Western country to approve the Pfizer-BioNTech vaccine⁴⁵.

The following week also the USA through the Food and Drug Administration granted an authorization to use the Pfizer-BioNTech vaccine and then also Moderna⁶.

In order to prevent deaths from Covid-19, nations have embarked on a vaccination campaign that in Italy and Europe started on December 27, 2020 with vaccine day and effectively on December 31, 2020, after approval by the 'EMA (European Medicines Agency) of the first Covid-19 vaccine.

³ Coronavirus: WHO backed China's emergency use of experimental vaccines, health official says, South China Morning Post, 26 settembre 2020.

⁴ Conditions of Authorisation for Pfizer/BioNTech Covid-19 vaccine, GOV.UK.

⁵ Benjamin Mueller, U.K. Approves Pfizer Coronavirus Vaccine, a First in the West, in The New York Times, 2 dicembre 2020.

⁶ Katie Thomas, Sharon LaFraniere e Noah Weiland, F.D.A. Clears Pfizer Vaccine, and Millions of Doses Will Be Shipped Right Away, in The New York Times, 12 dicembre 2020.

Vaccines are offered free of charge to the entire population, according to an order of priority, which takes into account the risk of disease, the types of vaccines and their availability.

For example: Health and social health workers, Residents and staff of residential care centers for the elderly, People of advanced age.

In March 2021, 12 were authorized⁷:

- two to RNA (Pfizer-BioNTech and Moderna);
- four conventional inactivates (Sinopharm's BBIBP-CorV, Bharat Biotech's BBV152, Sinovac's CoronaVac and CoviVac);
- four viral vectors (Sputnik V, Oxford-AstraZeneca, Ad5-nCoV from CanSino and Johnson & Johnson);
- two protein subunits (EpiVacCorona and ZF2001).

The birth of Covid-19 has had a really strong impact both on everyone's daily life and on consumer behavior.

The various countries have organized real vaccination programs capable of guaranteeing vaccinations to the populations in the shortest possible time.

Vaccination against Covid-19 is a right recognized to all. The risk of contracting the virus in a severe form is not the same for everyone, therefore, to ensure maximum equity, a strategic plan must be followed that is able to take into account all needs and conditions. On the day of administration, the health care worker assesses the patient's clinical condition and on the basis of this decides which vaccine to administer.

Among the strategies used to ensure the effectiveness of vaccination programs, health communication interventions were thought of, useful for increasing the vaccination coverage of the population.

The planning of a correct and effective communication strategy on Covid-19 is today of extreme importance both for the health of a country and for the population itself.

The lack of adequate knowledge on vaccines by the population determines the failure to achieve high levels of vaccination coverage.

In recent decades there has been a significant increase in those who do not undergo vaccination.

⁷ Covid-19 vaccine tracker, <https://vac-lshtm.shinyapps>.

For this reason, various strategic actions have been launched, including the enhancement of communication between the population and health professionals.

In recent years, the increase in the population refusing to undergo the vaccine has contributed to the emergence of numerous infectious outbreaks.

In the USA, compulsory vaccination against smallpox was introduced at the beginning of the last century. Those who refused were fined, sanctioned, excluded from schools.

In 1920, health workers through the media began to advertise the importance of vaccination and, in the middle of the century, following the development of the polio vaccine, they began to study the social contexts related to the different vaccination guidelines.

Today, the refusal of vaccinations represents *“a heterogeneous phenomenon in which a series of attitudes and beliefs converge, including mistrust of doctors and the scientific community and opposition to institutions”*⁸.

According to some, the use of coercive measures contrasts and violates the individual sphere of people's freedom and also compresses the choice of parents with regard to their children.

According to others, however, it is necessary to give value to the laws that make vaccinations mandatory and exemptions more difficult.

In this regard, it is recalled that California in 2015 eliminated the legitimacy of non-scientific reasons for refusing vaccination.

Persuasion and coercion *“are to be considered as necessary and coessential (...). The fusion of the two approaches is therefore the greatest challenge facing public decision makers on vaccinations, to balance and bring together effectiveness, efficiency, ethics and political acceptability must all be balanced in a single strategy”*⁹.

For the World Health Organization, vaccination against Covid-19 should only be mandatory in the case of specific professional circumstances.

Italy has introduced the vaccination obligation only for health workers and for the rest of the population, and has recommended it.

⁸ AIFA, Come affrontare il rifiuto delle vaccinazioni. Scegliere tra coercizione e persuasione?, www.aifa.gov.it, 26 ottobre 2016.

⁹ AIFA, Come affrontare il rifiuto delle vaccinazioni. Scegliere tra coercizione e persuasione?, www.aifa.gov.it, 26 ottobre 2016.

To make the population understand the right information on vaccines, health professionals must, through social media, internet, mass media, disseminate what are the benefits but also the risks on vaccines in order to help the population understand which information is true or false.

First of all, healthcare professionals must be updated in the best possible way in order to use a common language in dialogue with the population in order to increase vaccination coverage in each country.

In order to do this, it is necessary to create real projects capable of involving different operating units and guaranteeing the set objectives.

Countries must, through the development of strategies, intensify the network between health workers and the population by exploiting all means of communication.

It is true that various elements could delay the achievement of the set objectives due to the mismanagement of the information packages that will be developed.

The objectives of these programs, as mentioned, useful for increasing vaccination coverage can be divided as follows¹⁰:

- Understand what are the criticalities on vaccinations through surveys with questionnaires;
- Opening of branches to the public able to provide the population with information on vaccines;
- Refresher courses for healthcare professionals in order to prepare them in the best possible way for the questions that the public might ask themselves. Every health worker in the vaccination area must know all aspects of the vaccine. Institutions should increase the availability of updated technical documents and training on the subject of vaccinations. Regions are required to develop local training courses capable of improving the skills of those actively involved in the vaccination campaign;
- Organize meetings, conferences open to the public with health professionals to give the population all the information they need. Given the Covid-19 emergency, it is possible to create real virtual rooms in order to guarantee communication. You could also create websites, forums, blogs;

¹⁰ A communicator's guide to Covid-19 vaccination. Research, Theories, Models, and Recommendations Communicators Should Know”, Institute for Public relations, 2020, www.dors.it.

- Organize in schools with the help of teachers, meetings with pupils and operators to show them what are the risks and benefits of those who undergo the vaccine.
- Healthcare professionals could organize public meetings directly with those who refuse to undergo the vaccine in order to understand if they have been influenced by fake news, by uninformed people, by the wrong media.

To improve and therefore maintain trust in vaccinations and increase adherence to vaccination campaigns, it is necessary to:

- take care of communication so that it is effective, fair and consistent;
- promote the active participation of health professionals and citizens by guaranteeing transparency in the evaluation of the data collected;
- involve stakeholders (health and non-health) to foster a cultural climate in favor of vaccinations;
- create an efficient information system; ensure organizational stability of vaccination services;
- strengthen the communication system with health care; maintain consistency in local, regional and national vaccination governance actions;
- support vaccination services through the constant production of national technical documentation.

To achieve the objectives indicated in the plan, each public body must adopt the same operating standards for the services offered and guarantee their maintenance and improvement.

In addition, the public body must develop real checklists capable of helping the development of a plan shared by all services.

The plan must contain specific operating procedures for the management of vaccinations that are uniform throughout the national territory.

To implement the actions described, it is essential to have an integrated and efficient information system, so it is urgent and necessary to complete the creation of the National Vaccine Register and to integrate it with the Electronic Health Record.

Vaccination campaigns have both the function of prevention and that of intervening in support of patients who have serious pathologies or particular physiological situations.

It is therefore appropriate to involve health professionals and the many figures who work in the socio-health field who, if trained, possess the necessary skills to carry out vaccinations in compliance with suitable operating procedures.

Among these are, for example: midwives, nurses.

Involvement can be given not only by training courses, but also through organizational methods capable of giving substance to the promotion and execution of vaccination of patients at risk.

1.2 Essential characteristics of any efficient vaccination system

Among the essential characteristics of an efficient vaccination system, the main one is certainly communication.

To increase the effectiveness of vaccination programs, the UK government has hired several doctors, employing them in the vaccination media field. In fact, being these professionals in the sector they could have strength in convincing their patients to get vaccinated.

The aim is certainly to give correct information on vaccination through communication with industry experts: above all digital communication in such a way as to seem real influencers.

Communication could work even if given not only by health professionals but also by those who have already undergone vaccination in such a way as to ensure transparent, honest and fair communication.

Anyone who is uncertain or who refuses vaccination (vaccine hesitancy) needs communication with the individual health worker who, with his / her knowledge and skills, is able to integrate the scientific world with the relational one.

In fact, an important resource in carrying out professional activities in this context is given by the basic skills that can be acquired by all professionals involved in the vaccination field with the aim of building relationships based on trust and credibility.

With these skills the professional can lead the person to the center of the speech, listening to him and trying to grasp his thoughts.

The professional can also provide the patient with a clear picture of the disease, address doubts, help combat anxiety, invite them not to listen to false information.

A communication is effective if:

- it is possible to reach the emotional dimension;
- it is useful to raise the awareness that it is possible to be recognized as active subjects to listen to and to involve in the decision-making process.

The main factors for those who do not intend to undergo the vaccination are:

- dissemination of fake news;
- disinformation;

- lack of dialogue with one's doctor;
- insecurity;
- lack of trust.

To support global organizations in communicating the Covid-19 vaccine, The Institute for Public Relations has published the guide “*A communicator's guide to Covid-19 vaccination. Research, Theories, Models, and Recommendations Communicators Should Know*” which recognizes the following key points¹¹:

- Vaccine hesitancy is not due to a lack of information;
- Transparency is key.
- Tailoring communication with each audience is critical.
- Use theories and models to guide communication planning as well as strategies and tactics.
- Marginalized groups have lower vaccine confidence.
- Trust doctors and nurses.
- Opinion leaders for target audiences should be defined.
- The anti-vaccination movement should not be ignored.
- Tell stories, not statistics.
- Agencies must be aligned.
- Misinformation should not be repeated.
- Inoculate people against misinformation.
- Understand biases.
- Help encourage health literacy.
- Language matters.
- Listen.
- Technology can help increase uptake.

In particular, to provide a correct communication on the Covid-19 vaccine, the following questions must be asked¹²:

- What is the reason for giving up the vaccine?

¹¹ A communicator's guide to Covid-19 vaccination. Research, Theories, Models, and Recommendations Communicators Should Know”, Institute for Public relations, 2020, www.dors.it.

¹² A communicator's guide to Covid-19 vaccination. Research, Theories, Models, and Recommendations Communicators Should Know”, Institute for Public relations, 2020, www.dors.it.

Most of those who refuse to undergo the vaccine are struck by fear of the consequences that the vaccine may cause.

- How should the communication be?

Definitely clear and transparent. First of all, people must be reassured and encouraged through communication that can give them security and trust.

To do this, it is necessary to be organized involving also public and private organizations and institutions so that the messages are clear and truthful.

- ... And the information?

Beware of false information by taking into account only reliable sources. It is right to disseminate information in multiple languages to allow it to be disseminated to all nations, including through technology that can help increase the spread of the vaccine. Or via social media or text messages.

Unfortunately, misinformation could also be the cause that induces people not to get vaccinated. Always know the source before divulging news. It is therefore necessary to vaccinate people against disinformation.

- How to involve everyone?

Healthcare professionals but also those who have already undergone the vaccine should transmit truthful messages to those who refuse to be vaccinated for various reasons, including religious ones, by involving them in campaigns in favor of vaccination.

We must give a voice to professionals who are experts in the field of vaccination and avoid the influence of writers, philosophers and journalists, also because there is a risk of spreading false messages.

Many of the people who refuse vaccination are indecisive, insecure and doubtful, for this reason health professionals should not ignore these people but should try to listen to them, understand them by solving any kind of doubts about vaccines to increase the spread.

Even those affected by Covid-19 must testify what they felt. In fact, these subjects also need to get busy telling their story, what it feels like to be intubated in the crowded halls of hospitals far from loved ones.

“Man can deliberately, consciously wish for something harmful, stupid, even very stupid, and that is to have the right to wish for what is very stupid and not be bound by the obligation to desire only what is intelligent”¹³.

The intention is therefore to stimulate a debate that will have a central role for the near future of our country through the observance of some points that can be summarized in 10¹⁴:

- Listen to the network.
- Speak, explain, tell, write.
- Shorten distances.
- Respond to fears.
- Recognize that algorithms do the first mediation.
- Fill in the gaps.
- Thinking about micro-communities.
- Create a toolbox for those who want to be testimonials.
- Communication must lead to conversion.
- Many audiences, many formats, one message.

It is therefore necessary to share secure information and involve the institutions: communicative action is an ethical and political responsibility with persuasive effects capable of concretely affecting individual and collective responsibility¹⁵.

According to the virologist of the Vita-Salute San Raffaele University of Milan, Roberto Burioni, *“something very serious is happening in Italy: on a topic where correct information is fundamental not only for the safety of the individual, but also for the public good , disinformation, incomplete and incorrect news, political exploitation are the masters (...) this is very dangerous for the health of each of us and - more widely - for our country. There is wicked communication by institutions and companies, citizens' trust at risk”¹⁶.*

¹³ F. Marino, N. Zamperini, Manifesto per la comunicazione del vaccino contro Covid-19, www.scienzainrete.it.

¹⁴ F. Marino, N. Zamperini, Manifesto per la comunicazione del vaccino contro Covid-19, cit.

¹⁵ M. N. Gribaudo, Vaccinazione Covid: tra corretta comunicazione e obbligo vaccinale, www.quotidianosanita.it.

¹⁶ Vaccini, Burioni: comunicazione scellerata di istituzioni e aziende, a rischio la fiducia dei cittadini, 11 giugno 2020, www.medicalfacts.it.

Burioni continues: *“First, it is essential that young people are vaccinated (...). Second, not all vaccines are created equal. For some we have exhaustive data, for others we have less, for some (Chinese vaccines, for example) we practically have none (...) Third, getting a vaccine injected is an act of trust (...). If people do not get enough vaccinations we will have only two alternatives: stay in this nightmare or force people to get vaccinated”*¹⁷.

¹⁷ Vaccini, Burioni: comunicazione scellerata di istituzioni e aziende, a rischio la fiducia dei cittadini, 11 giugno 2020, www.medicalfacts.it.

1.3 Operational issues in Italy

In Italy, to cope with the economic crisis and avoid its collapse during the period of the pandemic, decree-laws have been issued to support families, businesses and local authorities.

In particular, the government has prepared a financial plan worth over 750 billion.

Due to the Covid-19 health emergency, several companies have suffered losses, others have been forced to close, others have gone bankrupt.

In particular, SMEs have tried to cope with the economic repercussions through certain liquidity and capitalization situations.

Unlike in the past, to tackle the crisis, businesses, families and institutions rely on banking institutions and expand commercial channels and take advantage of government incentives.

Financial intermediaries:

- on the one hand, they are aligning with the support requests of companies, through the offer of financial and operational products;
- on the other hand, they act as an accelerator in the evolution process in which Italian companies are trying to converge.

In addition to the financial plan to help families and businesses, a concrete vaccination plan has been organized in Italy.

In particular, the vaccines currently authorized in Italy are¹⁸:

- Comirnaty of Pfizer-BioNtech.
This is the first vaccine authorized in the European Union: on 21 December 2020 by the European Medicines Agency (EMA) and on 22 December by the Italian Medicines Agency (AIFA);
- Spikevax (Modern).
It was authorized on 6 January by the EMA and on 7 January by AIFA;
- Vaxzevria from AstraZeneca.
It was authorized on January 29 by the EMA and on January 30 by AIFA.

¹⁸ Ministero della salute, www.salute.gov.it.

The Ministry of Health has sent the opinion that the Vaxzevria vaccine is only given to people aged 60 years or older (full course).

For people under the age of 60, who have already received a first dose of the Vaxzevria vaccine, it is recommended to complete the vaccination course with one dose of the vaccine (Comirnaty or Moderna), to be administered 8-12 weeks after the first. dose;

- Janssen (Johnson & Johnson).

It was authorized by the EMA on 11 March and by AIFA on 12 March 2021.

The Ministry of Health recommends the preferential use of the Janssen vaccine for people over the age of 60. The vaccine remains authorized for people over the age of 18.

The EMA and AIFA reiterate that the risk-benefit ratio is extremely favorable to this vaccine.

As for the Comirnaty vaccines from Pfizer-BioNtech, Spikevax (Moderna), Vaxzevria, from AstraZeneca, two doses are planned, a few weeks apart.

A single dose is intended for the Janssen (Johnson & Johnson) vaccine.

In Italy, the national strategic plan for vaccines consists of two documents¹⁹:

- the document Elements of preparation of the vaccination strategy, presented by the Minister of Health to Parliament on 2 December 2020 (Decree 2 January 2021);
- the interim Recommendations on the target groups of the anti SARS-CoV-2/Covid-19 vaccination of 10 March 2021, with which the categories of the population to be vaccinated and the priorities were updated.

The Plan, drawn up by the Ministry of Health, Extraordinary Commissioner for Emergency, Istituto Superiore di Sanità, Agenas and Aifa, was adopted by Decree of 12 March 2021.

On March 13, 2021, the Vaccination Plan of the Extraordinary Commissioner for the execution of the national vaccination campaign was released.

This plan was drawn up in harmony with the National Strategic Plan of the Ministry of Health, which establishes the operational guidelines for completing the vaccination campaign as soon as possible.

¹⁹ Ministero della salute, in www.salute.gov.it.

In Italy, the vaccination campaign initially did not work much, but today there are more than 75,000,000 doses administered:

- 70% of people vaccinated with the first dose between the over 12;
- 65% fully vaccinated²⁰.

In particular, 36,354,666 people completed the vaccination cycle, equal to 65.04% of the population over 12 years old.

In recent days, the slowdown has continued, with 370,000 doses administered on 10 August, 400,000 on 9, only 255,000 on 8 August (Sunday) and in the last few days it has never even reached 570,000 doses.

The recalls still prevail, but the difference compared to the first doses is much lower if compared with a few weeks ago, so much so that now the first and second doses are almost in equilibrium.

To date there are few doses in Italy, it is just over 3,500,000 in total: of which just over 2,000,000 are doses of Pfizer, less than 100,000 of AstraZeneca, 800,000 of Moderna, while the vaccine of which we are more doses is Johnson & Johnson: 600,000 stocks compared to a total of 2,000,000 doses delivered.

In August, 5,240,000 doses arrived:

- 56,000 of AstraZeneca;
- 1,190,000 of Moderna;
- 4,160,000 of Pfizer.

While, in July 12,390,000 had arrived, of which over 8,500,000 from Pfizer.

In Italy, the vaccination plan organized by the government provides for the Green Pass or Covid-19 green certification, i.e. a certification in digital and printable format, issued by the national platform of the Ministry of Health, which contains a QR Code to verify its authenticity and validity.

In fact, the Green Pass was introduced by Israel to allow people who have completed the Covid-19 vaccination to access offices, gyms, businesses, etc.

This decision was made by the government of Israel to allow access to public places.

In Israel, last May the validity of the Green Pass was extended until December 2021²¹.

²⁰ Report Vaccini Anti Covid-19, in www.governo.it, 23 agosto 2021.

²¹ Coronavirus: Green pass extended to 2021, no need for third shot, JPost.com.

The Israeli Green Pass is not the same as the European one: in fact, while the first is used to access offices and commercial activities and offices, the second can also certify that the person who is in possession of it has received a tampon or has recovered from Covid-19.

In Italy, the green Covid-19 certification is required to participate in parties for civil and religious ceremonies, access nursing homes or other facilities, move in and out of territories classified in the "red zone" or "orange zone".

It is also necessary to access any type of indoor dining service at the table, shows, sporting events and competitions, museums, institutes and places of culture, swimming pools, gyms, wellness centers, fairs, festivals, conventions and congresses, spas, theme and amusement parks, cultural and recreational centers, gambling halls and casinos, public competitions.

In particular, the Covid-19 green certification was created to facilitate the free and safe circulation of citizens in the European Union.

Proof that you have been vaccinated or tested negative or recovered from Covid-19.

The European Commission has created a common technical platform to ensure that certificates issued by a state can be verified in the 27 countries of the European Union: it opens a new window plus Switzerland, Iceland, Norway and Lichtenstein.

In Italy, the Certification is issued exclusively through the National Platform of the Ministry of Health in both digital and printable format.

To get the Green Pass you need to:

- molecular test: allows to detect the presence of genetic material of the virus;
- rapid antigen test included in the common European list.

It must be carried out by health professionals or trained personnel who certify the type, the date on which it was carried out and the result and transmit the data through the Health Card System to the national platform-DGC for the issue of the certification.

The certification is automatically generated after²²:

- have taken the first dose or the single-dose vaccine for 15 days;
- have completed the vaccination course;

²² Ministero della salute, www.salute.gov.it.

- have tested negative for a molecular or rapid swab within the previous 48 hours;
- be healed of Covid-19 in the previous six months.

In August 2021, the US announced that most citizens should be given a third dose of the vaccine eight months after completing the initial course of two vaccinations.

Pfizer has already presented the data for the authorization to inoculate the third dose of the anti-Covid vaccine to citizens over the age of 16.

The administration of the third dose of the vaccine could begin in the US in mid-September, provided that the Food and Drug Administration grants authorization.

For the third dose of the vaccine priority will be given to the elderly, the sick and people with weak immune systems.

US health authorities have stated that the available data clearly shows that protection against coronavirus infection decreases with time and, coinciding with the Delta variant, we begin to see reduced protection against mild and moderate disease.

The Transportation Security Administration has extended the obligation to wear masks for travelers on board commercial flights, trains and buses until January 18, 2022.

The goal is to minimize the spread of Covid-19 on public transport²³.

There are many people around the world who undergo vaccinations even though in reality there are still a large number of those who give up vaccination.

For example, in the US about 40% of the population prefers not to get the vaccine, the same happens in several European countries and not as in Italy:

- Germany;
- Spain;
- France;
- South Africa;
- Japan;
- Russia.

Other countries, such as Israel, have had a lot of support for vaccinations while others, such as Australia but also a large part of Europe have had a lot of difficulty in convincing people to get vaccinated.

²³ Coronavirus nel mondo, gli Usa superano mille vittime al giorno e danno il via libera alla terza dose di vaccino dal 20 settembre, www.repubblica.it, 18 agosto 2021.

As mentioned, the governments of the various countries are trying to give priority to vulnerable people or health workers.

In fact, in most countries priority has been given to the elderly and the seriously ill.

2) Nudging Techniques

2.1 Successful countries: Israel and UK

EU member states, to ensure vaccination doses, have adopted a common approach through real preliminary agreements with various vaccine manufacturers.

In fact, the European Commission, with the vaccine strategy, has achieved several objectives, such as guaranteeing:

- efficacy, safety and quality of vaccines;
- quick access to vaccines for EU citizens;
- the vaccine to EU citizens by organizing access on the basis of priority.

The vaccination campaigns against Covid-19 are now active all over the world, but the success of those conducted in Israel and the UK must be acknowledged.

In fact, between July and August 2021, Israel and the UK confirmed themselves as the countries that vaccinated the most against Covid-19.

Both countries were able to quickly and efficiently organize and manage a mass vaccination campaign.

In fact, in Israel on 20 December 2020 until 1 February 2021, a mass vaccination with the BionTech-Pfizer vaccine was organized, obtaining truly extraordinary results.

The results obtained are similar for all age groups analyzed and only slightly lower in patients with multiple pathologies and risk factors, thus confirming a high level of efficacy in all age groups, including the elderly.

Israel is the state that has so far, in proportion to the population, administered the most vaccines, pledging to provide Pfizer with data on the effects of the vaccine²⁴.

This immunization capacity of the population derives from:

- the large quantities of vaccine doses available;
- thanks to the agreement with Pfizer which, given the possibility of testing the vaccine in Israel, guaranteed a significant supply.

²⁴ Audureau W., Maad A, Le Monde, La lezione della vaccinazione di massa in Israele, www.internazionale.it, 3 febbraio 2021.

The strategies used for the anti-Covid-19 vaccination by Israel concern:

- the choice to vaccinate health workers and the most vulnerable people first, obviously respecting a hierarchical order;
- the creation of a green passport that allows those who have been vaccinated to travel freely or to enter certain places;
- digitally advanced public health coverage with effective infrastructures to ensure rapid vaccinations.

As Israel was the first country to start with the vaccination campaign, as a result, today it is the country in which the most time has passed since the first doses of administration.

It is recalled that Israel:

- in the administration of the vaccines he used only Pfizer and the data published by the Israeli government at the end of July showed that the overall effectiveness of this vaccine in preventing infection was 39%;
- has already started administering a third dose to the population most at risk.

As mentioned, Israel has witnessed a rapid vaccination campaign:

- from 18 August 2021 the Green pass obligation applies to vaccinated, cured or with a negative test and also to children over the age of 3 to 12 years.

Among the few exceptions to the Green Pass obligation, there are places of worship, where up to 50 people present can be freely accessed;

As anticipated in the previous chapter, the Israeli Green Pass is not the same as the European one: in fact, while the first is used to access offices and commercial activities and offices, the second can also certify that the person in possession of it has received a tampon or is cured of Covid-19.

- the "Violet Code" is reintroduced in shopping centers and commercial areas, which authorizes the maximum presence of one person per seven square meters;
- the government approved an extraordinary allocation for hospitals to immediately strengthen their structures;
- from July 30, 2021, the third dose of Pfizer vaccine will be administered to over 60s who were vaccinated with two doses over five months ago.

The UK is also among the countries that have stood out most in terms of vaccination coverage. In fact, the UK was the country that vaccinated most of the population the

fastest, using vaccines from AstraZeneca and Pfizer, while Moderna's played a secondary role.

A group from the University of Oxford has published research showing how there has been a decline in the effectiveness of vaccines against Covid-19 over time²⁵.

According to the researchers, AstraZeneca's vaccine is likely to be more effective than Pfizer's after four months.

Please note that the United Kingdom has chosen not to respect the timing between the two doses indicated by Pfizer and to extend the interval to wait before the recall up to 12 weeks.

The research analyzed how the effectiveness of the two vaccines changes when boosters were given before or after this nine-week interval, but found no significant differences.

Therefore, the timing of the booster does not seem to change the effectiveness of the vaccine.

It should be remembered that in the UK, the double dose of vaccine is used to request the Covid Pass, but the UK, no longer part of the European Union, has been forced to create its own system which today is not accepted by several Member States.

UK Covid Pass²⁶ allows, through the NHS app or a printed document, to prove that you have received the double dose of vaccine or have tested negative in a swab test.

To date, it is a valid and recognized system only within the British borders.

It is especially useful in mass events where you need to prove your vaccination status or your health against Covid.

The Covid Pass:

- it is obtained from the NHS app by putting your data;
- it is generated in PDF format or is sent by e-mail;
- lasts 28 days but as soon as it expires, the code linked to your Covid Pass is automatically regenerated.

Can obtain it who:

- is enrolled in the British National Health System;
- is over 16 years old;

²⁵ Ruffino L., Da Israele al Regno Unito, arrivano i primi dati sul calo dell'efficacia dei vaccini, [pagellapolitica.it](https://www.pagellapolitica.it), 23 agosto 2021.

²⁶ Allocca A., NHS Covid Pass: come ottenerlo e quando usarlo, www.londraitalia.com, 2 luglio 2021.

- obtained both doses of the vaccine administered in the UK.

According to a study²⁷ conducted by Imperial College London, there is a connection between hesitation about the Covid-19 vaccine and a lack of free will over vaccination passports.

In particular, a survey of citizens from Israel and the UK was carried out and it was concluded that most of those who refuse to undergo the vaccine are those who feel that their sense of free will is stifled by the vaccination passports.

In both Israel and the UK, those who are not vaccinated aim for herd immunity.

In particular, reference is made to:

- 62.3% in Israel;
- 57.3% in the UK.

According to several health professionals, there is a risk that if those who do not intend to undergo the vaccination are a high enough number, they could hinder herd immunity.

According to others:

“If public health incentives like vaccine passports ‘frustrate’ psychological needs – for example by making people feel a lack of free will over their decisions – then they might paradoxically reduce people’s willingness to get vaccinated (...).

For some, vaccine passports act as incentives to get vaccinated so they can move freely in society.

Our results suggest that for others, the passports might increase resistance to vaccination or alter the motivation behind their vaccine decisions in ways that might have detrimental long-term consequences”²⁸.

2.2 Problems and solutions

²⁷ Vaccine passports linked to COVID-19 vaccine hesitancy – study, www.jpost.com, 2 settembre 2021.

²⁸ Vaccine passports linked to COVID-19 vaccine hesitancy – study, cit., 2 settembre 2021.

Among the various problems related to the vaccination campaign in Italy are:

- the vaccination hierarchy;
- constitutionally protected rights;
- vaccination in the workplace;
- disinformation.

As for the vaccination hierarchy, the question arises:

*“is it better to save more lives or more years of life? Better to save as many as possible, since every life has the same dignity. But evidently not everyone has the same opinion”*²⁹.

In Italy the administration of the vaccine is slow: in fact, while in Israel the over 60s have priority, in Italy the over 80s.

One of the many problems that caused the slowdown is the trend of distribution. Several drive-throughs, hubs, manufacturing sites, digital platforms were used to speed up vaccination, but they didn't work as they should.

As seen, the vaccination campaign in Italy provides for an order of priority to access the vaccine. The age of administration also depends on the type of vaccine:

- Pfizer, for people aged 16 or over;
- Modern, for adults aged 18 or over;
- Astrazeneca and Janssen are used for individuals aged 18 and over.

It was subsequently established that the AstraZeneca vaccine should only be given in a full course to people aged 60 years or older.

Italy, like other states, has imposed obligations related to the age of those who undergo vaccination.

Despite this, however, no possibility was given to be able to choose the vaccine to be administered: in fact, we speak not only of the registry hierarchy but also of the vaccine hierarchy.

As for constitutionally protected rights, there are those who have made vaccination a legal problem.

²⁹ Ainis M., Vaccini anti-Covid, la graduatoria della salvezza, www.repubblica.it, 5 gennaio 2021.

It is known that those who choose not to get vaccinated put those who have chosen to do so in difficulty. In Italy the Constitution protects the right to health.

In particular, according to art. 32:

“The Republic protects health as a fundamental right of the individual and as a collective interest, and guarantees free medical care to the indigent.

Nobody can be obliged to a specific health treatment, if not by law.

The law cannot in any case violate the limits imposed by respect for the human person”.

This article makes the right to health not only an individual good, but a collective heritage to be protected and safeguarded.

A sort of supremacy of the right to health over other rights is created. A prevalence sanctioned by the Italian Constitution itself, which establishes:

- in art. 16 that *“Every citizen can move and reside freely in any part of the national territory, except for the limitations that the law establishes in general for reasons of health or safety (...)”*;
- in art. 17 that *“Citizens have the right to assemble peacefully and without arms. For meetings, even in places open to the public, no notice is required.*

For meetings in public places, notice must be given to the authorities, who can prohibit them only for proven reasons of public safety or security ”.

In particular, the aforementioned freedoms may be limited for reasons of health or safety or for proven reasons of public safety or security.

There are several political parties from all over the world that want a law that makes vaccination mandatory.

And it is precisely for this reason that those who do not intend to undergo the vaccination are organizing protests and marches.

As for vaccination in the workplace, a debate has arisen regarding the existence of the vaccination obligation.

Obviously, this argument outlines obvious problems related to constitutional freedoms, including the aforementioned right to health and the employer's obligation to ensure safety and health in the workplace.

In Italy, according to art. 2087 of the civil code:

"The entrepreneur is required to adopt, in the running of the business, the measures which, according to the particular nature of the work, experience and technique, are necessary to protect the physical integrity and moral personality of the employees".

According to some, it would be necessary instead, a law that provides for the vaccination obligation for workers, with the consequent impossibility for the employer to dismiss the employee who refuses the vaccination.

To date, the vaccination obligation exists only for health personnel, so there is still talk of the voluntary nature of vaccination.

From a business point of view:

- the national protocol for the implementation of business plans aimed at activating extraordinary vaccination points against Covid-19, expressly provides for the voluntary and informed adhesion by workers to the vaccination campaign in the workplace;
- the Privacy Guarantor³⁰ confirms workers' freedom of vaccination choice and reiterates that the employer could not have information on the vaccination status of their employees.

Vaccination cannot be required of health workers as a condition for accessing the workplace.

Personal data relating to vaccination can only be processed by the competent doctor.

Otherwise, as anticipated, the Italian government has provided for the vaccination obligation for:

- health professions operators;
- health workers who carry out their activities in public and private health, social and health care and social assistance structures;
- pharmacies, parapharmacies;
- professional medical offices.

Only subjects who obtain from the general practitioner a certificate of the danger to health that justify the omission or postponement of vaccination can evade the obligation.

³⁰ FAQ Garante Privacy 17.2.2021.

If health workers do not undergo vaccination, the professional association to which they belong will proceed with the suspension which may last for the entire period in which the vaccination obligation applies.

There are several reports³¹ that contribute to countering the spread of incorrect information on Covid-19 vaccines.

Thanks to these reports it was noticed that people who get vaccinated do so because:

- the vaccine is safe and free;
- health authorities inspire trust in the same people;
- health authorities recommend the vaccine;

Instead, the reasons that lead to the refusal of the Covid-19 vaccine are ideological or generated by the insecurity of the people of whom many believe they are not at risk of contagion.

Those who have undergone the vaccination know that the vaccine itself is not the problem but the solution.

As for disinformation, with the development of vaccines on online platforms, misinformation about their safety and related approval processes has spread rapidly.

We recall the AstraZeneca affair which circulated the issue of thrombosis as a side effect of vaccination against Covid-19.

The real problem is given by the thrombotic complications caused by the virus in those who get sick, in the short and long term.

According to a study³², patients with severe forms of Sars-CoV-2 pneumonia suffer from hypoxemia not only from the inflammation of the pulmonary alveoli, but also from the presence of micro and macro thrombi in the blood, caused by a platelet hyperactivation, which they can occlude the pulmonary vessels.

Unfortunately, thrombotic complications are present in several patients with severe forms of Covid-19 pneumonia and can be the cause of the prognosis.

³¹ The COVID-19 Vaccine Communication Handbook. A practical guide for improving vaccine communication and fighting misinformation.

³² Pompilio G., Camera M., Merlino C., Covid e trombosi: i vaccini non sono il problema ma la soluzione, www.cardiologicomonzino.it, 21 marzo 2021.

"It is extremely important that the most fragile patients adhere to the vaccination campaign without fear, especially because their immunization will enable them to live their daily lives more peacefully and to adhere more safely to their treatment path"³³.

For these reasons, communication is required between the person who does not intend to undergo the vaccination and the health worker.

With their skills, the operator can lead the person to the center of the speech, listening to them and trying to grasp their thoughts.

The operator can also provide the patient with a clear picture of the disease, address doubts, help combat anxiety, invite them not to listen to false information.

As we have seen, there are several problems related to the vaccination campaign but for every problem there is always a good solution.

According to the World Health Organization, 60-70% of the population must be vaccinated to achieve herd immunity.

Based on the traditional spread model, the types of people trying to get vaccinated in a population are classified into five segments, each of which has its own behavioral and demographic characteristics³⁴:

- innovators;
- early adopters;
- early majority;
- late majority;
- latecomers.

Essentially, innovators will influence early adopters; these will affect the early and late majority, which will affect the laggards.

When it comes to vaccination, states are prioritizing certain groups:

- top healthcare professionals and government personnel;
- first responders;
- vulnerable individuals;
- general population.

³³ Pompilio G., Camera M., Merlino C., Covid e trombosi: i vaccini non sono il problema ma la soluzione, cit., 21 marzo 2021.

³⁴ Rohit Deshpandé, Ofer Mintz, and Imran S. Currim, How Influencers, Celebrities, and FOMO Can Win Over Vaccine Skeptics, 29 gennaio 2021, <https://hbswk.hbs.edu>.

According to the innovation diffusion model, each group has five customer segments based on their willingness to be vaccinated sooner or later.

It may happen that some health professionals are anxious to get vaccinated early (the innovators, early adopters and the majority) while others will wait (the majority late and the laggards)³⁵.

To accelerate vaccination, three customer recommendations should be considered across all innovation segments:

- innovators.

Patients trust healthcare professionals as the primary source of vaccine information. So the aim is to influence the patient;

- first users and first majority.

Early adopters may be unsure about the vaccine. Innovators can influence early adopters by addressing these uncertainties. Later they can influence the early majority, which in turn will influence the late majority and the laggards;

- late majority and laggards.

Some doubt the value of the vaccine and therefore wait before being vaccinated. Others are concerned about the vaccination or opposed to it. Meanwhile, obtaining their compliance is important for obtaining herd immunity.

Cristina Bicchieri proposed an intervention strategy that involves community members. The change in practices (health and moral) occurs when the local community is interested in it, exerting social pressure, through normative expectations.

Often the use of testimony is important, especially when it comes from a community leader; in fact the community respects him and listens to him.

According to Bicchieri, *“public statements are important to dismantle a practice, but testimony is a double-edged sword, because a leader can also lose credibility when he opposes practices supported by deeply rooted social norms”*³⁶.

For this reason it is important to link field work to scientific work. It is necessary to consider the other person interested in changing practices: the organizations that fund human rights campaigns.

In fact, the lenders are interested in projects that have an immediate response.

³⁵ Rohit Deshpandé, Ofer Mintz, and Imran S. Currim, How Influencers, Celebrities, and FOMO Can Win Over Vaccine Skeptics, 29 gennaio 2021, <https://hbswk.hbs.edu>.

³⁶ Bagnoli C., La Signora delle regole, <https://st.ilsole24ore.com>, 24 luglio 2016.

It is therefore a question of changing strategies and also objectives and adopting intervention measurement systems capable of tracking results and responsibilities.

It is possible to intervene through active members of the community, on the basis of an understanding of how social norms work: one must know how to value cooperation.

*“When the law and social norms conflict, there is no doubt that local social norms prevail”*³⁷.

Two scholars, Wood, Schulman, tried to collect the problems and possible solutions by giving life to a real strategy aimed at promoting the vaccination campaign against Covid-19³⁸.

Below is a table (Table n. 1) which summarizes the solutions that can solve any problem related to the anti-Covid-19 vaccination.

Table n. 1

Problems	Solutions
Public	Social media analysis to understand why patients refuse vaccination.
Common enemy	Message analysis to understand which common enemies resonate in two polarized groups.
Analogy	

³⁷ Bagnoli C., La Signora delle regole, <https://st.ilsole24ore.com>, 24 luglio 2016.

³⁸ Wood, Schulman, Beyond Politics, Promoting Covid-19 Vaccination in the United States, www.nejm.org.

	Create a list of analogies for critical facts, processes or statistics and share them with health care channels.
Increase observability	Make it easy to see who has been vaccinated.
Natural scarcity	Call a national referendum to decide who has priority for access to the vaccine.
Negative attributions	Monitor media to quickly identify negative attributions.
Anticipated regret	Use communications to remind people of a low-probability but high-stakes outcomes and the resulting strong emotions.
Risk information	Coordinate press releases with stakeholders to avoid spreading the fake news through.
Compromise options	Promote a sense of control through different vaccination choices.
FOMO	

	See vaccination as an opportunity not to be missed.
Patient	Communicate with healthcare professionals to identify patient groups that are more at risk than others.
Fake news	Communicate with healthcare professionals about fake news.

It often happens that communication channels and social media divulge information on vaccine side effects or allergic reactions to it, making us believe that this could happen to us too.

According to a study, humans tend to opt for the risks that vaccination brings rather than those risks that are run if one does not undergo the same.

It is obvious that convincing people to undergo the vaccination can be really difficult also because, for most vaccines it is mandatory to undergo two sessions (at least so far).

To get people to get vaccinated, campaigns and messages spreading around the world about vaccination should be framed in terms of what people lose if they don't get vaccinated, instead of what they gain from being vaccinated³⁹.

It is therefore essential to convince people of the importance of vaccination and that institutions work to achieve this goal through knowledge of behavioral sciences.

Kevin Volpp, director of the Center for Health Incentives and Behavioral Economics (CHIBE) at the Perelman School of Medicine, explained a detail in health care: it is common to spend large sums on health services when a patient becomes ill and to spend little to keep patients healthy. healthy patients.

To understand this phenomenon, Volpp studied how to reward healthy behaviors.

³⁹ Marques M., Vaccine hesitancy and how nudge can increase their uptake, www.novanudge.com.

It must be remembered that in the US, both states and companies are handing out prizes to people who provide proof of vaccination.

Volpp states that “*any nonmonetary incentive appeals to some people but not others (...). Monetary incentives have universal appeal, and for that reason they typically will work better.*

*“In a free market, people typically focus on how their decisions affects their own wellbeing; because of the positive externalities to having more people vaccinated, there is a compelling argument for the government to subsidize public health”*⁴⁰.

As we have seen, unfortunately mobilizing people to obtain vaccines is a challenge. The development of communication strategies to improve voluntary vaccine adoption is therefore crucial.

Nudges⁴¹ are interventions that alter people's behavior in a predictable way without significantly changing economic incentives.

Nudges could improve the spread of vaccines⁴².

They are essentially low-cost behavioral interventions as these have been effectively applied to other health-related decisions⁴³, such as healthy eating⁴⁴, exercise⁴⁵ and flu vaccinations⁴⁶.

In order to maximize vaccine uptake as much as possible, it is necessary to understand how to design behavioral interventions to increase vaccination intentions, remove barriers to following good intentions, or both⁴⁷.

⁴⁰ Vaccine lotteries and beyond: What motivates healthy behaviors, <https://penntoday.upenn.edu>.

⁴¹ Hengchen Dai, Silvia Saccardo, Maria A. Han, Lily Roh, Naveen Raja, Sitaram Vangala, Hardikkumar Modi, Shital Pandya, Michael Sloyan & Daniel M. Croymans, Behavioural nudges increase COVID-19 vaccinations, www.nature.com.

⁴² Volpp, K. G., Loewenstein, G. & Buttenheim, A. M. Behaviorally informed strategies for a national COVID-19 vaccine promotion program. *J. Am. Med.*, 2021.

⁴³ Patel, M. S., Volpp, K. G. & Asch, D. A. Nudge units to improve the delivery of health care. *N. Engl. J. Med.*, 2018.

⁴⁴ Wisdom, J., Downs, J. S. & Loewenstein, G. Promoting healthy choices: information versus convenience. *Am. Econ. J. Appl. Econ.* 2, 2010.

⁴⁵ Milkman, K. L. et al. Megastudies improve the impact of applied behavioral science. *Nature* (in the press).

⁴⁶ Chapman, G. B., Li, M., Colby, H. & Yoon, H. Opting in vs opting out of influenza vaccination. *J. Am. Med. Assoc.* 304, 43–44 (2010). Milkman, K. L. et al. A megastudy of text-based nudges encouraging patients to get vaccinated at an upcoming doctor’s appointment. *Proc. Natl Acad. Sci. USA* 118, e2101165118 (2021). Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D. & Madrian, B. C. Using implementation intentions prompts to enhance influenza vaccination rates. *Proc. Natl Acad. Sci. USA* 108, 10415–10420 (2011).

⁴⁷ Brewer, N. T., Chapman, G. B., Rothman, A. J., Leask, J. & Kempe, A. Increasing vaccination: putting psychological science into action. *Psychol. Sci. Public Interest* 18, 2017.

Some studies have been done that aim to push people to get vaccinated, using reminders and asking participants about their intentions to get vaccinated using different questions on a seven-point scale

It has been realized that text-based reminders designed to overcome scheduling obstacles can effectively encourage vaccinations across different demographic groups, with effects lasting for at least eight weeks.

Those effects are intensified as follow-through reminders take advantage of the psychological property, making people feel that a dose of the vaccine belongs to them.

The study was noted to have implications for improving vaccine adoption, as it makes vaccination easy and elicits feelings of ownership about the vaccine.

The insights from this work could inform strategies for motivating health-related behaviors more broadly, such as planning preventative care tests or participating in health-related programs.

Such research could serve policymakers and health professionals to develop communication strategies and to promote health-related behaviors.

From the point of view of the institutions, EU leaders have:

- discussed the problems relating to the current epidemiological situation in Europe;
- elaborated some solutions to accelerate the economic recovery and to help Europe emerge from the pandemic;
- accepted the agreements reached regarding the EU digital Covid-19 certificate which is free and valid in all 27 EU member states and in Switzerland, Iceland, Norway and Liechtenstein;
- accepted the Council recommendations on travel within the EU and non-essential travel to the EU;
- agreed to continue the work in progress that increases the global production of vaccines and to promote universal access to them.

In the next page a table (Table n. 2) summarizes the solutions that the EU has developed for the fight against the pandemic and to help Europe recover from the economic crisis, they have developed ten solutions⁴⁸.

⁴⁸ 10 iniziative dell'UE per combattere la COVID-19 e garantire la ripresa, www.consilium.europa.eu.

Table n. 2

Solutions	Description
Support for EU recovery	EU leaders have agreed on an extraordinary recovery fund, called Next Generation EU, which will prioritize investment in the digital and green transition.
Coordination of travel measures	Established a common framework for travel measures to safeguard free movement during the pandemic.
Slowing the spread of the virus	Criteria for determining the third countries from which travel restrictions should be lifted include the epidemiological situation and containment measures, including physical distancing.
Safe and effective vaccines against Covid-19	The EU has coordinated a joint effort to ensure that sufficient quantities of safe and effective vaccines are produced in the EU through preliminary procurement agreements with vaccine manufacturers.
Support for EU health systems	

	<p>The EU has made medical equipment available through the creation of a common European stockpile of personal protective equipment and ventilators.</p>
<p>Job protection</p>	<p>To help workers keep their jobs during the crisis, the EU has set up a European temporary support tool to mitigate unemployment risks in a state of emergency.</p>
<p>Support to EU countries in financing their response to Covid-19</p>	<p>The EU is applying the full flexibility provided by the EU budget rules to help Member States support health systems and businesses to safeguard employment during the crisis.</p>
<p>Promotion of European solidarity</p>	<p>The EU facilitates the dispatch of medical teams through the European Medical Corps, so that teams from different Member States can travel to help the health systems hardest hit by the crisis.</p>
<p>Support for the most affected economic sectors</p>	<p>To protect our food supply chain, the EU approved emergency measures to support the agricultural and fisheries sectors, affected by the pandemic.</p>

<p>A partnership to support our partners around the world</p>	<p>The EU has activated a humanitarian airlift to provide humanitarian assistance to countries in need and is ready to establish a European-wide vaccine sharing mechanism.</p>
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2.3 Covid-19 and young people

From different sides there is a push for a mass anti-Covid vaccination for young people and the very young with the pharmaceutical companies that are experimenting with serums for children⁴⁹.

But it is also true that there are several experts who point the finger at the over 50s who do not intend to undergo the vaccination.

Those who, from a social but also a psychological point of view, paid the highest price during the lockdowns were the young people.

Many have been and continue to have experienced negative effects, such as:

- depressive effects due to social distancing or caused by the loss of friendships or romantic relationships;
- risks of altered exposure to the web and social media;
- physical aspects related to a sedentary lifestyle;
- risks related to increased exposure to violence in the family;
- loss of opportunities related to study experiences abroad and the reduction of cultural exchanges;
- difficulties related to distance learning for lower income families;
- difficulties related to entering the world of work.

Due to Covid and restrictions⁵⁰, he claims to have symptoms of depression:

- 16.5% of the young population;
- 34.7%, in the range between 18 and 25 years.

Research⁵¹ published in the Journal of the American Academy of Child & Adolescent Psychiatry has brought alarming conclusions about the effects of isolation on young people.

Among these, the diffusion of behavioral and emotional disorders seems to have grown.

To allow every young person to continue living their own life, an organic plan is needed that is able to organize:

⁴⁹ L'effetto del vaccino sui giovani, ecco i dati Covid. "Tentativo disperato", ipotesi inquietante sulla campagna, <https://www.iltempo.it>.

⁵⁰ Sole 24Ore, Covid e giovani, allarme giovani, oltre il 40% avverte disagi psicologici, 3 maggio 2021.

⁵¹ Catastini I., Attanasio L., L'impatto del Covid-19 sui giovani, riflessioni e proposte, www.ripartelitalia.it, 25 gennaio 2021.

- formation;
- employment support;
- support for entrepreneurship.

“With increased job market insecurity and deteriorating mental health, there is now a real risk of permanent scarring of young people.

We also risk seeing a decrease in the employability of a generation. A generation that has already paid dearly for the previous recession”⁵².

Another problem that affects young people due to Covid-19 is the closure of discos.

In fact, if these were reopened, by imposing on them the Green pass or in any case the test of the swab for public access, they would be safe places where young people could have fun.

Furthermore, in discos it would be easier to carry out checks, do the tracking in case of infections, intervene to solve problems of public order and it would be possible to prevent those phenomena such as assaults and robberies involving young people or parties, abusive dances and in different places. where the risk of gatherings and contagions is much higher.

Considering that the number of vaccinated people is increasing every day and the situation in the hospitals has improved significantly, it is hoped that the discos will also be opened as soon as possible. Last May, the association of dance and show entertainment companies had developed a health protocol to allow the opening of discos⁵³.

The intent was to organize test-events in indoor discos, allowing access only to those who have already been vaccinated or to those who have had the negative result of a swab done at least 48 hours earlier.

According to the protocol⁵⁴, people in discos were supposed to wear masks and it was not necessary to maintain social distancing.

The protocol also provided for the sanitation of the premises, the use of single-use materials, and traceability through the purchase of tickets online.

Subsequently, with the introduction of the green pass, the rules changed. Decisions are therefore awaited from the Government.

⁵² Gallinati A., Vivere, lavorare e COVID-19: come è cambiata la vita di donne e giovani, <https://eurohealthnet-magazine.eu>.

⁵³ Discoteca Covid Free, anche in Italia si lavora a test-evento, www.ansa.it, 3 maggio 2021.

⁵⁴ Discoteca Covid Free, anche in Italia si lavora a test-evento, www.ansa.it, 3 maggio 2021.

3) Analysis

1. Survey

In a survey consisting of several questions we involved young people aged 16 to 28 to understand if they are in favor of or against the vaccine.

The survey was carried out in May, therefore, before the introduction of the green pass and this age group was chosen as it is the one in which young people have the most hesitation in getting vaccinated.

In total, about 500 young people of this age group were interviewed.

To those in favor of vaccination we asked why they would undergo. Those who are not in favor, we asked why. Eg:

- why do they think they are healthy?
- why do they believe that Covid-19 is not dangerous at all?
- why do they think the vaccine could be dangerous?
- why are they conditioned by family and friends?

Young people were also asked whether their opinion on the importance of not being vaccinated was most influenced by:

- newspapers, TV, news or programs regarding Covid-19;
- arguments of the virologist;
- institutional and government actions such as blocking communication on how to stay safe;
- articles on social media, opinions of friends and family.

Finally, young people were asked whether, to incentivize vaccination, governments and businesses should promote vaccination efforts with some form of incentive and, if so, with what form of incentive.

In the end, young people were asked which Covid-19 vaccine they trust most and, instead, which vaccine they trust least.

A survey is important because:

- it is a research approach through the adoption of standardized procedures (such as the questionnaire and the formulations of questions);

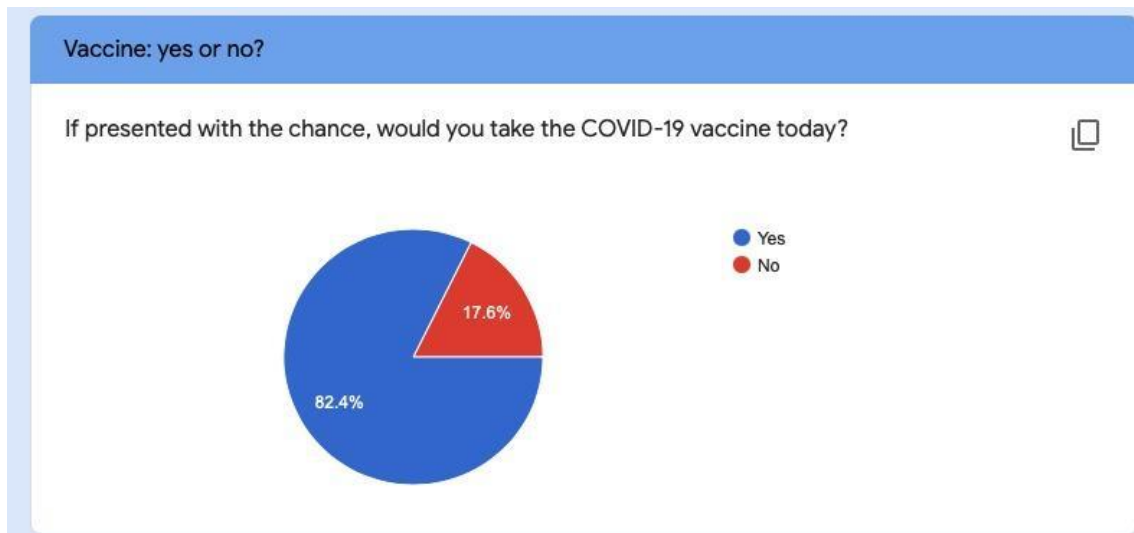
- it is a research approach of individual cases / subjects selected within a population through a representative sample;
- it allows to statistically process a series of information collected with reference to properties identified by the researcher in the conceptualization of the investigation problem;
- aims to investigate the existence of tendential regularities and uniformities referable to the problem being researched, presenting them in the form of relationships between variables;
- makes use of statistical processing of the information collected, previously organized.

The survey has features:

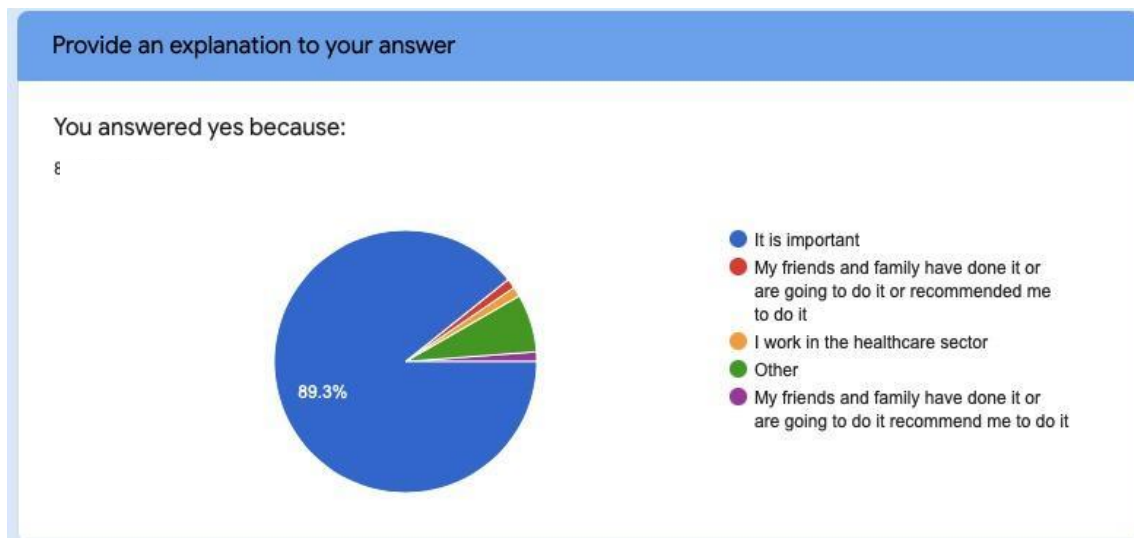
- extensive: the sample survey detects a set of properties on a set of subjects;
- inferential: the subjects are selected according to criteria that allow the results to be generalized to the entire population from which the sample was extracted;
- standardization of procedures: distinctiveness with respect to non-standard approaches to research.

2. Data

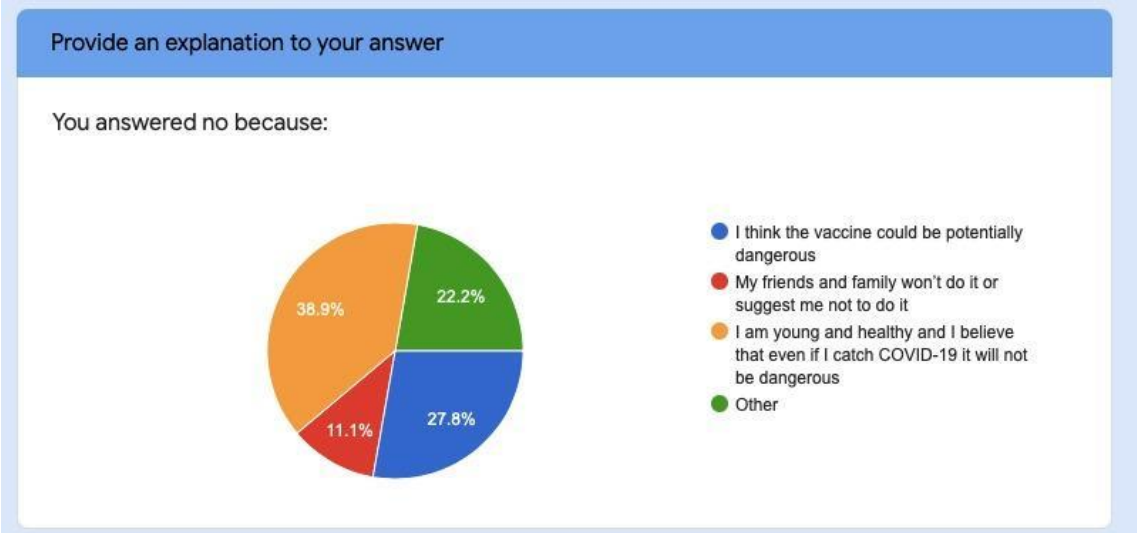
The data of the survey divided by questions are shown below:



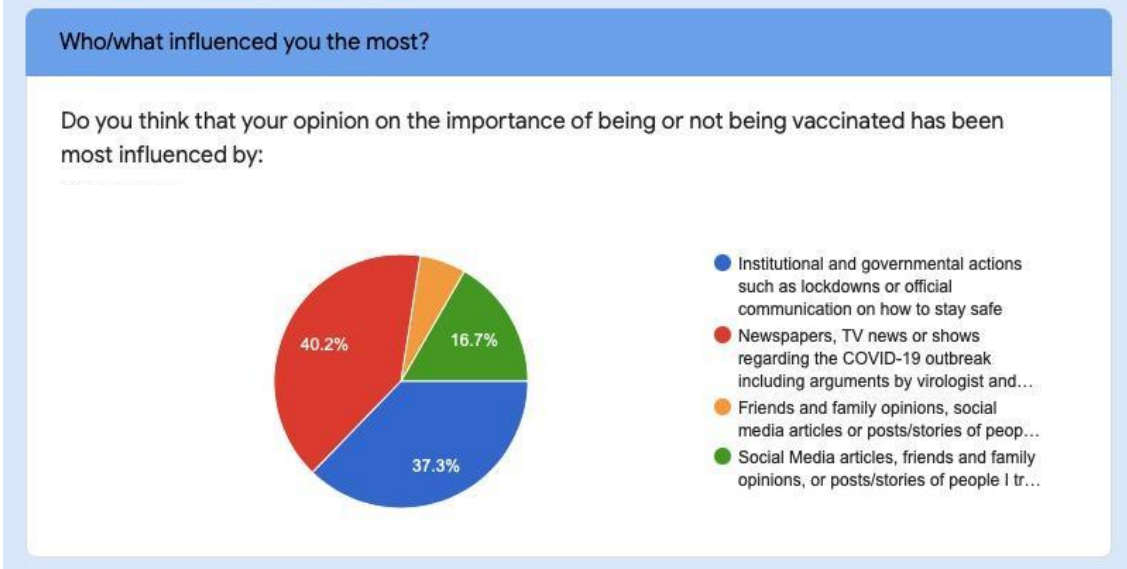
From the above question it can be deduced that most young people are in favor of vaccination (82.4%). In total, 502 people replied.



Most young people believe they are in favor of vaccination because it is important (89.3%). In total, 413 people replied.



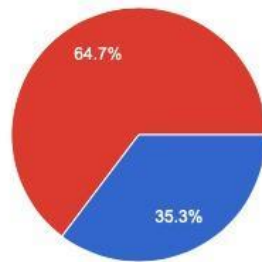
Most of those who are not in favor of vaccination think they are healthy and believe that Covid-19 is not dangerous at all (38.9%). In total, 88 people replied.



Many young people believe that their opinion on the importance of not being vaccinated is more influenced by newspapers, TV, news or programs regarding Covid-19, including the arguments of the virologist (40.2%). In total, 502 people replied.

Are incentives important?

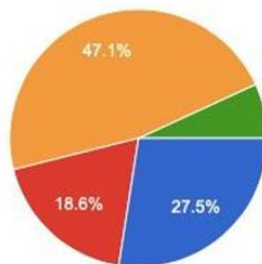
Do you think that both government and/or private enterprises should promote vaccination efforts with some form of incentive or do you think that vaccination itself is sufficient?



- Yes I think there should be some form of incentive.
- No, I think vaccination itself is a sufficient motivation and or that giving incentives might be counterproductive in terms of public trust by increasing suspicion regarding vaccines.

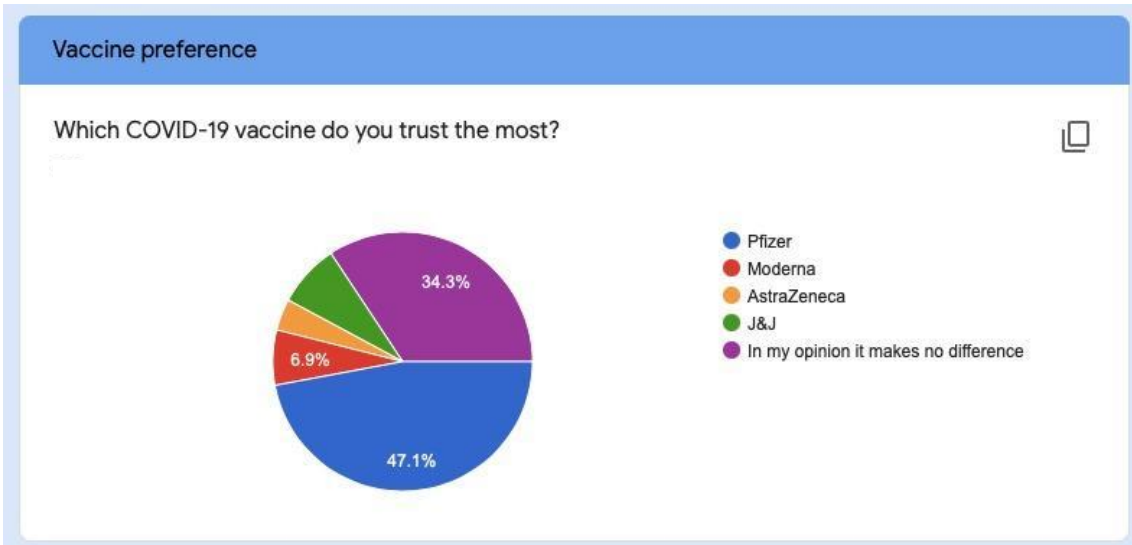
Many young people think that the government and even businesses should promote vaccination efforts with some form of incentive (64.7%), while others think that vaccination itself is sufficient to give incentives (35.3%). In total, 502 people replied.

If an incentive was introduced, which of the following would be the most effective in your opinion?

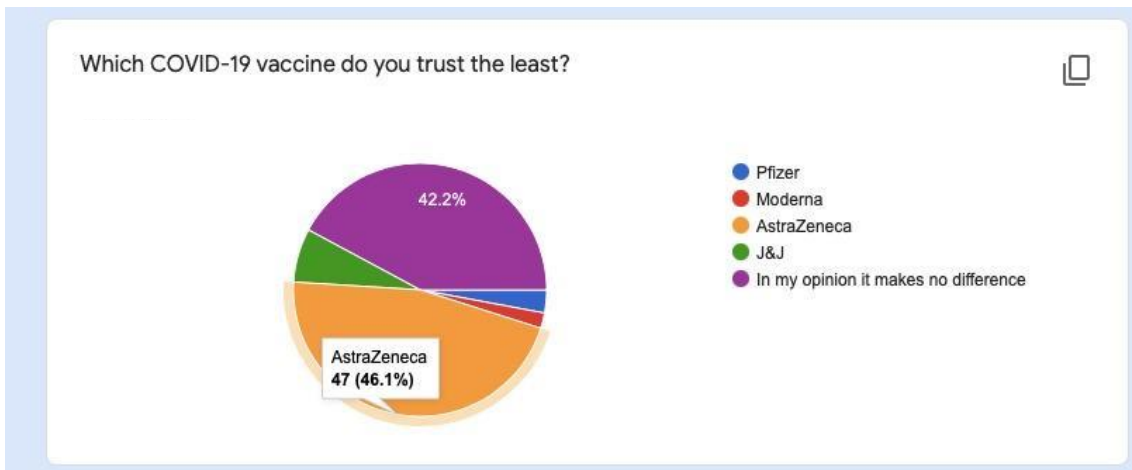


- A free meal
- A free T-shirt with the logo "I have been vaccinated"
- The chance to win a substantial amount of money by participating to a lottery with your vaccine booking number
- A selfie with a famous person you respect such as a singer/band, influencer, actress, football player...

Most young people think that a good purpose to incentivize the vaccination campaign could be to win a large sum of money by participating in a lottery with their vaccine reservation number (47.1%). In total, 502 people replied.



As regards the types of vaccines, 47.1% trust Pfizer (34.3%). In total, 502 people replied.



46.1% do not trust AstraZeneca, however, for 42.2% there is no difference between the various types of vaccines. In total, 502 people replied.

3. Results

As we have seen, most of the young people between the ages of 30 and 40 would get the vaccine.

From the survey it was noted that:

- most young people would get the vaccine (82.4%);
- 89.3% would get the vaccine just because it is important;
- most of those who are not in favor of vaccination think they are healthy and believe that Covid-19 is not dangerous at all (38.9%), others think that the vaccine could be dangerous (27.8%) and others they still do not do so because they are conditioned by family and friends (11.1%).

In this regard, it should be remembered that often the reasons that lead to the refusal of the Covid-19 vaccine are ideological or generated by the insecurity of the people of whom many believe they are not at risk of contagion.

Those who have undergone the vaccination know that the vaccine itself is not the problem but the solution;

- many young people believe that their opinion on the importance of not being vaccinated is more influenced by newspapers, TV, news or programs regarding Covid-19, including the arguments of the virologist (40.2%), others by institutional and government actions such as blocking communication on how to stay safe (37.3%) and still others from articles on social media, opinions of friends and family (16.7%).

As seen, most young people besides newspapers are influenced by the opinions of virologists.

As mentioned in the previous chapters, in fact, with their own skills the health worker can lead the person to the center of the discussion, listening to them and trying to grasp their thoughts.

The operator can also provide the patient with a clear picture of the disease, address doubts, help combat anxiety, invite them not to listen to false information. The responses to the survey confirm what Cristina Bicchieri said, namely that the change in practices (health and moral) occurs when the local community is interested in it, exercising social pressure, through normative expectations.

In particular, public statements are important to dismantle a practice, but testimony is a double-edged sword, because a leader can also lose credibility when he opposes practices supported by deeply rooted social norms.

It often happens that communication channels and social media divulge information on side effects to the vaccine or allergic reactions to it, making us believe that this could happen to us too.

To get people to get vaccinated, campaigns and messages spreading around the world about vaccination should be framed in terms of what people lose if they don't get vaccinated, instead of what they gain from being vaccinated.

Therefore, health communication is one of the strategies to guarantee the effectiveness of vaccination programs; this must be effective, correct and consistent;

- many young people think that the government and even businesses should promote vaccination efforts with some form of incentive (64.7%), while others think that vaccination itself is sufficient to give incentives (35.3%).

According to the latter, incentives are not needed because in some cases they could have side effects such as, for example, they could increase some suspicion regarding vaccination.

The United States of America in September 2021 imposed the mandatory vaccine for workers.

According to Biden, the US has the tools to fight Covid-19 *“but a minority of Americans, supported by a minority of government officials, continue to create problems”*⁵⁵.

Biden, with two executive orders:

- imposed the vaccine on all federal workers and also on contractors (people who do business with the government);
- will ask individuals with over 100 employees to make vaccines or at least tests mandatory for their employees; those who do not comply will pay up to 14 thousand dollars;

⁵⁵ A. Lombardi, Usa, obbligo di vaccino per 100 milioni di lavoratori. Biden: "Siamo stati pazienti, ora basta, www.repubblica.it, 10 settembre 2021.

- regarding incentives, most think that a good purpose to incentivize the vaccination campaign could be to win a large sum of money by participating in a lottery with their vaccine reservation number (47.1%), others they think of a free meal (27.5%) and still others of a free t-shirt with the “I was vaccinated” logo (18.6%);
- as regards the types of vaccines, 47.1% trust Pfizer and according to others (34.3%) it makes no difference, that is, one is as good as another; instead, 46.1% do not trust AstraZeneca, however, for 42.2% there is no difference between the various types of vaccines.

Unfortunately, as mentioned in previous chapters, with the development of vaccines on online platforms, misinformation regarding their safety has spread rapidly.

In fact, the fact that 46.1% of young people do not trust AstraZeneca could be caused by misinformation.

In this regard, we recall the AstraZeneca affair which circulated the theme of thrombosis as a side effect of vaccination against Covid-19.

Although in reality, according to a study⁵⁶, patients with severe forms of pneumonia also suffer from hypoxemia due to the presence of micro and macro thrombi in the blood, caused by platelet hyperactivation, which can occlude the pulmonary vessels.

Unfortunately, thrombotic complications are present in several patients with severe forms of Covid-19 pneumonia and can be the cause of the prognosis.

For these reasons, communication is required between the person who does not intend to undergo the vaccination and the health worker.

With his own skills, the operator can lead the person to the center of the speech, listening to him and trying to grasp his thoughts.

It often happens that communication channels and social media divulge information on side effects to the vaccine or allergic reactions to it, making us believe that this could happen to us too.

⁵⁶ Pompilio G., Camera M., Merlino C., Covid e trombosi: i vaccini non sono il problema ma la soluzione, www.cardiologicomonzino.it, 21 marzo 2021.

4) Conclusions

As mentioned, the planning of a correct and effective communication strategy on Covid-19 is today of extreme importance both for the health of a country and for the population itself.

Countries must, through the development of strategies, intensify the network between health workers and the population by exploiting all means of communication.

To increase participation in vaccination campaigns it is necessary:

- take care of communication in a way that is effective, correct and consistent;
- promote the active participation of health professionals and citizens by ensuring transparency in the evaluation of the data collected;
- involve stakeholders (health and non-health) to foster a cultural climate favorable to vaccinations;
- create an efficient information system;
- guarantee the organizational stability of vaccination services;
- strengthen the communication system with health care;
- maintain consistency in vaccination governance actions at local, regional and national level;
- support vaccination services through the constant production of national technical documentation.

As we have seen, among the essential characteristics of an efficient vaccination system, the main one is certainly communication.

Those who refuse vaccination need communication with the individual health worker who, with his knowledge and skills, is able to integrate the scientific world with the relational one.

In Italy, the vaccination plan organized by the government provides for the Green Pass, or a certification in digital and printable format, issued by the national platform of the Ministry of Health, which contains a QR Code to verify its authenticity and validity.

The European Commission has created a common technical platform to ensure that certificates issued by a state can be verified in the 27 countries of the European Union: it opens a new window plus Switzerland, Iceland, Norway and Lichtenstein.

Today, the types of people trying to get vaccinated in a population are classified into five segments, each of which has its own behavioral and demographic characteristics:

- innovators;
- early adopters;
- early majority;
- late majority;
- latecomers.

Essentially, innovators will influence early adopters; these will affect the early and late majority, which will affect the laggards.

It may happen that some health professionals are anxious to get vaccinated early (the innovators, early adopters and the majority) while others will wait (the majority late and the laggards).

According to a study carried out by Cristina Bicchieri, it is possible to intervene through active members of the community, on the basis of an understanding of how social norms work: one must know how to value cooperation.

It often happens that communication channels and social media divulge information on vaccine side effects or allergic reactions to it, making us believe that this could happen to us too. It is therefore essential to convince people of the importance of vaccination and that institutions work to achieve this through knowledge of behavioral sciences.

Through the survey of the third chapter there are many young people who are not in favor of vaccination because they think they are healthy and believe that Covid-19 is not dangerous at all.

Many others believe that their opinion on the importance of not being vaccinated is more influenced by newspapers, TV, news or programs regarding Covid-19, including the arguments of the virologist. From this we perceive that many young people trust the opinions of an expert who with his own skills can bring the person to the center of the discussion, listening to him and trying to grasp his thoughts.

The operator can also provide the patient with a clear picture of the disease, address doubts, help combat anxiety, invite him not to listen to false information.

Health communication is therefore one of the strategies for guaranteeing the effectiveness of vaccination programs; this must be effective, correct and consistent.

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Abstract

Nel **primo capitolo** si analizzano:

- le caratteristiche essenziali di un sistema di vaccinazione efficiente;
- le questioni operative in Italia.

La vaccinazione è un intervento di sanità pubblica che mira a:

- proteggere la comunità dall'infezione;
- ridurre l'incidenza di numerose malattie.

Nel giugno 2020, a causa della rapida crescita del Covid-19 in tutto il mondo, diversi governi, aziende pubbliche e private e persino investitori privati hanno investito miliardi di dollari nella ricerca di vaccini e nella preparazione di programmi di vaccinazione globali per isolare l'infezione da Covid-19.

La vaccinazione contro il Covid-19 è un diritto riconosciuto a tutti. Il rischio di contrarre il virus in forma grave non è uguale per tutti, quindi, per garantire la massima equità, occorre seguire un piano strategico che tenga conto di tutte le esigenze e condizioni.

La pianificazione di una corretta ed efficace strategia di comunicazione sul Covid-19 è oggi di estrema importanza sia per la salute di un Paese che per la popolazione stessa.

Negli ultimi anni, l'aumento della popolazione che rifiuta di sottoporsi al vaccino ha contribuito all'insorgere di numerosi focolai infettivi.

I Paesi devono, attraverso lo sviluppo di strategie, intensificare la rete tra operatori sanitari e popolazione sfruttando tutti i mezzi di comunicazione.

Per migliorare e quindi mantenere la fiducia nelle vaccinazioni e aumentare l'adesione alle campagne vaccinali è necessario:

- curare la comunicazione in modo che sia efficace, corretta e coerente;
- promuovere la partecipazione attiva degli operatori sanitari e dei cittadini garantendo trasparenza nella valutazione dei dati raccolti;
- coinvolgere gli stakeholders (sanitari e non) per favorire un clima culturale favorevole alle vaccinazioni;
- creare un sistema informativo efficiente;
- garantire la stabilità organizzativa dei servizi di vaccinazione;
- rafforzare il sistema di comunicazione con l'assistenza sanitaria;

- mantenere la coerenza nelle azioni di governance della vaccinazione a livello locale, regionale e nazionale;
- supportare i servizi vaccinali attraverso la produzione costante di documentazione tecnica nazionale.

Per raggiungere gli obiettivi indicati nel piano, ciascun ente pubblico deve adottare gli stessi standard operativi per i servizi offerti e garantirne il mantenimento e il miglioramento.

Il piano deve contenere specifiche modalità operative per la gestione delle vaccinazioni uniformi su tutto il territorio nazionale.

Tra le caratteristiche essenziali di un sistema vaccinale efficiente, la principale è sicuramente la comunicazione.

La comunicazione potrebbe funzionare anche se data non solo dagli operatori sanitari ma anche da chi si è già vaccinato in modo tale da garantire una comunicazione trasparente, onesta ed equa.

Chi è incerto o rifiuta la vaccinazione (titubanza vaccinale) ha bisogno di una comunicazione con il singolo operatore sanitario che, con le sue conoscenze e competenze, è in grado di integrare il mondo scientifico con quello relazionale.

In Italia, per far fronte alla crisi economica ed evitarne il collasso durante il periodo della pandemia, sono stati emanati decreti-legge a sostegno di famiglie, imprese ed enti locali.

In particolare, i vaccini attualmente autorizzati in Italia sono:

- Pfizer-BioNtech;
- Moderna;
- AstraZeneca;
- Johnson & Johnson

In Italia il piano vaccinale organizzato dal governo prevede il Green Pass, ovvero una certificazione in formato digitale e stampabile, rilasciata dalla piattaforma nazionale del Ministero della Salute, che contiene un QR Code per verificarne la autenticità e validità.

La Commissione Europea ha creato una piattaforma tecnica comune per far sì che i certificati emessi da uno Stato possano essere verificati nei 27 Paesi dell'Unione Europea: apre una nuova finestra più Svizzera, Islanda, Norvegia e Lichtenstein.

Nel **secondo capitolo** si analizza:

- la campagna vaccinale in Israele e Regno Unito;

- il covid e i giovani;
- i problemi e le soluzioni

Le strategie usate per la vaccinazione anti-Covid-19 da Israele riguardano:

- la scelta di vaccinare prima gli operatori sanitari e le persone più vulnerabili rispettando, ovviamente, un ordine gerarchico;
- la creazione di un passaporto verde che permette a chi è stato vaccinato di viaggiare liberamente o di accedere in determinati luoghi;
- la copertura sanitaria pubblica avanzata sul piano digitale e con infrastrutture efficaci in modo da garantire rapidità nelle vaccinazioni.

Il Regno Unito, ad oggi, è il Paese che è riuscito a vaccinare più velocemente la maggior parte della popolazione.

Si ricorda che il Regno Unito ha scelto di non rispettare le tempistiche tra le due dosi indicate da Pfizer e di allungare fino a 12 settimane l'intervallo da aspettare prima del richiamo.

Da diverse parti del mondo si spinge per una vaccinazione anti-Covid di massa per i giovani e i giovanissimi con le case farmaceutiche che stanno sperimentando i sieri per i bambini.

Per permettere ad ogni giovane di continuare a vivere la propria vita serve un piano organico in grado di organizzare:

- formazione;
- sostegno all'occupazione;
- supporto all'imprenditorialità.

Come detto, i giovani hanno perso il lavoro in modo sproporzionato: è più probabile che abbiano contratti a tempo determinato.

“Con la maggiore insicurezza del mercato del lavoro e il deterioramento della salute mentale, esiste ora un rischio reale di cicatrici permanenti dei giovani. Rischiamo anche di vedere una diminuzione dell'occupabilità di una generazione. Una generazione che ha già pagato a caro prezzo la precedente recessione”.

Un altro dei problemi che a causa del Covid-19 colpisce i giovani è la chiusura delle discoteche. Difatti, se queste venissero riaperte, imponendo loro il Green pass o comunque la prova del tampone per l'accesso al pubblico, sarebbero luoghi sicuri in cui i giovani potrebbero divertirsi.

Inoltre, nelle discoteche sarebbe più facile eseguire i controlli, fare il tracciamento in caso di contagi, intervenire per risolvere problemi di ordine pubblico e si riuscirebbe a prevenire quei fenomeni come aggressioni e rapine che coinvolgono i giovani oppure feste, balli abusivi e in diversi luoghi in cui il rischio di assembramenti e di contagi è molto più elevato.

Considerando che il numero di vaccinati aumenta ogni giorno e la situazione negli ospedali è nettamente migliorata, si spera che anche le discoteche verranno aperte il prima possibile.

Oggi, i tipi di persone che cercano di vaccinarsi in una popolazione sono classificati in cinque segmenti, ciascuno dei quali ha le proprie caratteristiche comportamentali e demografiche:

- innovatori;
- primi utilizzatori;
- maggioranza precoce;
- maggioranza tardiva;
- ritardatari.

Sostanzialmente, gli innovatori influenzeranno i primi utilizzatori; questi influenzeranno la maggioranza precoce e tardiva, che influenzeranno i ritardatari.

Per quanto riguarda la vaccinazione, gli Stati stanno dando la priorità a determinati gruppi:

- operatori sanitari e personale governativo al vertice;
- primi soccorritori;
- soggetti vulnerabili;
- popolazione generale.

Secondo il modello di diffusione delle innovazioni ogni gruppo ha cinque segmenti di clientela in base alla propria disponibilità a farsi vaccinare prima o dopo.

Può succedere che alcuni operatori sanitari siano ansiosi di farsi vaccinare in anticipo (gli innovatori, i primi utilizzatori e la maggioranza) mentre altri attenderanno (la maggioranza in ritardo e i ritardatari).

Secondo uno studio effettuato da Cristina Bicchieri (filosofa) per comportarsi razionalmente occorre capire che cosa è ragionevole attendersi dagli altri.

Tramite il concetto di “attesa” si può spiegare il cambiamento e l’evoluzione delle norme sociali.

Le norme sociali, non sono simili alle regole, e hanno una struttura composta da due elementi:

- empirico: la credenza che gli altri membri della stessa comunità seguano una norma e dunque si comportino in un certo modo;
- normativo: la credenza che tutti gli altri membri della comunità debbano comportarsi in un certo modo. La pressione sociale non fa altro che garantire una certa stabilità alle norme.

Cristina Bicchieri ha proposto una strategia di intervento che coinvolge i membri della comunità.

Il cambiamento nelle pratiche (sanitarie e morali) si ha nel momento in cui è la comunità locale a interessarsene, esercitando pressione sociale, tramite aspettative normative.

Spesso l’uso della testimonianza è importante, specialmente quando proviene da un leader della comunità; difatti la comunità lo rispetta e lo ascolta.

Secondo Bicchieri *“le dichiarazioni pubbliche sono importanti per smantellare una pratica, ma la testimonianza è un’arma a doppio taglio, perché un leader può anche perdere credibilità quando si oppone a pratiche sostenute da norme sociali molto radicate”*.

Per questo motivo è importante ricordare il lavoro sul campo al lavoro scientifico.

Occorre considerare l’altro soggetto interessato al cambiamento delle pratiche: le organizzazioni che finanziano le campagne per i diritti umani.

Difatti, i finanziatori sono interessati a progetti che hanno un riscontro immediato.

Si tratta dunque di cambiare le strategie e anche gli obiettivi e adottare sistemi di misurazione dell’intervento in grado di tracciare i risultati e le responsabilità.

Si può intervenire tramite i membri attivi della comunità, sulla base della comprensione di come funzionano le norme sociali: bisogna saper dare valore alla cooperazione.

“Quando la legge e le norme sociali entrano in conflitto, non c’è dubbio che prevalgono le norme sociali locali”.

Spesso accade che i canali di comunicazione e i social media divulgano informazioni sugli effetti collaterali al vaccino o reazioni allergiche allo stesso facendoci credere che ciò potrebbe accadere anche a noi.

Secondo uno studio, l'essere umano tende a optare per i rischi che porta la vaccinazione anziché a quei rischi che si corrono se non ci si sottopone alla stessa.

È ovvio che convincere le persone a sottoporsi alla vaccinazione può essere veramente difficile anche perché, per la maggior parte dei vaccini è obbligatorio sottoporsi a due sedute (almeno finora).

Per convincere le persone a vaccinarsi, le campagne e i messaggi che si diffondono in tutto il mondo sulla vaccinazione dovrebbero essere inquadrati in termini di ciò che le persone perdono se non vengono vaccinate, invece di ciò che guadagnano dall'essere vaccinate.

È fondamentale dunque convincere le persone dell'importanza della vaccinazione e che le Istituzioni lavorino per raggiungere questo obiettivo tramite le conoscenze delle scienze comportamentali.

Nel **terzo capitolo** si analizza un survey che ha coinvolto circa 500 giovani da 16 a 28 anni composto da diverse domande.

Lo scopo del survey è quello di capire se i giovani sono favorevoli o contrari al vaccino ed è stata scelta questa fascia d'età in quanto è quella in cui i giovani hanno più esitazioni nel vaccinarsi.

Dal survey si è notato che:

- la maggior parte dei giovani farebbe il vaccino (82,4%);
- l'89,3% farebbe il vaccino solo perché è importante;
- la maggior parte di coloro che non sono favorevoli alla vaccinazione pensano di essere sani e credono che il Covid-19 non è affatto pericoloso (38,9%), altri pensano che il vaccino potrebbe essere pericoloso (27,8%) e altri ancora non lo fanno perché condizionati dalla famiglia e dagli amici (11,1%);
- molti giovani ritengono che la propria opinione sull'importanza di non essere vaccinati è maggiormente influenzata da giornali, TV, notizie o programmi riguardanti il Covid-19, comprese le argomentazioni del virologo (40,2%), altri da azioni istituzionali e governative come il blocco della comunicazione su come stare al sicuro (37,3%) e altri ancora da articoli sui social media, opinioni di amici e familiari (16,7%);

- molti giovani pensano che il governo e anche le imprese dovrebbero promuovere gli sforzi di vaccinazione con qualche forma di incentivo (64,7%), altri pensano, invece, che la vaccinazione stessa è sufficiente per dare incentivi (35,3%);
- per quanto riguarda gli incentivi, la maggior parte pensa che un buon proposito per incentivare la campagna vaccinale potrebbe essere quello di vincere una cospicua somma di denaro partecipando ad una lotteria con il proprio numero di prenotazione del vaccino (47,1%), altri pensano ad un pasto gratuito (27,5%) e altri ancora ad una maglietta in omaggio con il logo “sono stato vaccinato” (18,6%);
- per quanto riguarda le tipologie dei vaccini il 47,1% si fida del Pfizer e secondo altri (34,3%) non fa differenza, cioè uno vale l’altro; invece, il 46,1% non si fida di AstraZeneca, invece, per il 42,2% non c’è differenza tra le varie tipologie di vaccini.