
MEETING REPORT

COMBATTING ONLINE MISINFORMATION

Policy Focus Group Meeting on Misinformation

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Initiative History, Purpose and Work Within the EU Coalition on Vaccination

Since 2015 the Excellence in Pediatrics Institute (EIP) has worked with European and Global partners to help overcome the many remaining barriers to vaccination uptake. By connecting and working with colleagues across Adolescent Medicine, General Practice, Pharmacy and Nursing, and uniting behind the **EU Commission's Coalition on Vaccination**, EIP's goal is to promote a LifeCourse approach to vaccines.

Most notably, EIP believes that the following barriers remain: 1) **Policy discrepancies** - Heterogeneous national vaccination policies. Differences in approach, prioritisation and decision making processes. 2) **Overarching barriers** - Lack of policies to increase vaccines confidence, counteract misinformation, increase awareness and mobilise medical communities, and 3) **Failure to adopt a LifeCourse approach** - Prevention Policies not adapted to demographic changes and an increasingly ageing population. Disease prevention in all stages of life is not yet a priority.

As part of EIP's work within the **EU Coalition on Vaccination**, 8 Stakeholder Working Groups, as well as a joint EU Commission and WHO plenary briefing, took place at 11th EIP Annual Conference in Copenhagen in December 2019. During the Working Groups, speakers were asked to share their opinions on ways to increase vaccination uptake in both general public and healthcare

professionals, on the current state and progress made in increasing vaccination coverage rates in different countries and to mention the obstacles faced in the process of doing so. Four of the Working Groups looked at Vaccine-specific barriers, while the remaining four looked at policies focusing on overarching barriers to update.

One of the Policy Focus Group was tasked to look at Misinformation and specifically how we can better combat and counter online Misinformation. During the Focus Group, several experts shared their thoughts on this crucial matter, mentioned the fundamental issues that led to vaccine misinformation, but also they proposed possible measures in order to fight the anti-vaccine movements and the misinformation they spread.

The following report summarises the invited expert's briefings, discussions, and proposed action plans that were debated during the proceedings of the **Misinformation Policy Focus Group**.

IMPROVING VACCINE CONFIDENCE BY UTILIZING EVIDENCE-BASED CREDIBLE INFORMATION

Working Group Briefing

Prof. Marc Van Ranst (*Professor, Department chair of the Department of Microbiology, Immunology and Transplantation, Head of the Laboratory of Clinical and Epidemiological Virology, Rega Institute for Medical Research, Belgium*) was invited to open the Focus Group by highlighting and exploring the crucial need in providing evidence-based credible information in order to improve vaccine confidence in the general public.

Prof. Van Ranst, commented that although we have successfully eradicated severe diseases, such as smallpox and polio, people still hesitate when it comes to vaccines and one of the main reasons is the fact that they have never witnessed the disease impact on their lives. Anti-vaccination movements and vaccine hesitancy have been now identified by World Health Organization (WHO) as one of the biggest threats to world health.

Prof. Van Ranst provided the historic context that the first anti-vaccination movement started back in 1796 when Edward Jenner first started vaccinating and this was partly due to the fact that the first physicians were using nothing that was evidence-based and sometimes vaccination could go wrong as the mixtures used were not pure. Although many years have passed since then, it seems that **we still need evidence-based information in order to overcome vaccination hesitancy**. During his presentation, Prof. Marc Van Ranst proposed a few measures in order to improve vaccine confidence and one of these was **the introduction of vaccinology courses in all medical and paramedical education programs. In most universities, vaccinology does not stand alone as a course, but its principles are scattered through other courses such as**

microbiology, virology etc, and the outcome is that health care professionals do not ultimately feel comfortable with vaccination.

As the Centre for Disease Control (CDC) has highlighted, vaccine hesitancy mainly comes from parents and people not feeling safe about vaccines. By reinforcing the educational system of doctors and nurses with extra vaccinology courses, we could end up with better informed health care professionals that can be totally trusted by the public, and therefore decrease vaccine hesitancy.

Apart from health care professionals, Prof. Van Ranst underlined that **we also need to educate the general public. This could be done by informing children in schools about the viruses and bacteria, the evolution of disease, basic principles of immunity and the heroes of vaccinology, using interesting and simple movies and presentations.**

Prof. Van Ranst then posed the question of what a healthcare professional (HCP) should do if they are called to answer questions about vaccine hesitancy. There are numerous legitimate internet sites, such as WHO, PublicHealth.org, CDC etc, that can provide with evidence-based answers on the subject and can help health care professionals address vaccine-hesitant people. Nonetheless, Prof. Van Ranst also underlined that one should not waste time in trying to convince a headstrong anti-vaccine person, as their arguments mainly come from personal stories where vaccinations went wrong. In addition, Prof. Van Ranst suggested that **HCPs should also avoid participating in falsely balanced debates in the media because the media only care about the coverage and impact of the story and not the true message and facts.**

In conclusion, Prof. Van Ranst pointed out that we are not doing enough in telling the stories about the successes of vaccination and **we should also highlight to the public the**

adverse outcomes of not vaccinating for potentially dangerous diseases.

HOW CAN AND SHOULD HCPs COUNTER ONLINE MISINFORMATION / DISINFORMATION

Working Group Briefing

Mr Philip Weiss (ZN Founder and CEO, ZN Consulting, Belgium) was then invited to brief the Focus Group on the magnitude of power that social media has nowadays, as well as proposed ways of confronting and effectively combating online misinformation.

More specifically, Mr Weiss explained the correlation of social media and vaccines in the age of disinformation, giving as an example The Black Swan Theory, which is a very unpredictable event, considered by the majority impossible by nature until it happens, and the connection with a more recent bird, Twitter, which represents social media in general, transforming the way we communicate, shaping perception and thus behaviour.

Mr Weiss concluded that as information is power and, **in this era, the major source of information is the internet, then the internet is power, so the use of social media that have the power to shape perception can make people vaccinate if you provide the right information at the right time to the right people.**

Mr Weiss then suggested that it is very well known that fear spreads pretty fast and that is what the Anti-vax narrative exploit to thrive, especially in specific situations like the measles epidemic or the H1N1 crisis. This reality is something that the pro-vaccine community has to embrace and confront **not only by publishing a lot of facts, reports or stats that people find hard to connect with, but also by spreading stories that apply to individuals, bringing the story in front of the parent and make it personal, because in the end this is why you vaccinate.**

Mr Weiss then referred to a recent study by Renée DiResta¹, who studied the Anti-vax Movement, depicting that the

¹ Renée DiResta, "OF VIRALITY AND VIRUSES: THE ANTI-VACCINE MOVEMENT AND SOCIAL MEDIA", NAPSNet Special Reports, November 08, 2018, <https://nautilus.org/napsnet/napsnet-special-reports/of-virality-and-viruses-the-anti-vaccine-movement-and-social-media/>

Anti-vax Network was much more interconnected and thus much more efficient in spreading stories than the Pro-vax people, which are less agile and effective at connecting, and that is a major problem also in the medical community. **Social Media Hesitancy (people are afraid or worried about social media) needs to be overcome on the Pro-vax side of the battle.**

By ignoring social media, Healthcare Professionals allowed the **Anti-vaxxers to dominate the space and yet this can easily change if HCPs, who are in general far more trusted in social media than other people, try to communicate effectively, using social media to build a network that will be highly trusted and will help them engage more, amplifying the pro-vaccination message.** Mr Weiss gave some examples of HCPs who have done a very good job by either confronting openly Anti-vaxxers in social media or by disseminating and amplifying pro-vaccination rhetoric. Subsequently, Mr Weiss explained how to use social media to build trust in vaccination, insisting that the most important thing is to just do it, just start getting involved with social media. As general guidelines Mr Weiss proposed that misinformation is not a joke and we all need to work together to stop it from spreading, by rebutting or flagging damaging stories before they begin to take hold, by reporting accounts or posts that are spreading misinformation to the social media platform and by focusing on building respect and keeping the trust that HCPs already have, rather than rebutting every false claim.

The briefing then looked at the main social media players (Facebook, Twitter, YouTube, LinkedIn and Instagram) and their role (all sorts of content, news & networking, video & comments, professional outreach and images & videos respectively). Mr Weiss then mentioned that quite recently (March 2019) the Tech Companies that own the social media started to respond to demands to crack down on vaccine misinformation, but still we are very far away from where we should be. Particularly regarding Twitter, it was explained how it works and its importance nowadays. Mr Weiss advised that an effective use of this means of communication involves carefully listening of what others are saying and then engaging following a **five-step action that consist of: 1) sharing a short piece of interesting information or fact, 2) a call to action, 3) tagging relevant other accounts, 4) providing links, images or videos and 5) adding 2-3 hashtags (#). This five-step action plan can then amplify the Pro-vaccine messages and expand your network of influence.**

Moving on to how to deal with misinformation and attacks, Mr Weiss described two course of actions, the first being that of monitoring only what applies to attacks from trolls (a person who debases or degrades others) and ragers (rant, rage,

ridicule or satirical posts) and the second of using fixed facts or restoration narrative that applies to people that are either misguided or unhappy by some personal experience.

Mr Weiss then analyzed his theory called "The Jiu Jitsu move", that applies to situations where someone is attacked for example by an Anti-vaccine individual who happens to be followed by thousands of people and explained how this is a great chance, even though it needs effort, to fight back and promote Pro-vaccine rhetoric to numerous people, turning the tables to our advantage. **The recommendation on the required time needed for social media, was that we need to prioritize, plan and commit daily 15-20 min (making it a habit), delegate, disseminate, learn and adapt.**

In conclusion, Mr Weiss emphasized that we need to start fighting social media misinformation by joining the global conversation (one tweet at a time), connecting with pro-vaccine influencers, amplify-engage and shift the conversations and finally learn by doing and sharing the experience with your network.

Upon finishing the briefing, it was commented that, **being in a regulatory environment often limits the freedom of expressing your views on a social media platform, limiting also the speed of your response because you need to make sure that what you express comply with the rules of your organization.**

Mr Weiss replied, making two points; the first one was that there are clear things coming from professional sources that can be tweeted and re-tweeted without causing issues and that's a good starting point and the second one that he thinks people should be a little bit more relaxed with social media, realizing the importance of their swift engagement and not waiting months before responding because then the damage is done, meaning that there are lives at risk.

Dr Jacques de Haller, commented that in order to avoid the aforementioned problem and keep the doctor's credibility, Standing Committee of European Doctors – CPME have decided to elaborate policy papers and adopt them in a general assembly. Mr Weiss replied, that turning policy papers into key messages that can be used as approved narratives is a good start, but that can be further supported by adding common sense to the table, sharing articles that you agree with or putting them on your Twitter account with "Opinions are my own", something that is becoming accepted by most organizations lately.

INTERVENTIONS FROM ORGANISATIONS

WHO

Dr Katrine Habersaat (*Technical Officer, Vaccine-Preventable Diseases and Immunization programme, WHO, Denmark*) added some perspectives concerning online misinformation and vaccination. Most notably, Dr Habersaat mentioned that if we look at the data, there is no evidence that the increase in available online information or the use of social media has actually led to a decline in vaccination, with average vaccination coverage being higher than the last 2 years. It was suggested that one of the main reasons we didn't have that dreadful impact we might have all feared, is because of very skilled healthcare professionals who are able to respond to parental concern and questions effectively.

Dr Habersaat emphasized that not only from daily experience but also from various studies, it is clear that both parents and patients have very high expectations from HCPs, making them a key-factor for several decisions taken - like vaccination uptake - but also putting a lot of pressure on them. Dr Habersaat agreed that the correct way to move forward is **by providing training and skills building among healthcare workers, all the way from medical school and then throughout their careers.** Dr Habersaat pointed out that **training should not be focused just in vaccinology but also into inter-personal communication to understand the psychological factors that relate to parental fears and concerns.** This is critical as HCPs need to act accordingly to each case; accepting parents needs is one approach, a hesitant parents needs another and a refusing parent yet a different one, and unfortunately medical workers have not been trained to consider this perspective.

Dr Habersaat added that is very important to understand what we can do, but also what we cannot do, especially in terms of building trust and resilience to vaccine safety scares, as there is not a lot of strong evidence to say that you can actually change how people feel or think about vaccination, once they have a certain perception.

In conclusion Dr Habersaat stated that an early vaccination is preferable (10 - 12yrs old) as at that age individuals are able to both understand some complexity and no-complexity related to vaccination, but they are not old enough to have an established position.

Dr Liudmila Mosina (*Technical Officer, Vaccine-Preventable Diseases and Immunization programme, WHO, Denmark*) also pointed out **the importance of teaching medical workers how to communicate with parents about vaccination, having both very deep knowledge so they can reply to questions, and communication skills so they can shift parents to the decision**

to vaccinate their child. Dr Mosina commented, that it is also important that the medical doctor who provides the information and communicates with the parents needs to be confident in vaccines and **unfortunately there are still HCPs that are hesitant and do not feel comfortable recommending vaccination to parents.**

Dr Liudmila Mosina noted that even though it is crucial to include vaccination training in medical education, most replies that she receives from universities imply that the curriculum is already very packed, and to add a week vaccination course wouldn't be easy. Dr Mosina underlined that **we need to provide continuous education to medical doctors and classes where they can get updated information about new vaccines and safety, so they can always feel comfortable about vaccination.** Dr Mosina then questioned the importance of social media, as parents trust still lies in doctors, and set the dilemma of where we should really put our time and energy, into fighting with Anti-vaxxers on Twitter or rather talk to parents, adding that medical societies should be responsible for addressing this issue.

Standing Committee of European Doctors - CPME

Dr Jacques de Haller (*Past-President of the Standing Committee of European Doctors - CPME, Belgium*) started the CPME briefing by commenting that the projects of the European doctors are in line with the guidelines proposed on the previous presentations, also adding that nowadays they **work on a coalition with other health professionals in social media and communication activities in order to positively influence what's been communicated to the general population, and mentioned the possibility of a joint action for vaccination of the European Commission which is currently conducting an interesting study for social media and particularly Twitter.** The preliminary results described, after analyzing 12 thousand tweets, show just two groups of people (among a variety of groups with different attitudes) that are **either anti-vax or pro-vax and the group of anti-vax is much smaller than the pro-vax, but much more active also.**

Dr de Haller then asked what the meaning is of trying to change the mind of the people that are anti-vax, considering that they have stuck to their own convictions and most probably won't change. Mr Philip Weiss answered that not only is it always better to try doing something than not, such as spreading positive vaccine stories, but also that there is a big group of people who may be sceptic about vaccination but

they are not hardcore anti-vaxxers and they can be influenced and shaped towards the right direction.

In conclusion, Dr Jacques de Haller referred again to the ongoing vaccination coalition, pointing that they have chosen to address HCPs more than the general public, arming them with resources and means to use at their own fight for vaccination.

An interesting comment from the audience at this point underlined what some HCPs feel - that it's often a waste of time to try to convince individuals with more extreme vaccination ideology, and that you need to aim for the vast majority of the normal average individuals that can be shifted towards a more pro-vax attitude. Also, Mr. Gary Finnegan, Vaccines Today, noted that the use of social media for vaccination not only helps by spreading positive messages but also influences Google rankings and that is quite important too as pro-vax information will climb up the search results and it will be easier for individuals to reach it.

European Pharmaceutical Students' Association (EPSA)

Dr Tilen Kozole (*Vice President of European Affairs, European Pharmaceutical Students' Association (EPSA), Belgium*) described what the EPSA are working on and their actions as an Association to combat vaccine misinformation. Their current strategy consists of carrying out public health campaigns and delivering webinars for pharmacy vaccination, referred to by EPSA as the Thing Young Coalition. The approach is to gather young people who believe, trust and support vaccines, and will launch their manifesto on the 21st of January 2020 in the European Parliament.

Dr Kozole then commented on the Global Vaccination Summit that was held in September, organized by EU Commission and WHO, which was focused also on misinformation and mistrust, and pointed out a specific speaker, Ethan Lindenberger, a 18-year old American who was raised by Anti-vax parents and once he reached the age of maturity he got vaccinated against his mother's will. Dr Kozole suggested that it was useful to underline the message through a strong personalized voice for vaccination, such as Greta Thunberg has managed to do for climate change.

Dr Kozole then went on to emphasize **the need for alternative ways of promoting vaccinations, such as giving bracelets to vaccinated children who will show them off in kindergarten or primary school, thus making non-vaccinated children press**

their parents for vaccination when they return home. Dr Kozole pointed out the importance of the voice of the youth since social media is of key importance in not only spreading, but also tackling, misinformation, especially as it's this generation who are considered experts in the field as they were raised with the technology so prominently in their youth. Finally, Dr Kozole highlighted the importance of communication and understanding, as Pro-science data is often hard to comprehend, pointing out that we need to pass this information easily across to people either through social media or face-to-face conversations.

COUNTRY UPDATES

Latvia

Dr Dace Zavadzka (*Paediatric Infectious Diseases Specialist, Head of Children Vaccination Centre under Children Clinical University Hospital, Riga, Latvia*) reported the problems they face in Latvia regarding the anti-vaccine movement, but also the steps they made towards fighting it. One of the main obstacles they face is the lack of support from the government in vaccinating children and pregnant women, as **anti-vaccine people hold central roles in their Parliament**. Nonetheless, they have managed to provide information in hospital web pages by giving interesting to the eye titles that would attract the interest of the public. Dr Zavadzka's main message was that unfortunately nobody believes in the impact of influenza on people's health and that we need to change that. Therefore, she mentioned several examples from her country that helped towards fighting against the anti-vaccination movement. **Regarding influenza, they made pictures showing the outcomes of inflected and unvaccinated people and this seemed to have reached some people. They also made videos on YouTube, promoting the message 'Stop Children Dying from Vaccine Preventable Diseases' and gave many interviews on the TV and radio.** Nonetheless, they did not confront or try to convince anti-vaccine people on Facebook, as they were sure that they could not be convinced.

Serbia

Professor Radovan Bogdanovic (*Professor of Pediatrics & Pediatric Nephrologist, Paediatric Association of Serbia*) described the problems of vaccine misinformation in Serbia and the steps they are taking to resolve them. Professor Bogdanovic noted that like the rest of the world, the main reason for vaccine misinformation in Serbia comes from Anti-vax organized groups or individuals which are spreading

their ideas through social networks, electronic or printed media, public meetings or debates on TV. This has become more intensive in the last decade and Professor Bogdanovic agreed that the main source and main cause of misinformation and inadequate public awareness is the Internet, where individuals are more visible to the public than organized associations. Prof. Bogdanovic also emphasized the unfortunate fact that **among the Anti-vaxers individuals there are two Professors in Paediatrics, who are representing both professional and ethical relation, causing enormous damage to advocacy for vaccination.**

Prof. Bogdanovic underlined that the MMR vaccine was specifically targeted by Anti-vaxers in Serbia, and consequently coverage dropped at national level to 85% from over 90% in the last 4 years. While in one of the largest cities it reached 35% and this led to a measles outbreak in Serbia two years ago, affecting almost six thousand people with 15 deaths; but fortunately, due to the epidemic and several activities from government agencies and professional organisations promoting vaccination, MMR coverage reached 93% overall last year.

Finally, Prof. Bogdanovic referred to some other drastic measures taken against vaccination misinformation in Serbia, as there is **a group of doctors and citizens that have filed criminal charges against multiple Anti-vaxers who through public action have spread fears and mistrust to the general population and also added that recently the Medical Chamber launched a procedure to revoke licenses from doctors who are the most prominent public opponents of vaccination.**

DISCUSSION POINT 1

The Role of Public Authorities, Organisations and Associations in Countering Misinformation

During the discussion the Focus Group Members shared their views on the role of public authorities, organisations and associations in countering misinformation regarding vaccines. **In Italy, for instance, it was mentioned that they had created a website dedicated to promoting vaccination and its benefits. Additionally, they have formed a group in alliance with scientific societies in order to promote vaccination and intervene during a vaccination crisis and they are also supported by their government financing their cause.**

Another Focus Group member mentioned that vaccinations should be part of the national security policy and there should be a movement that would counteract the misinformation

provided on the internet. Another important issue discussed is the need of providing clear and simple definitions regarding vaccinations and the need for clear methods and systematic approaches in order to achieve the most regarding countering misinformation. Having a medical “hero” promoting the benefits of vaccinations would also help towards fighting anti-vaccination movements.

The example of Hungary was cited, where it was reported that they have created an immunization calendar that is accessible through a website and provides up-to-date information on vaccination policies. Finally, they have also **implemented a special course for medical students about vaccinations and their possible adverse events by examining 20 case scenarios.**

DISCUSSION POINT 2

Mobilising HCPs to Engage on Social Media to Fight Misinformation

Experts in attendance then commented on ways of mobilizing health care professionals to engage on social media to fight misinformation. It was mentioned that in order for the parents to recognize the value of medical and professional information, one should provide them with clear, meaningful and evidence-based information. In addition, it was reported that there is research currently taking place on collecting and providing data from all over the world regarding different disciplines and approaches in fighting misinformation. Finally, it was concluded that the media are a powerful tool in fighting misinformation, if used properly.

DISCUSSION POINT 3

Countering the Disproportionate Number of Websites that Look Scientifically Credible, but are Anti-vax Led

During the final discussion point, **possible measures were suggested in order to counter the disproportionate number of websites that look scientifically credible, but are in fact anti-vax led.** One of these was the **development of training material for medical doctors that would train those that were mistrained during their medical education and adopted the wrong attitude towards vaccinations.** Another measure that was proposed was to simply ignore anti-vaccine people and focus on providing evidence-based information regarding vaccinations. **Finally, it was proposed to create websites**

dedicated in clarifying whether an information provided by another website is accurate or wrong.

CONCLUSIONS

The Policy Focus Group was dedicated to looking at ways we can better combat online misinformation. During the discussion the Group concluded that there is currently a lack of appropriate training on vaccines for healthcare professionals, medical students and the general public. In addition, it was underlined that there is a need for better and more effective communication towards patients. Regarding social media, there is an urgent need to train health care professionals to use Social Media more effectively and to mobilize them to spread positive messages on the internet. Finally, we should provide additional, easy and accessible information regarding the benefits of vaccinating.

In addition to the concluding points above, the following areas were raised that need to be explored in more detail with necessary actions taken in 2020-21 to achieve improved vaccination coverage, they include:

- ❑ **The introduction of vaccinology courses in all medical and paramedical education programs should be a policy priority.** We need to implement a special course for medical students about vaccinations and the possible adverse events of not vaccinating by examining 20 case scenarios.
- ❑ **We need to better educate and communicate with the general public.** Such as informing children in schools about the basic principles of immunity and the heroes of vaccinology, as well as highlighting to parents the adverse outcomes of not vaccinating for potentially dangerous diseases
- ❑ **HCPs still need evidence-based information in order to overcome vaccination hesitancy but must also learn to tell the personal story of vaccinating.** Not only by publishing lots of facts, reports or stats but also by spreading stories that apply to individuals.
- ❑ **Overcoming HCP Social Media Hesitancy (HCPs are often afraid or worried about social media) this needs to be overcome on the Pro-vax side of the battle.** Anti-vaxxers dominate the space and yet this can easily change if HCPs, who are in general far more trusted in social media than others, try to communicate effectively, using social media to build a network that will be highly trusted,

- ❑ **HCPs should consider adopting a five-step action plan on Social Media that consists of :** 1) sharing a short piece of interesting information or fact, 2) a call to action, 3) tagging relevant other accounts, 4) providing links, images or videos and 5) adding 2-3 hashtags (#). **This five-step action plan can then amplify the Pro-vaccine messages and expand your network of influence.**
- ❑ **There is a need to provide training and build skills among healthcare workers throughout their careers.** Training should not be focused just in vaccinology but also into inter-personal communication to understand the psychological factors that relate to parental fears and concerns.
- ❑ **We need to provide continuous education to medical doctors and classes where they can get updated information about new vaccines and safety, so they can always feel comfortable about vaccination.** Development of training material for medical doctors that would train those who have adopted the wrong attitude towards vaccinations.
- ❑ **Measures need to be put in place in order to counter the disproportionate number of websites that look scientifically credible, but are in fact anti-vax led.** Looking to create websites dedicated to clarifying whether an information provided by another website is accurate or wrong should be considered.

SUGGESTED ACTION PLAN FOR 2020/2021

Target 1

Train and Mobilise HCPs to Engage on Social Media to Fight Misinformation

Need: HCPs, in general, are currently Social Media Hesitant. HCPs are often afraid or worried about social media and this needs to be overcome on the Pro-vax side of the battle. Anti-vaxxers dominate the space and yet this can easily change if HCPs, who are in general far more trusted in social media than other people, try to communicate effectively, using social media to build a network that will be highly trusted and will help them amplify the pro-vaccination message.

Proposed Actions - A series of free-to-view webinars covering:
1. How social platforms work in disseminating information. **2.** What are the do and don'ts where they are working with social

media? **3.** How to react when you face a misinformation issue? **4.** Best practice approaches in disinformation. **5.** How to link their social platforms with an additional trusted source of information **6.** The power of creating videos in YouTube for direct and customized impact against disinformation.

Target 2

Countering the Disproportionate Number of Websites that Look Scientifically Credible, but are Anti-vax Led

Need: The most damaging misinformation on vaccines is often coming from people with medical credentials spreading unfounded fears. There is an urgent need to put measures in place in order to counter the disproportionate number of websites that look scientifically credible, but are in fact anti-vax led. We must better formulate our content and cooperate with the media. How could we become more active, upload content, establish points of information to counteract the "disproportionate" number of websites with misinformation peddled by anti-vax activists.

Proposed Actions - Launching a campaign to adopt a common message to parents across the medical community in order to strengthen the message. Looking to create websites dedicated in clarifying whether an information provided by another website is accurate or wrong.

Target 3

Arm HCPs with the Latest Information on Vaccines to Prepare Them to Actively Counter Misinformation and Advocate Vaccines

Need: To provide continuous education to medical doctors and classes where they can access updated information about new vaccines and safety, so they can always feel comfortable about vaccinations. A need to develop training material for medical doctors that can be used to re-train and update those who have adopted the wrong attitudes towards vaccinations.

Proposed Actions - 1) A Policy Focus Group dedicated to facilitating the introduction of vaccinology courses in all medical and paramedical education programs. We need to implement a special course for medical students about vaccinations and their possible adverse events of not vaccinating by examining 20 case scenarios.

In addition, **2)** The development of free-to-view online training and material for HCPs that can be accessed throughout their careers to counter any HCPs vaccine hesitancy. Targeting those

who have adopted and established wrong and outdated attitudes towards various vaccines, and vaccinations in general.