



REPORT

Content Department

***Anti-vaccination rhetoric online***

## 1. Conclusions

The objective of this report is to analyse how anti-vaccine rhetoric is constructed in audiovisual content disseminated online.

More people than ever now use the internet to find information, including about their health. The web gives us access to content that provides specialised medical knowledge, as well as content that refutes such knowledge.

### Anti-vaccination rhetoric

To estimate the prevalence of anti-vaccination messages online, we performed a quantitative assessment by carrying out two complementary searches on YouTube linked to child vaccination.

In the first we used a neutral search term (with neither positive nor negative connotations), and found that 12% of the top 50 results were against vaccination.

For the second search we used a term with anti-vaccine connotations, which we believe gives a closer result to what people who have misgivings about vaccination would find.

In this case, **anti-vaccination content rises to 40% of the total.**

Based on the results of these searches, we selected 10 audiovisual contents available on video-sharing platforms that are explicitly against vaccination and that have garnered over **1.5 million views** in total. Our analysis reveals the main features of online anti-vaccination discourse, which is constructed through the type of message disseminated and the persuasion strategies used.

## Anti-vaccination messages on online audiovisual content

Anti-vaccination discourse is characterised by the repetition of a series of arguments from various perspectives that converge in denying the opportunity or desirability of universal vaccination, as provided in advanced public health systems.

The most widely repeated argument – found in almost all the content analysed, **90%** – **casts doubt on the safety of vaccines**. This is done by highlighting the alleged toxicity of vaccines, linking them to the onset of various diseases, and suggesting that the purported harmful effects are covered up:

“Do you know that the thing vaccines least contain is microorganisms? They did contain them once upon a time. Now **they are all toxins of the microorganism and foreign substances, some of which would make your hair stand on end.**”

*(Vacunas, peligros y alternativas por Adolfo Pérez Agustí - "Vaccines, dangers and alternatives by Adolfo Pérez Agustí")*

“**The vaccinated population has a 500% higher incidence of chronic illnesses.** [...] These range from tumour illnesses like **leukaemia, lymphoma, bone tumour, brain tumour, allergy illnesses, autoimmune illnesses,** [...] **neuropsychiatric illnesses and neurodevelopment disorders.**”

*(Qué sucede con los no vacunados - Dr. EDUARDO YAHBES - "What's the situation with the unvaccinated - Dr. EDUARDO YAHBES")*

Similarly, in 80% of content, anti-vaccination messages are constructed by questioning **the effectiveness of vaccines**. In particular, they argue that vaccines do not result in immunity, attribute the lower rate of infectious diseases to improved hygiene and living conditions, as well as invalidating them by claiming that they do not provide full protection:

“People get vaccinated for their own benefit. [...] **Herd immunity is simply a lie.** [...] If you want to avoid catching a disease, you get vaccinated yourself, don't think about your neighbour.”

*(ADN HUMANO EN LAS VACUNAS - DRA ISABEL BELLOSTAS - ( ENTREVISTA ) – "HUMAN DNA IN VACCINES - DR. ISABEL BELLOSTAS - (INTERVIEW)"*

“Even the official statistics [...] often say quite simply that out of the vaccinated population 70% haven't had the disease, but the remaining 30% have. **So, what's the point of vaccines?**”

*(Vacunación ¿Un peligroso fraude médico? (con el Dr. Enrique Costa) - "Vaccination - A dangerous medical fraud? (with Dr. Enrique Costa)"*

In addition, half of the contents analysed claim that vaccines are not necessary by **trivialising vaccine-preventable diseases**, describing them as banal or benign:

“There is so much talk about **new cases of measles**, for example. **What's the problem, when measles is a benign disease? Chickenpox is a benign disease** so why do you have to vaccinate against diseases that are benign?”

(*Qué sucede con los no vacunados* - Dr. EDUARDO YAHBES – "What's the situation with the unvaccinated - Dr. EDUARDO YAHBES")

Denying the effectiveness, safety or usefulness of universal vaccination is used as part of a broader rhetoric that questions scientific medicine as a whole. Various arguments are utilised to construct this discourse.

For instance, 60% of the content analysed contains **explicit messages seeking to discredit medical professionals**:

“Much, if not most, of this information comes from highly qualified people, **a lot more qualified than your GP**, I'm talking about **top scientists who are calling into question this disproportionately mass vaccination.**”

(*Vacunas, peligros y alternativas por Adolfo Pérez Agustí* – "Vaccines, dangers and alternatives by Adolfo Pérez Agustí")

Likewise, 70% of the content analysed **suggests alleged alternative treatments** and presents them as safe, such as **vaccine substitutes**:

“The answer is **I do not advise you to get any vaccine whatsoever, be it small or large, or once or seven times. None. None!** [...] If your child had diphtheria and went to the doctor [...] if they are a homeopath or use homeopathy as a healing technique, or use herbs, or use **natural medicine**, I assure you that this person **can treat the diphtheria** your son or daughter has and heal it.”

(*LA FALSA TEORÍA DE LA INFECCIÓN, con Enric Costa* - "THE FALSE THEORY OF INFECTION, with Enric Costa")

While disqualifying scientific medicine, 70% of the content analysed **reinterprets data from various official sources** to support the anti-vaccination theories they propound:

“There's a document, which I am in possession of, which is called **the Pharmacovigilance Bulletin** of Catalonia, i.e. it comes from **the Regional Government of Catalonia** [...]. A study was conducted and concludes that [...] adverse reactions to drugs are a major cause of pathology on serious occasions [...] in this population group, children. [...] In this study [...] **the most frequently notified suspicious drugs were vaccinations, eh? Accounting for 16%, in other words 56**

**cases.** [...] And it states there are very few adverse effects of vaccines [...] because they are not recognised [...] **I'm talking about an official document.**"

*(Comunicado de Dra Lua Català, sobre Vacunaciones y la campaña mediática de TERROR, en junio 2015 - "Statement by Dr. Lua Català, on Vaccination and the media campaign of TERROR, June 2015)*

Lastly, in all of the content analysed, the various reasons given against universal vaccination go hand in hand with a range of claims about **conspiracy theories**, including implications about the vested interests of the pharmaceutical industry and an alleged practice of eugenics linked to vaccines:

"My recommendations yield no profits for pharma multinationals [...]. **Vaccination campaigns**, on the other hand, do **generate a lot of money for multinationals and the whole chain of people involved**, including our public officials."

*(SI AMAS A TUS HIJOS NO LOS VACUNES - "IF YOU LOVE YOUR CHILDREN DON'T VACCINATE THEM")*

### **The anti-vaccination discourse strategy**

In addition to the content of anti-vaccination messages, we also analysed the strategies used to convey messages.

Our analysis shows that the most salient strategy in anti-vaccination rhetoric online is the clear intention of **generating mistrust in vaccination**, primarily by casting aspersions on whether it is safe, effective and/or opportune, in addition to backing conspiracy theories linked to universal vaccination policies.

Furthermore, treatments that have not been scientifically validated are suggested as substitutes for vaccines, thereby discrediting medicine, the medical profession and last but not least scientific paradigm in the process of presenting these therapies.

Denials of scientific reason leads to a second persuasion strategy in anti-vaccination discourse: **appealing to emotions** such as fear, compassion or anger, by using both visual and textual dramatic resources:



10 INGREDIENTES TÓXICOS DENTRO DE LAS VACUNAS

(10 INGREDIENTES TÓXICOS DENTRO DE LAS VACUNAS - "10 TOXIC INGREDIENTS IN VACCINES")

“The **design** of that vaccine [for human papilloma virus] is really **evil**. I'm looking at the photos of the Danish girls, an association of Danish girls. You see all these little blonde girls in wheelchairs, with crutches...”

(ADN HUMANO EN LAS VACUNAS - DRA ISABEL BELLOSTAS - ( ENTREVISTA ) - "HUMAN DNA IN VACCINES - DR. ISABEL BELLOSTAS - (INTERVIEW)" )

This denial of scientific reason and use of emotions is reinforced by **appealing to personal experience and individual cases**; generalising supposed individual cases is used to shore up anti-vaccine arguments. Comments from users (with allegedly real testimonies) and "likes" of the videos are, in this context, a credibility guarantee for people who have misgivings about vaccination:

“I think all vaccines are unnecessary, absolutely all. [...] I can't lie, **this is what I know from experience and from everything I've studied** and researched about this. I inform, as I do for my patients.”

(Comunicado de Dra Lua Català, sobre Vacunaciones y la campaña mediática de TERROR, en junio 2015 - "Statement by Dr. Lua Català, on Vaccination and the media campaign of TERROR, June 2015)

“Vaccines messed me up. Since I was given them when I was little, I started having allergies [...] with symptoms that lasted for several years during my childhood: terrible headaches, memory loss, vomiting, diarrhoea. [...] And since the age of 14 [...] degenerative acne [...]. Bloody awful! That's what vaccines did to me 30 years ago, I don't even want to imagine what today's vaccines do to you.”

(10 INGREDIENTES TÓXICOS DENTRO DE LAS VACUNAS - "10 TOXIC INGREDIENTS IN VACCINES")

Recurring exposure to a series of arguments against universal vaccination shapes a discourse that may generate or fuel mistrust of vaccines, especially amongst those who already have misgivings, by means of strategies such as appealing to emotion and personal experience above scientific reason.

In addition, anti-vaccination rhetoric is reinforced by the dynamics and intrinsic structure of social networks. Firstly, content can be widely disseminated regardless of how true it is, as shown by the amount of views garnered by the content analysed (over 1.5 million for 10 videos). Secondly, algorithms create digital bubbles, which means that vaccine-hesitant people end up seeing predominantly anti-vaccination claims.