‘Humans over herds’: Complementary and alternative medicine (CAM) providers’ individualized approaches to vaccination in Switzerland

Michael Deml
PhD Candidate; Swiss TPH, University of Basel
michael.deml@swisstph.ch ; twitter: @michaeljdeml

First supervisor:
Prof. Nicole Probst-Hensch, PhD; Swiss TPH, University of Basel

Second supervisor:
Prof. Claudine Burton-Jeangros, PhD; Université de Genève

Study principal investigator and co-advisor:
Prof. Dr. med. Philip Tarr, Kantonsspital Baselland, University of Basel

Co-advisor:
Dr. med. Sonja Merten, PhD; Swiss TPH, University of Basel

NRP74: Determinants of Vaccine Hesitancy and Under-Immunization with Childhood and Human Papilloma Virus Vaccines in Switzerland
Goals of the presentation

• To give an overview of the overall NRP74 study design
• To provide a brief review on studies into complementary and alternative medicine (CAM), vaccine hesitancy, and under-immunization
• To give an overview of the qualitative study design
• To share findings about complementary and alternative medical (CAM) provider approaches to vaccinations in Switzerland
NRP74: The Project

• National study, 4 years (2017 – 2021)
• Two research phases: Mixed methods approach
  1) **Qualitative phase** (German and French-speaking CH)
     • Semi-structured interviews
       • Parents
       • Providers (“CAM” and “biomedical”)
     • Observation of medical consultations
     • Discourse analysis: Vaccine information sources and Internet sites
  2) **Quantitative phase** (German, French, and Italian-speaking CH)
     • Telephone survey (PACV15) [1]
     • Additional items based on qualitative phase results
• Year 4 - Intervention
  • With “biomedical” providers
  • Will not seek to implement mandatory vaccination
CAM provider approaches to medicine and to vaccination

Quantitative studies:

• Focus on reasons *why* people use CAM [20]
  • Reasons vary and include: dissatisfaction with biomedicine, satisfaction with CAM encounter, alternative perspectives/views towards biomedicine, CAM providers’ ability to spend more time on their consultations than biomedical providers, and CAM providers’ emphasis on participatory consultations, shared decision-making, and patient-centered approaches

• Seek to determine *who* the people are that use CAM [21]
  • In Switzerland, CAM users are more likely to have a chronic illness or poor health status, be women, be middle-aged, and have attained higher levels of education

• Associate CAM usage and vaccine hesitancy/under-immunization
  • Explained in terms of spirituality as a source of information, intuitive (as opposed to analytic) thinking styles, and openness to new experiences [22]
  • Cannot definitively determine a causal link in this association – might be explained by confounding factors, such as higher income, higher education, or distrust of the medical system [23]
CAM provider approaches to medicine and to vaccination

Qualitative studies

• Explore **epistemological differences** between CAM approaches and biomedical approaches to medicine [24-26]

• Show that CAM is often perceived by patients as being able to “do no harm,” or as being **risk-free** [27]

• Examine how **trust** is developed in the patient-provider interaction and emphasize processes of **shared decision-making** [28-29]

• Find that CAM users and CAM providers have a **symbiotic relationship**:
  - “Vaccine hesitancy and CAM exist and function separately, but when combined, provide each other with ‘resources’ that enable them to thrive together.” [30]
  - Importance of patients’ abilities to exercise agency, evoke “natural” approaches to health, and operate outside of biomedicine, industry, and Big Pharma

• Studies with a specific focus on CAM providers and vaccination are scarce → **What actually happens in the CAM patient-provider interaction?**
  How do providers and patients discuss vaccination?
The Swiss context: Vaccination coverage

- Vaccination is on a voluntary basis; Swiss Federal Office of Public Health (FOPH) makes recommendations and communicates them to the public
- High coverage (depending on the vaccine) which has remained stable (or slightly increased) over the last 20 years
- Generally: French and Italian-speaking cantons > German-speaking cantons
- Swiss Federal Office of Public Health on measles:
  - “Switzerland has only partially reached its objectives in terms of vaccination (…). For instance, flares of measles still occur in parts of Switzerland, taking advantage of locally low rates of vaccination” (FOPH 2017, p. 5).
  - Cases tend to cluster around anthroposophic schools (i.e. Rudolf Steiner, Waldorf) and certain CAM providers
The Swiss context: CAM attitudes, use, and practices

• Favorable attitudes towards CAM (i.e. 25-50% of the population report use and/or expresses positive attitude towards CAM services)
• Often provided by medical doctors with additional CAM training
• Reimbursement through basic mandatory health insurance
  • Doctors who are trained in:
    • anthroposophic medicine
    • Traditional Chinese Medicine/acupuncture
    • Homeopathy
    • phytotherapy
• Supplementary insurance covers other CAM services not provided by medical doctors trained in CAM
  • Non-medical doctors of CAM → undergo training and receive accreditation in order to receive supplementary insurance payments
Qualitative Study Design

- **CAM-providers** (complementary and alternative medicine)
- **Parents of children (childhood and HPV)** Hesitant and non-hesitant
- **Biomedical providers** (associated with the Sentinella network)

- *Qualitative interviews and observations of medical consultations*
  *September 2017 - November 2018, in German- and French-speaking parts of Switzerland*

- Discourse analysis of vaccination information sources
  i.e. Internet websites, Internet forums/groups, books, etc.

- AIM: to better understand why certain parents and providers might be hesitant towards vaccination in Switzerland and how they make vaccination-related decisions and recommendations
Interview Guides with CAM Providers

- Background, training, contextual information about the provider
- Thoughts on vaccination, information sources on vaccinations, benefits and risks, public health and individual choice considerations
- Swiss recommendations and vaccination rates
- Interactions with patients about vaccination
- Questions patients have, time spent on consultations, recommendations about vaccination, etc.
Medical Consultation Observations

Narrative format

The doctor then changed subjects as she walked over to the other side of the examination table to tell the mother that there were scheduled booster vaccinations for today ("rappel des vaccins") and asked if they were going to continue the vaccination schedule that they had agreed on. The mother looked a bit hesitant to say what she was about to say but then mentioned that she had been wondering about the aluminum that was in vaccinations. She looked embarrassed to say that she had seen a homeopathic doctor and that he had been quite adamant in telling the mother that there was aluminum in vaccines. The doctor seemed a bit annoyed that she had to address this question but then she slowly explained that the other provider was correct that there was aluminum in some vaccines. She explained that there was aluminum in vaccines in small amounts so that the vaccinations could correctly prompt the immune system to react and to activate in order to make the necessary antibodies as a reaction to the vaccine. The doctor also then explained that there was another argument about aluminum that says that we are exposed to aluminum in many different ways throughout our lifetime and that the amount in vaccines was not anything to worry about.

The observation:

- What was the reason for the consultation?
- Who initiated the vaccination discussion?
- Was there a certain reason for discussing vaccinations?
  - Regular doctor’s visit?
  - Issue of vaccination specifically brought up by parent?
  - Child or other children ill with a vaccine-preventable disease?
  - Other?
- Which vaccinations were discussed?
  - DTP-HIB-IPV (Diphtheria, pertussis, Haemophilus influenzae, Polio)
  - MMR (measles, mumps, rubella)
  - HPV
  - Other
- How was the discussion regarding vaccinations initiated/lead (by the physician)?
  - Presumptive (i.e., “Today we are going to do some vaccines”)
  - Participatory (i.e., “What do you think about doing vaccinations today?”)
- Did the parent(s) ask any questions about vaccines? What were they?
### Table 1

Characteristics of CAM provider participants

<table>
<thead>
<tr>
<th>Provider Pseudonym</th>
<th>Language Region</th>
<th>Type of CAM Practiced</th>
<th>Medical Doctor</th>
<th>Number of Consultations Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Heffelfinger</td>
<td>Swiss German</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Dr. Füssli</td>
<td>Swiss German</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Welty</td>
<td>Swiss German</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>Dr. Buchman</td>
<td>Swiss German</td>
<td>Traditional Chinese Medicine and Acupuncture</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Ms. Krieger</td>
<td>Swiss German</td>
<td>Naturopathy</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Abegglen</td>
<td>Swiss German</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Kimmig</td>
<td>Swiss German</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Pfyffer</td>
<td>Swiss German</td>
<td>Phytotherapy</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Bär</td>
<td>Swiss German</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Rüegg</td>
<td>Swiss German</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Laurin</td>
<td>Swiss French</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Schmidt</td>
<td>Swiss French</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>Dr. Ferrand</td>
<td>Swiss French</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Jansen</td>
<td>Swiss French</td>
<td>Homeopathic medicine</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>Ms. Beaulieu</td>
<td>Swiss French</td>
<td>Homeopathic medicine</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Brescher</td>
<td>Swiss French</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Dr. Dupont</td>
<td>Swiss French</td>
<td>Anthroposophic medicine</td>
<td>Yes</td>
<td>0</td>
</tr>
</tbody>
</table>

N=17  
N=18
Providers’ nuanced vaccination views and practices: beyond the anti-pro vaccine dichotomy

• Few categorical (i.e. pro or anti) stances about vaccination*
  • Vaccine-by-vaccine, case-by-case perspectives
  • *2 out of 17 providers reported being vocally anti-vaccine
• Doubts and/or concerns about vaccination:
  • Long-term negative effects of vaccines on immune systems
  • unknown long-term effects of aluminum and other additives on the body (particularly the brain)
• Deviation from the FOPH recommendations:
  • Delaying, cherry-picking, vaccine-specific recommendations (i.e. “don’t do the HPV vaccine for children who are 11-14 years old or for boys”), or difference in opinions about monovalent and polyvalent vaccines
Experiential knowledge and evidence-based medicine: critiques of biomedicine and health authorities

Two summative themes:
1) the role of evidence, what types of evidence, and how evidence is considered
   • CAM providers’ vaccination perspectives were framed in terms of their clinical experiences and patients’ vaccination experiences
2) CAM providers’ legitimacy in claims-making, particularly in claims that question the status quo
   • perspectives that diverge from generally accepted consensus on health and illness
The role of evidence

- Experiential framings of evidence: ‘in my experience,’ ‘a colleague told me,’ ‘I know from experience’
- Providers recommended that we take such accounts with a grain of salt as irrefutable proof in favor or against vaccination:

**Dr. Laurin** (anthroposophic doctor) who has patients that are less vaccinated than the norm:

“I know from experience that I have [patients] with less severe asthma. (...) Well, maybe it’s due in part to other things.”
The role of evidence

Ms. Bealieu (homeopathic provider) on treating patients who claim that they had developed adverse reactions after being vaccinated:

“There is what I think and what I see. And now, with 10 years of practice (...), I see that non-vaccinated children are sick much less. That is evidence, all the same!”
The role of evidence

Dr. Dupont (anthroposophic doctor) on the number of vaccine-related symptoms reported by patients throughout his career:

“Since my patients often come for a second opinion [for difficult cases], I see a lot of people who have had problems with vaccines. I have a deformed vision because of this. (…) There might not be a scientific correlation, but [it is important to listen] to people who say, ‘Listen, since I’ve had this vaccine, I don’t feel well. Science should take into account what these people experience, and what they feel.’”
Critiques of biomedicine

- Illness is no longer tolerated in modern society due to its inconvenience.

**Dr. Laurin** (anthroposophic medicine) on Rudolf Steiner’s philosophy about developmental advantages of childhood illnesses:

“Children transform their bodies into what they need through their childhood illnesses.”

**Dr. Dupont** (anthroposophic medicine) on measles:

“We didn’t use to make such a monster out of it.”

**Dr. Kimmig** (homeopathic medicine) on exposing children to infection:

“I always say that we should set up a rubella-hotline. If you have a 5- or 6-year-old daughter, you can call, ‘Hey, is there someone with rubella around here?’ Then, you can go there for a visit, maybe she’ll get infected.”
Critiques of biomedicine

Providers expressed interest in having the Swiss Federal Office of Public Health clearly state potential health risks of vaccines to the public.

Dr. Ferrand (homeopathic medicine) explained this perceived knowledge gap:

“(…) the FOPH’s information is really good. But, when it comes to some of the grey areas, we find ourselves in a type of magma of information that is very, very difficult to sift through. We kind of have the impression that the FOPH and the Vaccination Commission only shows studies that are [unfinished sentence]. There are studies showing there are maybe complications. Scientific honesty would have it so that those studies are also shared so that we could have that specific element. As a result, we must look further than what the FOPH tells us.”
Critiques of biomedicine

• Providers thematically questioned public health arguments about vaccination in the Swiss context.

• During a consultation, Dr. Buchman (TCM and acupuncture) alluded to the potential infectious Other by explaining to a mother:

“there are cases of polio in Egypt, Nigeria, and similar countries, but if you don’t have contact with people from those countries or travel there, the risk of contracting polio [in Switzerland] is very small.”

• Dr. Laurin (anthroposophic medicine) encapsulated these perspectives:

“We now know that there are not two individuals who are exactly the same. However, for me, vaccination comes from the practice of veterinary medicine. They’re now referring to us as herds! (…) That’s not human medicine for me, especially when it’s practiced in a mandatory way.”
"We treat humans, not herds!": A qualitative study of complementary and alternative medicine (CAM) providers’ individualized approaches to vaccination in Switzerland

Michael Deml a, b, Julia Notter b, c, 1, Paulina Kliem b, c, Andrea Buhl b, Benedikt M. Huber d, Constanze Pfeiffer a, b, Claudine Burton-Jeangros c, d, e, Philip E. Tarr b, c, e, f

Show more

https://doi.org/10.1016/j.socscimed.2019.112556

Get rights and content
Emphasizing individualized choices

- CAM providers focused on individual patients, families, and their specific social contexts
- They employed individualized approaches by incorporating:
  1) parents’ pre-existing knowledge and perceptions on vaccinations and vaccine-preventable diseases
  2) parents’ wishes and concerns
  3) Parents’ histories, physical constitution, medical history, and social and family contexts
Emphasizing individualized choices

Dr. Ferrard (homeopathic medicine) on vaccination discussions with parents:

“\textit{I go over [the vaccines] one-by-one. And for each one, I ask [the patients] what type of information they had sought out. What information do they already have? What are their concerns about vaccinations? (...) I tell them the FOPH recommendations. Then, I tell them my information.”}
Emphasizing individualized choices

Observation notes from a consultation with Dr. Buchman (TCM and acupuncture) and a vaccine hesitant mother:

_The mother nodded and took out two sheets of paper covered in handwritten notes. (…) She said that she was unsure if she should vaccinate her daughter and that her husband knew some people who said they had been harmed by vaccinations. They were not sure if this was true, but it made her have doubts. She said she was generally a fearful and careful person, so hearing things like that scared her. (…) Dr. Buchman said she was not against vaccinations but preferred alternative schedules. She also stated that she did not vaccinate during the full moon, or two days before or after, and that she always tested vaccinations “kinesiologically” before administering them._
Emphasizing individualized choices

Observation notes from a consultation with Dr. Buchman (TCM and acupuncture) and a vaccine hesitant mother:

*Dr. Buchman then personalized the discussion by considering kinesiology reactions. With the daughter in the mother’s lap, the doctor applied pressure to the mother’s arms, held at a 90° angle, while her daughter held the vaccine-containing syringes. If the mother’s arms dropped, it meant that the daughter would not tolerate the vaccine. Her arm dropped slightly for the Infanrix® vaccine but not the Boostrix®-Polio vaccine. Dr. Buchman concluded that the mother should elect for Boostrix®-Polio vaccine if she chose to vaccinate.*
Emphasizing individualized choices

A consultation observation with Dr. Schmidt (anthroposophic medicine) and a mother of a 2 month old son shows how he took the family’s social milieu into account:

*The mother spontaneously brought up vaccinations. Seemingly apprehensive and hesitant, she explained, “For vaccines, we will do only the most basic ones. I prefer waiting, and I only want the most important ones.” She was unsure which ones were most important and asked for recommendations.*

*Dr. Schmidt asked if the son went to a nursery. She said that she did not intend to send him. The doctor began explaining the Swiss recommendations, stopping to ask the mother if she had female friends with children. She said that there were no children in her social entourage and that she always asked friends to disinfect their hands before holding her son. The mother glanced at the schedule and again asked about minimum recommendations. He explained that it was difficult to determine and that it was her choice: “It’s up to you to decide.”*
Conclusions & Discussion Points

• The CAM providers included in our study sample tended to frame vaccination discussions in terms of individual choice and personal context with their patients.

• Providers were not categorically opposed to vaccination; rather, they expressed nuanced, vaccine-specific attitudes and argued in favor of patient choice.

• Providers were aware of the professional implications of questioning vaccinations. **Dr. Laurin** (anthroposophic medicine) remarked on how “being anti-vaccine in a university setting is a career killer!”

• Through engagement in dialogue with parents over time, the CAM providers in our sample undertook work that likely addresses some of the complex determinants of **VH**.
  
  • For example, **Dr. Schmidt** (anthroposophic medicine) explained, “I have the impression that if we take the time and explain [vaccination] well, the majority will end up vaccinating. Maybe they vaccinate less, but we can still get them vaccinated.”
Conclusions & Discussion Points

• CAM providers’ individualized approaches to vaccination align themselves with other larger socio-medical trends and provide insight into some of the more complex determinants of VH, particularly as they relate to healthism, risk culture, consumer-driven approaches to healthcare, individualized, patient-centered approaches in clinical practice, incorporating experiential knowledge into decision-making, and maximizing patient agency.

• Individualized approaches to vaccination underscore and exemplify larger tensions of current debates in public health and prompt us to reflect upon the question of the role of individualized approaches to medicine in public health.
Thank you for listening!

Vaccine-skeptical patients and doctors in Switzerland

**Principal Investigator:** philip.tarr@unibas.ch, Tel 061 436 2212

**2017-2021, Transdisciplinary Collaboration:**

Michael Deml, Swiss TPH, University of Basel
Andrea Buhl, Swiss TPH, University of Basel
Lisa Schmid, Paulina Kliem, Kantonsspital Baselland
Constanze Pfeiffer, Sonja Merten, Swiss TPH, University of Basel
Kristen Jafflin, Institute for Sociology, University of Basel
Claudine Burton-Jeangros, Dept. Sociology, University of Genève
Benedikt Huber, Integrative Pädiatrie, Kantonsspital Fribourg
Bernhard Wingeier, Daniel Krüerke, Klinik Arlesheim
Caesar Gallmann, Allg Innere Medizin FMH, Seepraaxis Au/ZH
Peter Carp, Pädiatrie FMH Yverdon
Gisela Etter, Präsidentin SVHA, Allg Innere Med FMH Richterswil/ZH
Christian Schindler, Statistician SwissTPH
Mirjam Mäusezahl-Feuz, Federal Office of Public Health, BAG/OFSP
Suzanne Suggs, Social Marketing, Università della Svizzera Italiana, Lugano
Julia Notter, Kantonsspital Baselland (2017-2018), University of Basel
Andreas Zeller, Universitäres Zentrum für Hausarztmedizin beider Basel
Christoph Berger, Co-Chefarzt, Infektiologie, Kinderspital Zürich, Präsident Eidg. Kommission für Impffragen (EKIF)
22 Medical Masters Students at the University of Basel
References