

Approaches of providers of complementary and alternative medicine to vaccination in Switzerland



Prof. Dr. med. Philip TARR

Co-Chairman University Dept. of Medicine

Chief, Infectious Diseases Service

Director, National Research Program (NRP74) Vaccine Hesitancy

Kantonsspital Baselland, Bruderholz

philip.tarr@unibas.ch Tel. 061 436 2212

Global Challenges in Vaccine Acceptance, Pensières Sept 2018

What does complementary and alternative medicine (CAM) have to do with vaccine hesitancy ?

Doctor-patient relationship/communication: in past 20-30 years, larger sociocultural trends:

→ „postmodern medicine“, „healthism“

- Well informed patients, interested in healthy, natural life style
 - NB: in part promoted by health authorities
 - NB: Switzerland has highest worldwide consumption of „BIO“ food products worldwide [NZZ 2008](#)
- They want „individualized“ recommendations
- They do no longer wish to be passive recipients of orders by „authoritarian“ physicians, but want to be active participants/partners in discussion
- Such patients tend to consult CAM > biomedical providers

[Muir Lancet 1999](#), [Greenhalgh and Wessely Brit Med Bull 2004](#), [Ackerman und Gonzales Annals Intern Med 2012](#)

What does complementary and alternative medicine (CAM) have to do with vaccine hesitancy ? -- 2 --

- 25-50% of Swiss residents report that they use CAM

Wolf Compl Med Res 2006, Simoes Wüest JCAM 2014, Klein PLOS One 2015

- Perspectives of parents who use CAM are being increasingly studied in last years

→ CAM usage and vaccine hesitancy are epidemiologically and sociologically linked

Salmon Hum Vacc 2008

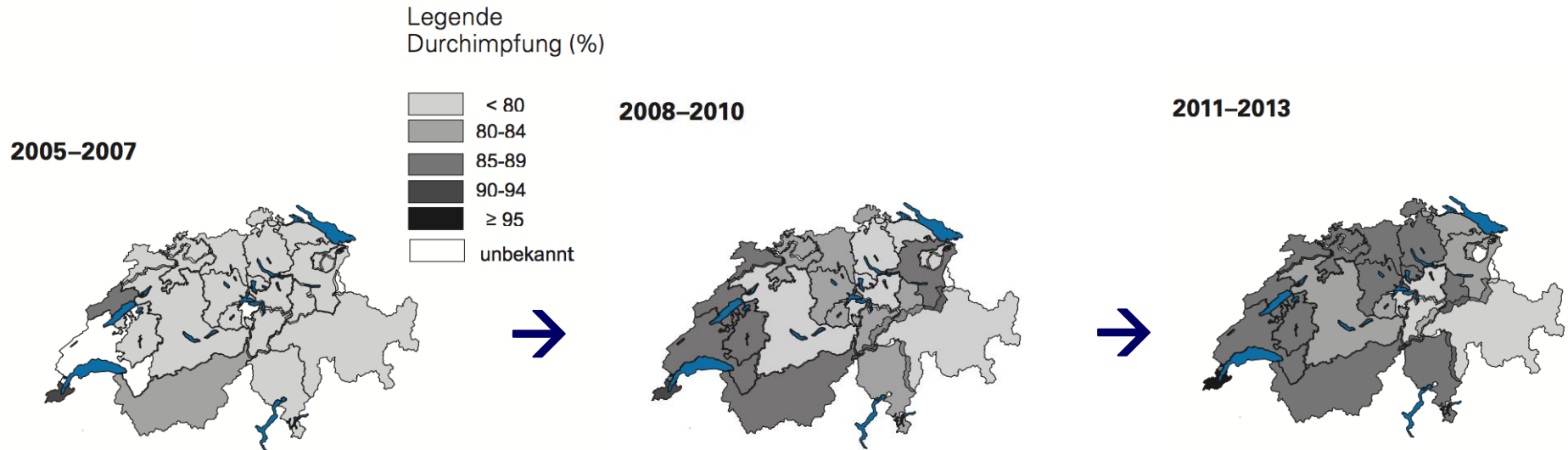
Zuzak SMW 2008

Peretti-Watel PLOS Curr 2015

Browne PLOS One 2015

Attwell Social Sci Med 2018

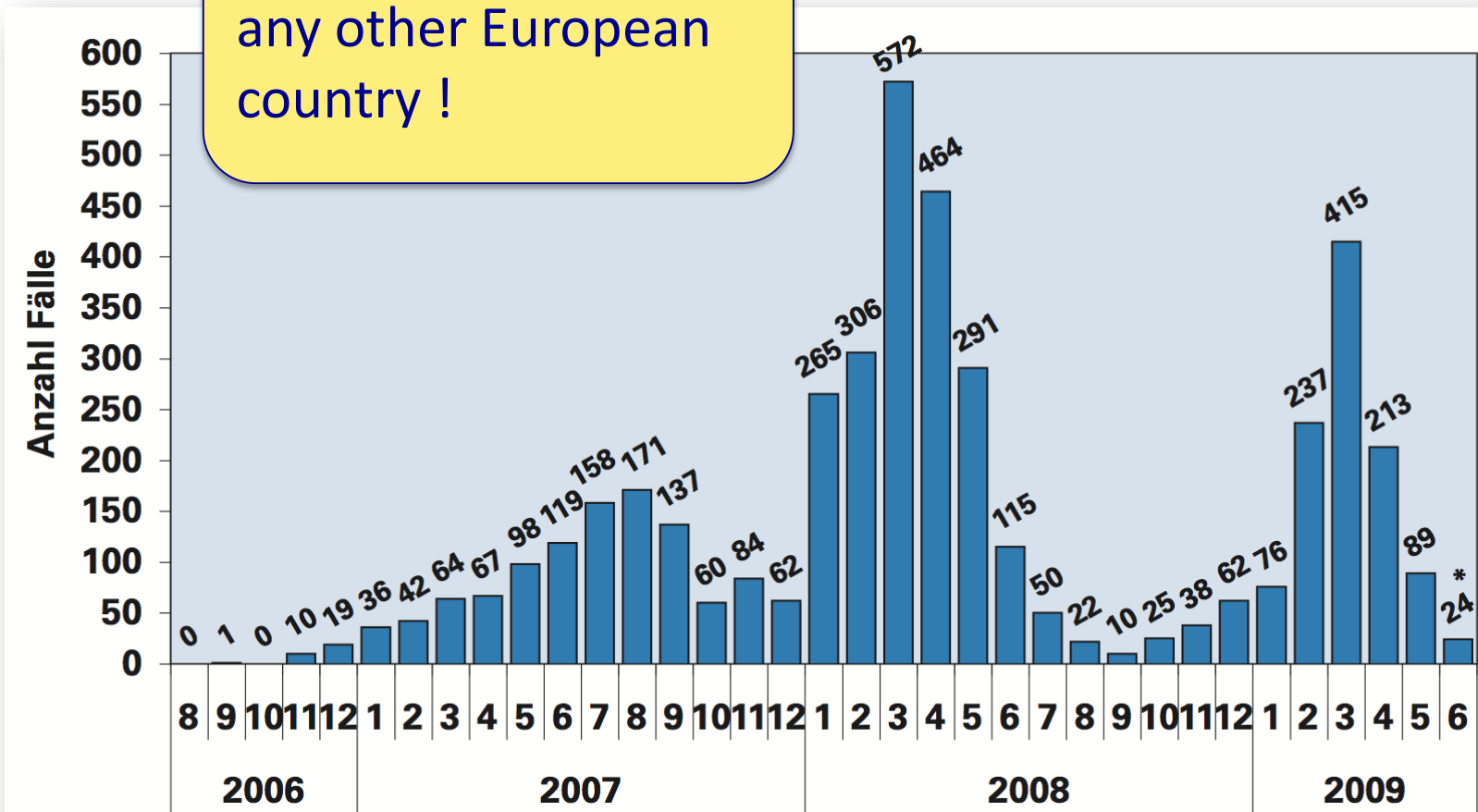
On a national level: Childhood vaccination rates are high and they are increasing in CH



Measles vaccine, 2 doses at age 2 - BAG Bulletin 28, 2015

Measles Epidemic in CH: >4300 cases, 2006 – 2009

By far more than in any other European country !



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Bundesamt für Gesundheit BAG

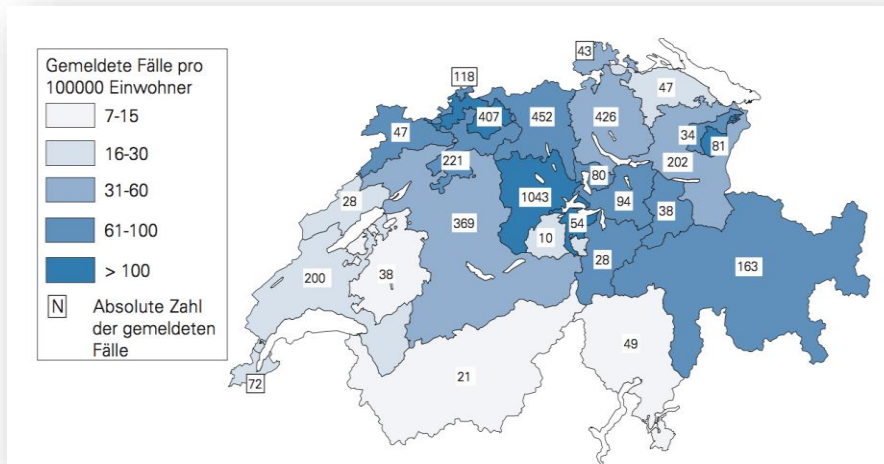
Kantonsspital
Baselland

BAG Bulletin 27, 2009



Universität
Basel

Measles Epidemic 2006-2009: Local clusters, large cantonal differences in incidence



Rudolf Steiner School Basel:
44% MMR vaccination rate
(93-95% necessary to prevent
measles outbreaks)

School physician Dr. E. 2013

“Individual” vaccination schedules are not rare in CH

They cluster around local complementary/alternative medicine (CAM) physicians, anthroposophical institutions (Rudolf Steiner schools)

- **Selective vaccination** (some vaccines but not others)
- **Later** than recommended by public health authorities
- **Not** vaccinated at all (a minority)

Vaccine hesitancy: A growing challenge for immunization programmes

News release



EPA/C.J. Gunther

WHO Call to Action 2015:

- 1) Measure prevalence of vaccine hesitancy
- 2) “**Strong need**”: Talk with vaccine-hesitant persons and understand their motivations

WHO SAGE working group on vaccine hesitancy 2014; Eskola Vaccine 2015, WHO VACCINE Supplement issue August 2015

National Research Program NRP74 2017-2021: Vaccine hesitancy among parents, young adults and physicians in Switzerland

Michael Deml, Swiss TPH, University of Basel

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, Chief, Integrative Pediatrics Kantonsspital Fribourg

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Caesar Gallmann, General Internal Medicine, Seepraxis Au/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

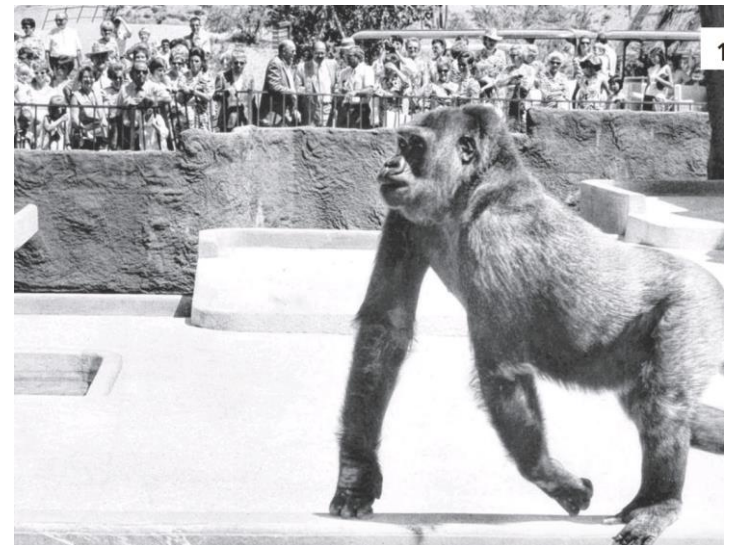
Andreas Zeller, Universitäres Zentrum für Hausarztmedizin beider Basel

Christoph Berger, Co-Chefarzt, Infektiologie, Kinderspital Zürich, president, Swiss Federal Vaccination Commission (EKIF)

Study Design

1) Key concept: Transdisciplinary Study Team that includes CAM

- Sociology, Anthropology, Infectious Diseases, Pediatrics, Complementary and Alternative Medicine (**CAM**), General Family Medicine, Federal Office of Public Health, SwissTPH
- We don't want to be «external» observers of CAM
 - who study the «opponents» who are against vaccines
 - who have a knowledge deficit
 - who are **wrong**



Our study's approach:

We want to learn from CAM providers :

What do CAM providers do right that 25-50% of population consult them ?

- Based on such knowledge, we can begin to better understand vaccine hesitancy and probably design communication and training interventions aimed at biomedical providers



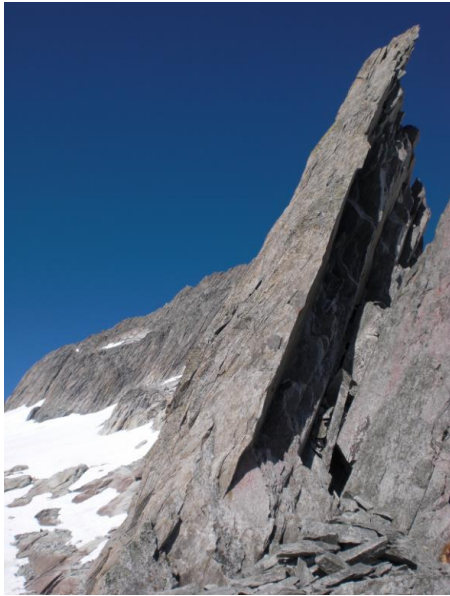
We conduct our research together with CAM physicians

- We have included 3 Swiss CAM physicians in our study
- They participate in our research meetings
- For symbolic reasons, we hold all our research meetings at CAM institutions (Klinik Arlesheim, Integrative Pediatrics Unit, Cantonal Hospital Fribourg)
- CAM help us recruit additional CAM physicians to the study
- We consult them and include them as co-authors on our manuscripts

Personal attitudes and motivations that facilitate this research

I've been living in vaccine-hesitant social networks for years

- A number of CAM physicians know me personally and know that I do not want to harm them
- Not interested in introducing mandatory vaccination in Switzerland



Hiking, Mountain climbing
since age 14



2 daughters who go to
Rudolf Steiner School
(**NB: fully vaccinated
+ Hep A, B, Influenza**)



Professional Baroque
musician since age 10

How did we convince CAM providers to work with us ?

- I have built a reputation over the years that I am genuinely interested in learning from CAM, working together with them, not marginalizing or belittling them
- CAM communication styles tends to be participatory than presumptive ([Opel Pediatrics 2011](#)) – I am genuinely interested in this communication style
- One of my friends from medical school practices CAM → when we submitted the grant, we had already a small network of 4 CAM physicians interested in participating

What can we learn from CAM ?

- Over the years biomedicine has adopted many CAM concepts. CAM physicians have been saying for decades that.....
 - antibiotics cause ecological collateral damage (they kill normal flora of protective bacteria) → since 2011 this is mentioned in US urinary tract infection guidelines *Gupta IDSA Clin Infect Dis 2011*
 - you can/should treat most patients with viral respiratory infections (bronchitis, sore throat, including „strep throat“) without antibiotics
NL Guidelines: Dagnelie Huisarts Wet 1990, SIGN Scottish Guidelines 2010, NICE UK guidelines 2018
 - you can treat most patients with uncomplicated bladder infections without antibiotics (but 2-6% may go on to develop a kidney infection)
Gagyor BMJ 2015, Kronenberg BMJ 2017, Vik PLOS Medicine 2018

What CAM seem to be particularly good at (and an important reason that patients consult them):

→ ***When does a patient with a viral respiratory infection leave the doctor's office satisfied and without an antibiotic ?***

- Accumulating evidence that **patient satisfaction** does not depend on receiving an antibiotic prescription....
- ... *but on the feeling*
 - *that I was taken seriously*
 - *that the doctor took enough time with me*
 - *that they explained the illness/vaccine*
 - *that I understood the next steps/the treatment/follow-up*

Brody Med Care 1989, Sanchez-Menegay JGIM 1992, Hamm J Fam Pract 1996, Mangione-Smith Pediatrics 1999 + Arch Ped Adol Med 2001, Hong Am J Med 1999, Shapiro Clin Ther 2002, Gonzales R JAMA 2003, Ong Ann Emerg Med 2007, Edgar JAC 2009, Li F Family Med 2009

Transdisciplinary Study Team

- Sociology, Anthropology, Infectious Diseases, Pediatrics, Complementary and

Since we will be designing a communication intervention in year 4 of the study, it makes sense to include CAM physicians as co-authors on HPV review articles and thus to learn from CAM already today

- how to communicate on the topic of vaccines
- with vaccine hesitant physicians as audience in mind

Background for Planning + Implementing an Intervention (2020-2021)

- Designed at improving vaccine communication and counseling by (biomedical ?) physicians → will submit grant for randomized controlled trial

Qualitative Research – Study participants

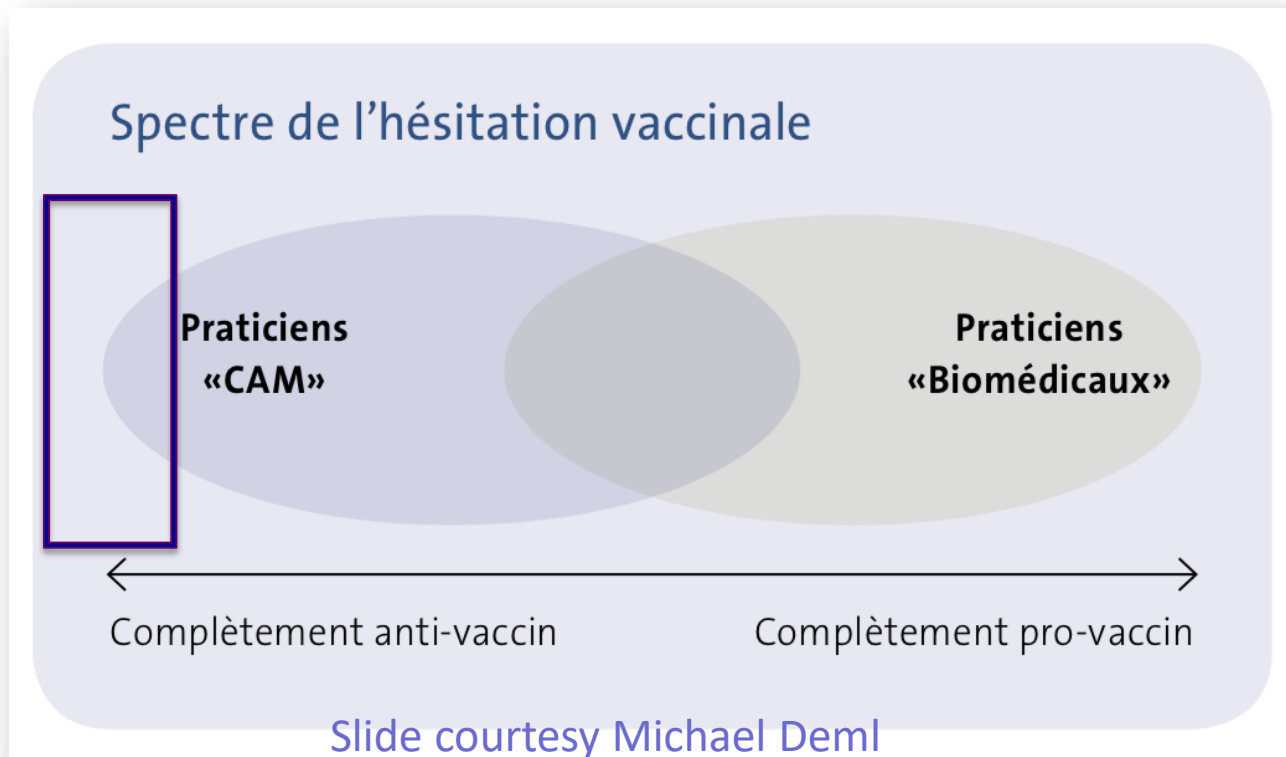
Providers	Romandie	Deutschschweiz	Total
Biomedical*	11	9	20
CAM*	7	8	15
Total	18	17	35

Parents	Romandie	Deutschschweiz	Total
No vaccine hesitancy; vaccine adherence	2	4	6
Expressed vaccine hesitancy	10	10	20
Total	12	14	26

Medical Consultation Observations	Romandie	Deutschschweiz	Total
Biomedical*	4	5	9
CAM*	10	4	14
Total	14	9	23

Qualitative Research – Preliminary Results:

1) No simple dichotomy pro-vaccines vs anti-vaccines



Certain strongly vaccine-hesitant providers are not participating in our study

- How do we know this ?
- We've received quite detailed emails from some providers, explaining to us why they're not participating, e.g. :

"I don't share 2 central concepts of your study:

- a) that vaccines are safe
- b) that goal should be to vaccinate everyone

Some CAM providers are reluctant to work with us

They are concerned

- that we're doing "espionage" for the health authorities
- in order to gather data that will be held against them
- in order to introduce vaccine mandates in Switzerland



Preliminary qualitative results:

2. CAM providers' perspectives on vaccination in general

- Not categorically opposed to vaccination
 - Hesitancy/acceptance spectrum
 - Variety and range of perspectives
- Position themselves as providers who reflected critically about the necessity of individual vaccines for each one of their individual patients.
- In part divergent views from biomedicine on illness and its effects on body
 - e.g. measles → "benign" childhood illness
- More likely to take personal experience into account as evidence about the risks of vaccination

Preliminary qualitative Results:

3. CAM providers and vaccination in Switzerland

- Frame Switzerland as a “safe space”
 - low probability of contracting certain vaccine-preventable infections.
 - in case of vaccine-preventable infection → Swiss health system adequately prepared to manage them
- Question the necessity of Swiss vaccination recommendations and mass vaccination policies advanced by public health institutions: *“We treat humans, not herds!”*
 - public health approaches to vaccination might not necessarily be justified and fail to take into account individual patients, their contexts, and their wishes

Preliminary qualitative Results:

4. CAM physicians tend to emphasizing individual patient choice

- Incorporating patient **knowledge** about vaccination into discussion
- Incorporating patient **wishes** into discussion
- Incorporating patient **social context** into discussion
- Incorporating **general health and constitution** of child into vaccination decisions
- **Providers' perceived role in vaccination decision**
 - accompany the parents in their decision-making
 - do not necessarily make any vaccine recommendations to patients !

Quantitative Research – Telephone Interviews

- 1) Parents with a child 0-11y (childhood vaccines; n=1350)
- 2) Young men 15-26 and young women 15-21 (HPV vaccine; n=722)

Recruitment in biomedical and CAM offices*

- Decision against recruitment of a representative population sample via the Federal office of statistics
 - We prefer having the link patient-provider
 - We prefer performing interviews with patients personally recruited

Quantitative Research – Telephone Interviews

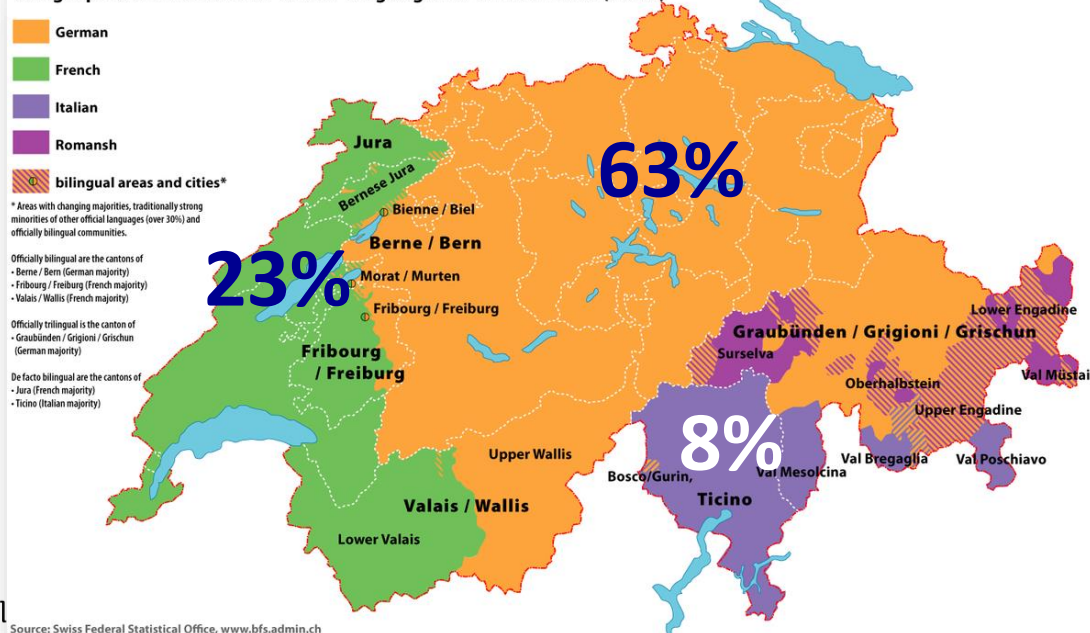
- 1) Parents with a child 0-
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Recruitment in biomedical

- Decision against recruitment
- Federal office of statistics
- We prefer having the
- We prefer performing

- French speaking Switzerland
(as of 23.9.18: 7 biomedical, 12 CAM)
- German (18 biomedical, 21 CAM)
- Italian speaking Switzerland (5
biomedical, 5 CAM)

Geographical distribution of the languages of Switzerland (2000)



Quantitative Research – Telephone Interviews

- 1) Parents with a child 0-11y (childhood vaccines; n=1350)
- 2) Young men 15-26 and young women 15-21 (HPV vaccine; n=722)
- 3) Recruited in biomedical and CAM offices in French, German, Italian speaking Switzerland
- 4) Measure Vaccine hesitancy: Administer PACV (Parent attitudes about childhood vaccines) Opel 2011, 2013
- 5) Sociodemographic variables
- 1) Capture vaccination history in order to correlate verbally expressed vaccine hesitancy vs. actually delayed or omitted vaccines

Quantitative Research – Telephone Interviews –2 –

Additional questionnaire items

- 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]

Summary:

- 1) In order to understand vaccine hesitancy we think we need to go to vaccine-hesitant patients and physicians and talk with them
- 2) Concept of learning from CAM, including them in our research team to gain deeper understanding of their vaccination concepts
- 3) Use insights gained from CAM in order to design communication interventions focused on vaccine hesitancy

Thank you !



Smarter Health Care
National Research Programme

Michael Deml, Swiss TPH, University of Basel

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Kantonsspital Baselland

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Präsident Eidg. Kommission für Impffragen (EKIF)



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Centre de pédiatrie intégrative



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