

Measles in Switzerland – progress made, but communication challenges lie ahead

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Now in *Swiss Medical Weekly*, Richard and colleagues from the Swiss Federal Office of Public Health (FOPH) provide a comprehensive report on measles epidemiology in Switzerland over the past 20 years [1]. In 2007, Switzerland was the country with the highest measles incidence in Europe by far. Since then, measles cases have decreased considerably (by 94%). This prompted the World Health Organization to conclude that no endemic measles transmission occurred in Switzerland in 2016–2017. Thus, the Swiss measles situation has dramatically improved, in the setting of an already successfully implemented national measles elimination strategy [2], and without any vaccine mandates. Still, more work needs to be done if these favourable trends are to be maintained. For example, Richard and colleagues note that measles vaccination rates vary markedly between Swiss states (cantons). Only a minority of cantons have achieved >90% coverage, and most remain below the target rate of 95%. This has allowed further measles epidemics to occur in Switzerland in 2019.

Do we need mandatory vaccination to increase immunisation rates? One could easily have concluded so, given the intense media coverage accompanying recent measles outbreaks in Switzerland. Some politicians have even suggested coercive measures, such as fining parents who do not have their children vaccinated against measles, as a possible response to not meeting coverage targets [3]. Also, neighbouring France and Italy decided in 2017/8 that vaccine mandates are indispensable to address “vaccine hesitancy”, a social phenomenon of seemingly increasing prevalence that is feared to lead to decreasing vaccination rates. In Germany, the health ministry is now preparing to introduce vaccine mandates. These developments have stimulated professional groups specialising in evidence-based medicine [4], general medicine [5] and, importantly, in both homeopathy [6] and anthroposophical medicine [7, 8], to produce statements arguing against mandatory vaccines. Each of these statements is nuanced, but clearly express favourable vaccination attitudes and makes a strong case against alarmism and for more patient-oriented discussions of all aspects of vaccination. Recent editorials in major Swiss newspapers have also insightfully argued against compulsory vaccines [9, 10].

Insufficient immunisation rates are not all due to vaccine hesitancy. Even in Switzerland, limited access to vaccines remains an issue. For example, human papilloma virus (HPV) vaccination rates among 16-year old young women are on average 51% where the vaccine is offered through school vaccination programmes, but only 37% in areas without such programmes [11]. In these areas, the stance seems to be that vaccines are a personal matter between individuals and their physicians, that is, the government should not interfere [12]. This needs to change; all cantons should make all recommended vaccines more easily available to the populations for which they are recommended.

Vaccine mandates are ethically problematic [13] and there is no legal basis for introducing mandatory vaccination in Switzerland outside of major epidemics. Most importantly, data suggesting that vaccine mandates are effective are surprisingly scanty [14]. Indeed, there is now experimental evidence that mandates make people angry and may actually reduce their future intentions to vaccinate [15]. Mandates neither remove vaccine access problems nor address the crucial issues underlying vaccine hesitancy. For example, many physicians have insufficient time and knowledge for high quality vaccine counselling – it may be this combination of factors that contributes to some physicians themselves being vaccine hesitant [16, 17].

For each of these reasons, the FOPH is correct not to pursue any vaccine mandates in Switzerland, and to instead focus on removing access barriers and improving vaccine communication. A majority of adults in Western countries still is comfortable with following official vaccine recommendations and still regards their physicians as the most trusted vaccine information source [16, 18, 19]. But health authorities and some physicians tend to struggle when it comes to dealing with patients who wish to take an active, self-responsible role in health decisions shared with their provider, and with parents who have trouble making sense of the vast and contradictory vaccine information on the internet. Such parents are less receptive to traditional vaccination messaging used by physicians and authorities, which states that vaccines are safe and effective. These parents tend to favour “individualised” vaccine plans they sometimes develop together with physicians specialising

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in complementary and alternative medicine (CAM) who they have come to trust.

Still, it will be crucial that physicians learn how to engage with these individuals because 25–50% of Swiss report seeing CAM providers [20–22], and because the merits of personalised, patient-oriented health care are increasingly well documented [23, 24]. This is what many patients increasingly expect from their physicians. In the setting of our ongoing NRP74 National Research Programme on vaccine hesitancy [25], we have gained a surprisingly favourable picture of the work of CAM physicians: by discussing vaccines in a non-threatening way with parents, by considering their patients' individual information needs and vaccine concerns, CAM physicians seem to be filling an important gap that is not addressed by the traditional, public health oriented vaccine discourse [26]. We need to abandon the widely held notion that all providers of CAM are sceptical or opposed to vaccination altogether. The published literature and our research confirm that the vast majority of vaccine-hesitant patients end up vaccinating [26]. In summary, our emerging work hypothesis is that CAM physicians effectively address vaccine hesitancy by responding to the communication needs of vaccine-hesitant persons who represent a large minority of the population, approximately 25–35% of patients in Western countries [27, 28]. By learning from CAM physicians, we could improve the quality of our vaccination counselling, and health authorities should be able to avoid unnecessary vaccination mandates in Switzerland.

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References

- Richard J-L, Mäusezahl M, Basler S, Eckert N. Approaching measles elimination in Switzerland: changing epidemiology 2007–2018. *Swiss Med Wkly*. 2019;149. doi: <http://dx.doi.org/10.4414/smw.2019.20102>.
- Bundesamt für Gesundheit BAG OFSP. Nationale Strategie zur Masernelimination. <https://www.bag.admin.ch/bag/de/home/strategie-und-politik/nationale-gesundheitsstrategien/nationale-strategie-masernelimination.html>
- TheLocal.ch. Swiss MPs call for fines for parents who fail to vaccinate kids against measles. 8 May 2019. <https://www.thelocal.ch/20190508/swiss-mps-call-for-fines-for-parents-who-fail-to-vaccinate-kids-against-measles-mmr-anti-vaxxer>
- Deutsches Netzwerk Evidenzbasierte Medizin eV EbM-Netzwerk. Impfpflicht versus informierte Entscheidung - Perspektive der Evidenzbasierten Medizin. 2 May 2019. <https://www.ebm-netzwerk.de/pdf/stellungnahmen/stn-impfen-20190502.pdf>
- Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin DEGAM. DEGAM-Positionspapier zur Impfpflicht. 2 May 2019: https://www.degam.de/files/Inhalte/Degam-Inhalte/Ueber_uns/Positionspapiere/DEGAM_Positionspapier_Impfpflicht_final.pdf
- Schweizerischer Verein Homöopathischer Ärztinnen und Ärzte. Stellungnahme zu den Impfungen - Schweizerischer Verein Homöopathischer Ärztinnen und Ärzte (SVHA). 2 May 2019. www.svha.ch/uploaded/files/Stellungnahme_Impfungen_2019.pdf
- Vereinigung anthroposophisch orientierter Ärzte in der Schweiz (VAOAS). Stellungnahme der VAOAS zu Impfungen. 5 May 2019. https://vaos.ch/wp-content/uploads/2019/05/vaos_stellungnahme_impfungen.pdf
- International Federation of Anthroposophic Medical Associations (IVAA). Anthroposophic Medicine Statement on Vaccination. 15 April 2019. <https://www.ivaa.info/latest-news/article/article/anthroposophic-medicine-statement-on-vaccination/>
- Niederer A. Überzeugen ist besser als zwingen: Ein Impfpflichtorium ist unverhältnismässig. *Neue Zürcher Zeitung* 9 May 2019. <https://www.nzz.ch/meinung/masernbekaempfung-ueberzeugen-ist-besser-als-zwingen-ld.1479887>
- Schuler E. Ein Impfwang wäre verheerend. *Tagesanzeiger* 17 April 2019. <https://www.tagesanzeiger.ch/schweiz/standard/ein-impfwang-waere-verheerend/story/27818751>
- Lang P, Sinniger P, Spaar A, Born R, Hatz C. Evolution of the HPV vaccination coverage in Switzerland, 2008–2016. Poster 4441, presented at the Swiss Public Health Conference 2017, Basel 22–23 November 2017. https://sph17.organizers-congress.org/frontend/index.php?page_id=4145&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=4441&hash=925078cf906fe3575968a0d451fd6a1e106903fb18506bfe4
- Masserey Spicher V. Faktoren, welche Unterschiede in der Durchimpfung zwischen Kantonen in der Schweiz erklären: Ergebnisse der FE-VAC-Studie (2014–2015). *BAG Bulletin*. 2018;9:12–21.
- Vermeersch E. Individual rights versus societal duties. *Vaccine*. 1999;17(Suppl 3):S14–7. *PubMed*.
- MacDonald NE, Harmon S, Dube E, Steenbeek A, Crowcroft N, Opel DJ, et al. Mandatory infant & childhood immunization: Rationales, issues and knowledge gaps. *Vaccine*. 2018;36(39):5811–8. doi: <http://dx.doi.org/10.1016/j.vaccine.2018.08.042>. *PubMed*.
- Betsch C, Böhm R. Detrimental effects of introducing partial compulsory vaccination: experimental evidence. *Eur J Public Health*. 2016;26(3):378–81. doi: <http://dx.doi.org/10.1093/eurpub/ckv154>. *PubMed*.
- Verger P, Fressard L, Collange F, Gautier A, Jestin C, Launay O, et al. Vaccine Hesitancy Among General Practitioners and Its Determinants During Controversies: A National Cross-sectional Survey in France. *EBioMedicine*. 2015;2(8):891–7. doi: <http://dx.doi.org/10.1016/j.ebiom.2015.06.018>. *PubMed*.
- Paterson P, Meurice F, Stanberry LR, Glismann S, Rosenthal SL, Larson HJ. Vaccine hesitancy and healthcare providers. *Vaccine*. 2016;34(52):6700–6. doi: <http://dx.doi.org/10.1016/j.vaccine.2016.10.042>. *PubMed*.
- Benin AL, Wisler-Scher DJ, Colson E, Shapiro ED, Holmboe ES. Qualitative analysis of mothers' decision-making about vaccines for infants: the importance of trust. *Pediatrics*. 2006;117(5):1532–41. doi: <http://dx.doi.org/10.1542/peds.2005-1728>. *PubMed*.
- Brown KF, Long SJ, Ramsay M, Hudson MJ, Green J, Vincent CA, et al. U.K. parents' decision-making about measles-mumps-rubella (MMR) vaccine 10 years after the MMR-autism controversy: a qualitative analysis. *Vaccine*. 2012;30(10):1855–64. doi: <http://dx.doi.org/10.1016/j.vaccine.2011.12.127>. *PubMed*.
- Wolf U, Maxion-Bergemann S, Bornhöft G, Matthiessen PF, Wolf M. Use of complementary medicine in Switzerland. *Forsch Komplement Med*. 2006;13(Suppl 2):4–6. doi: <http://dx.doi.org/10.1159/000093488>. *PubMed*.
- Simões-Wüst AP, Rist L, Dettling M. Self-reported health characteristics and medication consumption by CAM users and nonusers: a Swiss cross-sectional survey. *J Altern Complement Med*. 2014;20(1):40–7. doi: <http://dx.doi.org/10.1089/acm.2012.0762>. *PubMed*.
- Klein SD, Torchetti L, Frei-Erb M, Wolf U. Usage of Complementary Medicine in Switzerland: Results of the Swiss Health Survey 2012 and Development Since 2007. *PLoS One*. 2015;10(10):. Correction in: *PLoS One*. 2015;10(12):. doi: <http://dx.doi.org/10.1371/journal.pone.0141985>. *PubMed*.
- Holt D, Boudier F, Eleumuwa C, Gaedicke G, Khamesipour A, Kisler B, et al. The importance of the patient voice in vaccination and vaccine safety—are we listening? *Clin Microbiol Infect*. 2016;22(Suppl 5):S146–53. doi: <http://dx.doi.org/10.1016/j.cmi.2016.09.027>. *PubMed*.
- Evangelatos N, Satyamoorthy K, Brand A. Personalized health in a public health perspective. *Int J Public Health*. 2018;63(4):433–4. doi: <http://dx.doi.org/10.1007/s00038-017-1055-5>. *PubMed*.
- Tarr PE, Berger C, Zeller A, Burton-Jeangros C. Vaccine-sceptical patients and doctors in Switzerland. <http://www.nfp74.ch/en/projects/out-patient-care/project-tarr>
- Deml MJ, Notter J, Kliem P, et al. “We treat humans, not herds!”: A qualitative study of complementary and alternative medicine (CAM) providers' individualized approaches to vaccination in Switzerland. *Social Science and Medicine*. 2019 (in revision).
- Bundeszentrale für gesundheitliche Aufklärung, Köln. Elternbefragung zum Thema “Impfen im Kindesalter” - Ergebnisbericht. <https://www.bzga.de/forschung/studien-untersuchungen/studien/impfen-und-hygiene/elternbefragung-zum-themaimpfen-im-kindesalter/>
- Bundesamt für Gesundheit BAG OFSP. Masernimpfung in der Schweiz im 2012: Resultate einer nationalen Bevölkerungsbefragung zum Thema Masern. *BAG Bulletin*. 2013;17:278–83.