

SUMMARY REPORT

While studying at the Faculty of Medicine, we are witnessing a strong opposition to vaccination, especially on social networks and other online spaces. Students are finding that both, the trust in the profession of medicine as well as the trust in physicians is approaching a critical point. We refused to stay passive, instead deciding to contribute as much as we could.

We gathered statistical data from the National Institute of Public Health of Slovenia and combined with the knowledge we gained at the Clinic for Infectious Disease at University Clinical Centre Ljubljana, realised that our immunization rates are steadily decreasing and that collective immunity is not insured anymore for certain infectious diseases (especially for mumps, measles and rubella).

Unfortunately the responsible institutions and the government have neglected their responsibility for advocacy of public health through vaccination for far too long.

The only one who were fighting against the dropping rates of vaccination coverage were physicians, especially pediatricians. The whole health system including medical workers is overburdened and can not be the only one in the country fighting for vaccination. Students from Medical Faculty of Ljubljana saw the pediatricians struggling and decided to help.

We noticed another enormous deternment in public outreach: the institutions, the government and older pediatricians, who are most likely to stand up for vaccination as they have seen the frightening effect preventable childhood illnesses, are unfamiliar with the quickly evolving world of social media and the general platform the world wide web provides; yet, those are the spaces most claimed by anti vaxxers.

Their propaganda is mostly shared on Facebook and blogs and very much available to impressionable young parents in the age of technology, yet credible information on vaccination in Slovene is very hard to come by when searching for information on vaccination on the internet. Action through the media, via the Internet and social media requires a lot of time and knowledge of the problem, as well as quick follow up of new arguments and issues regarding vaccination.

We've seen our advantage here as a generation of technology, being intimately familiar with the latest trends in social networking and able to quickly and efficiently operate data. On our platform we provide trustworthy information on vaccination, interesting and fun facts about immunology and related fields and reliable, evidence-based answers for anyone seeking advice on anything relating to vaccination or infectious disease.

Our main goal is to rise general public's awareness of importance of vaccination and help to increase vaccination rate to a previously already achieved level.

After a few months of designing the project, we have set up goals and objectives in order to achieve our vision.

We divided our activities into several groups.

1. Educating future and young parents
2. Educating high school students
3. Informing the students of medicine about the importance of the seasonal flu vaccination
4. Collaboration with the Faculty of Medicine in Maribor
5. Cooperation with Municipality of Ljubljana
6. Educating future teachers - students of Faculty of Education in Ljubljana
7. Workshops at Secondary school for health care
8. Workshops for first and second year students of Faculty of Medicine in Ljubljana
9. Congress for medical students of Faculty of Medicine in Ljubljana

10. Advocacy

11. International activities

We started with educating future parents and parents with young children. Our methodology are 60 minutes long lectures at Health Centers of Ljubljana about infectious diseases and importance of vaccination that finish with a discussion where the parents have the opportunity to ask anything they want about this topic to resolve their concerns. The organization, content and performance of the lectures is in our hands and we are currently booked for a year in advance in health centers across Ljubljana. Attending the lectures is encouraged for all parents and mandatory for fathers who wish to witness the birth in the delivery room.

The next phase was to expand our activities to High schools in October of 2016. It is important for young adults as future parents to be aware of vaccination issues that we are dealing with on everyday basis. We got in touch with teachers or principals of high schools and offered to conduct workshops in biology classes. Our project is cooperating with five high schools Ljubljana and we will expand to secondary nursing schools as well. Workshops are 90 or 45 minutes long, depending on the available time during the school schedule.

Another part of our project was to start an awareness campaign about the importance of seasonal flu vaccination for health care workers, as it is not mandatory and the coverage is extremely poor even in hospitals.

With the help of Faculty of Medicine in Ljubljana, Clinic of Infectious Diseases in Ljubljana and National Institute of Public Health of Slovenia, we organize free flu vaccinations for all students of the Faculty of Medicine at the University of Ljubljana.

We succeeded in vaccinating over 60% of the students, compared to 50% in the years before and 14% of all health

care workers. We plan to continue with this activity in the upcoming years, hoping to raise the coverage by 10% each year.

One of the actions we prepared was a congress for medical students at the Faculty of Medicine in Ljubljana. We invited different scientists, physicians, and infectious disease specialist to lecture the participants. We also shared the knowledge we gained during the project activities. We filled the lecture hall in less than 2 hours after opening the registration and the congress was attended by over 300 people, some of whom also came from other faculties.

In a first year of starting this project we have acquired enough experience and impressions to make a step further. To make a breakthrough in solving the problem of declining vaccination rates, we had to reach out to the broader public and make ourselves visible through media by addressing the government and public health institutions in Slovenia. We have also concluded that there are needed significant changes in current laws regarding infectious diseases and vaccination.

In Slovenia the current law states that ten vaccines are mandatory and if parents refuse to vaccinate without a defined medical reason, they receive a fine. But the problem we are facing is that the inspection does not carry out their work and parents with unvaccinated children do not feel that there are any consequences for their decision. Also, the pediatricians are obligated to report the parents who refuse to vaccinate, which just adds more pressure and more bureaucratic burden on already overworked doctors. Many doctors feel this obligation damages the trusting relationship they try so hard to build with the parents.

Petitioning politicians, legislators and decision makers is one of the key aspects of our project. By bringing attention to the fact that vaccination coverage is indeed falling and to the very tangible threat this poses to public health, we are able to contribute to implementation of change to our legislature. Our advocacy efforts bore fruit: recently, we petitioned the Ministry of Health on new guidelines for cancer prevention. They decided to include our suggestions related to vaccine preventable cancers into the new guidelines, guaranteeing financial resources and promotion of accessible vaccination against HPV and hepatitis.

After this success, we have been drafted by the Ministry of Health to serve as external consultants in developing new legislature dealing with infectious disease and vaccination.

Contagious Diseases Act has been unchanged for the past 20 years and we are excited to be working with the team to change it so that it reflects the reality of today and to be able to bring our first-hand experience to the table.

In June 2017 Slovene Ministry of Health held a media conference on possible measles outbreak and a call for regular child vaccination. At the conference Minister of Health publicly acknowledged the work of medical students which furthermore added value to our project.

As a project we were also invited to the Medical Chamber of Slovenia where the Council of Primary Healthcare in Slovenia presented the problem of vaccination as seen by pediatricians.

Although our activities might have a big impact on participants, to reach vaster public and achieve bigger recognisability we had to get into media.

Few magazines, radio shows and newspapers were ready to make an article about our project, moreover we managed to negotiate further collaboration.

Project leader Eva Vrščaj also held a public speech on vaccines, on government being passive and on the problem of providing information on vaccines to the public by medical professionals at the event of TedX University of Ljubljana.

We advocate for movements, legislature and projects that have proven effective abroad or in the past. It is important to do extensive research into what the other countries dealing with similar problems are doing, what works for them and how we can adapt their policies for ourselves. For instance, neighbouring Croatia has implemented free vaccination against HPV for boys. In Slovenia, free vaccination against HPV is only available to girls under 16, and we are actively advocating to change that, as Croatia is comparable to us in legislature and social status, which means similar measures would most likely also work in Slovenia.

With the recent refugee crisis, the possibility of once eliminated childhood diseases has become very real again. Slovenia lies directly on the Balkan route the refugees are taking from Syria and neighbouring countries, which means that millions of refugees are passing through every day.

We are also aware of the issues that are present in neighboring countries. As an example, the spread of measles in neighboring Italy. Therefore, with active advocacy we encourage parents to vaccinate their children with the MMR vaccine. This is especially important before the summer vacation period, as a consequence of the eventual transmission of the disease.

EVALUATION AND OUTCOMES

Evolution in the project is carried out continuously at several stages.

- Surveys after the activities for participants
- Surveys after the activities for the project's members
- External evaluation from SloMSIC
- Members meetings monthly evaluation

The results of the surveys are good. The average score of the workshop or lecture is 4 of 5 points. Since our primary method of evaluation are surveys, their analysis has shown that we make use of outstanding communication and are willing to discuss vaccines and immunization with all participants, whether they fully support the idea, oppose it, or are not decided yet. We also recorded rise in trust in vaccination after our lecture than before lecturing. This is one of the data with which we can be very pleased. The average score of trust in vaccination before the workshop is 3 of 5 score points. After our activity, the result gets better and it is 4 of 5 score points.

Unfortunately, we cannot yet compare our rise in trust in immunization to vaccinations rates in Slovenia. We hope that after a few years, we can show the picture of our work and raise the vaccine coverage of the entire population.

Upon completion of our seasonal flu vaccination programme for students at the Faculty of Medicine in Ljubljana, the participants were asked to fill out a questionnaire regarding their satisfaction with the programme, if they noticed any side effects and any suggestions they might have for the future. The results allow us to better our involvement next year.

We keep track of our project with monthly meetings, where the members report on their work, successes and ideas for the future. In this way, any member, regardless of their age or experience has the opportunity to help shape the project and to

be as involved as they would like. The monthly meeting also gives us the opportunity to be dynamic and to make changes in our project as the need arises, given our experience in the field. Our project coordinator regularly attends the meetings of SloMSIC Ljubljana, the regional medical students' organisation, where in collaboration with project coordinators for other SloMSIC efforts and other members, our project's progress is assessed and plans for the future are made. Every three months SloMSIC a written report on our efforts and success is written and presented to the dean of the Faculty of Medicine in Ljubljana.

Even when we are comparing the results of Facebook analysis where we can see how many people we reach with our posts on this social media, the results are getting better and better. We reach an average of 2000 people and over 60000 people with the best posts we publish.

These numbers do not seem important, but Slovenia is a small country with just over 2 million inhabitants. Slovenian users of this social network counts around 60,000. Of these users, 50% is our main target group. Which means we reach 20% of the population that is active on the Facebook network with our posts.

Our likes on Facebook are growing steadily and at the moment we have 3082 likes and followers.

<https://www.facebook.com/projekt.imuno>

CONCLUSION

The medical and general community in Slovenia refused to believe for a long time that the antivax movement could pose a serious risk to our public health. After all, with its mandatory and free childhood vaccination programme, Slovenia seems like one of the countries best equipped to deal with the growing scepticism of the merit of vaccination and in effect the merit of evidence-based medicine as whole.

We tackled the problem right at its root. A large part of our activism is web-based, via our facebook page and emerging website. We have reclaimed the platform formerly claimed by the antivax community and are often able to operate right of the source of inaccuracy, at least with antivax sites in Slovene. By hosting publicly accessible free lectures and seminars specifically for young parents and providing personal response to any question regarding vaccination over our social media or in person we are stepping hand in hand with the parents to ensure health and well-being for their children as well as breaking the harmful, but unfortunately far too extended idea that physicians and scientists are held up in their bubble and inaccessible to the concerned public. Rather, our focus is on providing accessible, wholesome and evidence-based education regarding vaccines to anyone who might be interested, with special focus on health care providers, parents and teachers.

We are not held back, but rather elated by the fact that we are a voluntary organisation composed entirely of students. Now it is not the time for questioning our abilities or indifference. With vaccination rates relentlessly falling and childhood preventable diseases rearing their ugly head once more in Europe, we must all stand together, every one of us who has something to contribute and built a healthy, safe future. We believe our project and every one of our members and collaborators exemplifies this core belief.