



PILOT SURVEY RESULTS

ASPHER Survey

THE ROLE OF PUBLIC HEALTH SCHOOLS IN THE COVID-19 RESPONSE AND BEYOND

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TABLE OF CONTENT

EXECU	TIVE SUMMARY	2
ВАСКС	ROUND	2
GOAL	AND OBJECTIVES	3
Goa	I	3
Obj	ectives	3
METH	ODOLOGY	3
RESUL	TS AND COMMENTS	4
1.	PARTICIPATION	
2.	TEACHING	5
3.	HEALTH COMMUNICATION TO THE PUBLIC	D
4.	RESEARCH	2
5.	CONSULTANCY/ADVICE	5
6.	OVERALL ENGAGEMENT	D
CONC	LUSION	1
RECOM	/MENDATIONS	1
APPEN	IDICES	2
1.	QUESTIONNAIRE	2
2.	LIST OF PARTICIPANTS	3

EXECUTIVE SUMMARY

A pilot survey was carried out concerning ASPHER member schools' anti-COVID-19 activities during the period from 1st March till 31st July 2020. The pilot questionnaire was answered by some of the members of ASPHERS's COVID-19 task force and ASPHER's Executive Board, totalling 14 out of 25 eligible member Schools and Departments of Public Health. Thirteen out of fourteen schools got involved in all four sections a) teaching, b) health communication to the public, c) research, and d) consultancy/advice, whereas one school was not involved in research. Nevertheless, based on the total number of counts per theme in the different sections, consultancy/advice had 144 counts, followed by teaching (121), health communication (86) and research (64).

The pilot survey has demonstrated a substantial engagement in the combat against COVID-19 within this small sample of Schools of Public Health. Comments achieved in the pilot about the questionnaire itself will be included in considerations on the development of the final questionnaire, which later, in autumn 2020, will be circulated to all 120 ASPHER member schools.

BACKGROUND

The development of the COVID-19 pandemic has stressed the necessity of using all accessible resources in meeting this serious infection threat and its consequences for individual citizens as well as specific population groups and society as a whole. Thus, engaging in the combat against the pandemic is natural and, furthermore, an ethical claim for Schools of Public Health (SPH).

The Association of Schools of Public Health in the European Region (ASPHER) believes that Schools of Public Health are playing a critical role now but also in the aftermath of the acute phase of the COVID-19 pandemic. From contributing to the dialogue on how to best and most safely emerge from current lockdown, to training the current and next generation of public health professionals on how to respond to the next disease outbreak; to synthesizing and understanding the vast amount of data currently being generated from various sources; to contributing to a more health literate public; to giving advice to political and administrative decision makers.

To throw light on this, ASPHER runs a survey based on its affiliated institutions, to compile the different initiatives taken to participate in the combat against COVID-19. This can range from specific trainings emerging; reinforcing health communication to the public; evidence production and dissemination; providing advice to political and administrative bodies. From there, ideas and best practices may emerge and help design the role of Schools of Public Health beyond the present COVID-19 situation as well as help effectively combat the present and future pandemics. This will serve as an inspiration between schools of public health; enable us to make the voices of ASPHER member schools heard; and show the importance of

high-quality Public Health education and training and the crucial role of placing genuine Public Health perspectives in the combat of epidemics.

GOAL AND OBJECTIVES

Goal

Contribute to a better understanding of the role of Schools of Public Health in the response to the COVID-19 pandemic from 1st of March to 31st of July 2020.

Objectives

- Gain an overall understanding of ASPHER associated Schools of Public Health contribution to the response to the COVID-19 pandemic.
- Identify the concrete activities conducted by ASPHER members in the public health response to the COVID-19 pandemic.

METHODOLOGY

We developed a cross-sectional survey with period prevalence of anti-Covid-19 activities, defined for the period of 1st March to 31st July 2020. The ultimate target population of study was all ASPHER affiliated Schools and Departments of Public Health, in total 120, to be approached during autumn 2020.

For the present pilot data collection, we used an online questionnaire, LimeSurvey [®] a free and open source statistical survey web app, which may be used with different web browsers and equipment (computers, tablets and cell phones). Data are stored in ASPHER's Administration as well as in the Andalusian School of Public Health.

The survey included a range of questions on the types of interventions of SPHs in the combat against COVID-19. The majority of the questions were closed questions with a few "Others" open text questions. Participants were able to select multiple responses or to skip a list, if they did not find its items applicable. The survey was kept broad with the same themes repeated in most of the sections, to increase both thematic coverage and to stimulate participation.

The present pilot, which was conducted during August 2020, included the members of the ASPHER COVID-19 Taskforce and ASPHER's Executive Board, in total 25 schools and departments. Participants were asked to fill in only one questionnaire per institution.

3

In the following presentation of findings from the pilot, we apply percentages in addition to absolute numbers, even if the numbers are very small.

RESULTS AND COMMENTS

1. PARTICIPATION

Fourteen (14) out of a total of 25 Schools and Departments of Public Health responded to the survey, which represents a response rate of 56%. A better response rate probably would have been achieved outside the summer holiday period. Gathering the activities from different departments in each institution was also mentioned as a burden.

The questionnaire was generally perceived as straightforward and easy to fill in. Given the heterogeneity of the Schools of Public Health, some of them exclusively focus on education and training and are thus not normally involved in activities like health communication to the public, research, or consultancy and advice to decision makers and political bodies, which may lead to a feeling of low relevance and thus be a cause of non-respondence.

The presentation of survey results is grouped into the four main sections of the questionnaire a) teaching, b) health communication to the public, c) research, and d) consultancy/advice.

The data presented are referring to a total of 14, the number of schools responding to the pilot survey.

2. TEACHING

Table 1		
During 1st March – 31st July 2020, did your school/department of public health offer any training p health students (bachelor, master, PhD), with one or more of the following themes related		
Answer	Count	Gross %
Surveillance	7	50,00%
Epidemiologic indicators for the management of the pandemic	6	42,86%
Epidemiologic literacy	6	42,86%
Applied / field epidemiology	7	50,00%
Outbreak investigation	7	50,00%
Contact tracing	6	42,86%
Prediction of epidemic development, mathematical modelling, patterns, co-morbidities	3	21,43%
Anti-epidemic strategy development, implementation and monitoring	3	21,43%
Prevention and infection control, confinement: methods, effects, ethics	9	64,29%
Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other	4	28,57%
Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment (PPE)	5	35,71%
Health ervices organisation and management	4	28,57%
Capacity of health services, the health workforce	3	21,43%
Occupational health	5	35,71%
Environment (climate, pollution)	2	14,29%
Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other	4	28,57%
Health inequity	4	28,57%
Refugees and migrants	4	28,57%
Minorities and vulnerable groups	4	28,57%
Children's health	2	14,29%
Impact on people with chronic conditions	3	21,43%
Mental health	5	35,71%
Testing theory, strategy, practice, validity and accuracy of tests	3	21,43%
Vaccines (production, distribution, characteristics, equitable access) and vaccination	1	7,14%
Health communication, health literacy	3	21,43%
Social and individual behavior, including interpersonal violence	2	14,29%

Table 1		
During 1st March – 31st July 2020, did your school/department of public health offer any training program to your public health students (bachelor, master, PhD), with one or more of the following themes related to COVID-19?		
Answer	Count	Gross %
Peer to peer teaching, e.g. School of Patients	1	7,14%
Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions	3	21,43%
Data management and data analysis	5	35,71%

The main COVID-19 themes taught to public health students (bachelor, master, PhD) were Prevention and infection control (9), followed by Surveillance (7), Applied / field epidemiology (7) and Outbreak investigation (7) [Table 1]. None included vaccines or children's health. One institution mentioned that they offered online courses, where students could choose their own thematic focus.

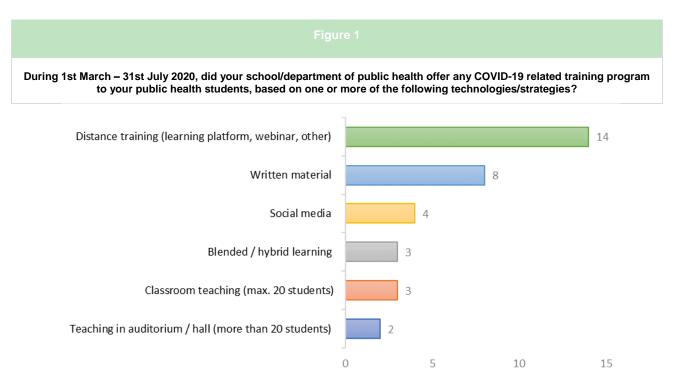
Similar patterns were found in themes taught to social workers, psychologists, nurses, midwives, carers, other health personnel, with Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, PPE (7), Prevention and infection control, confinement: methods, effects, ethics (6) and Surveillance (5) [Table 2]. No "other" themes were listed.

However, there were clearly more training themes provided to public health students with a total count of 121, compared to 60 counts for other professionals.

Table 2		
During 1st March – 31st July 2020, did your school/department of public health offer any training program to social workers, psychologists, nurses, midwives, carers, other health personnel, with one or more of the following themes related to COVID- 19?		
Answer	Count	Gross %
Surveillance	5	35,71%
Epidemiologic indicators for the management of the pandemic	3	21,43%
Epidemiologic literacy	2	14,29%
Applied / field epidemiology	4	28,57%
Outbreak investigation	3	21,43%
Contact tracing	4	28,57%
Prediction of epidemic development, mathematical modelling, patterns, co-morbidities	1	7,14%
Anti-epidemic strategy development, implementation and monitoring	2	14,29%
Prevention and infection control, confinement: methods, effects, ethics	6	42,86%
Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other	3	21,43%

Table 2		
During 1st March – 31st July 2020, did your school/department of public health offer any training program to social workers, psychologists, nurses, midwives, carers, other health personnel, with one or more of the following themes related to COVID- 19?		
Answer	Count	Gross %
Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, PPE	7	50,00%
Health services organisation and management	2	14,29%
Capacity of health services, the health workforce	1	7,14%
Occupational health	3	21,43%
Environment (climate, pollution)	0	0,00%
Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other	1	7,14%
Health inequity	3	21,43%
Refugees and migrants	3	21,43%
Minorities and vulnerable groups	1	7,14%
Children's health	0	0,00%
Impact on people with chronic conditions	1	7,14%
Mental health	0	0,00%
Testing theory, strategy, practice, validity and accuracy of tests	1	7,14%
Vaccines (production, distribution, characteristics, equitable access) and vaccination	1	7,14%
Health communication, health literacy	0	0,00%
Social and individual behavior, including interpersonal violence	0	0,00%
Peer to peer teaching, e.g. School of Patients	1	7,14%
Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions	0	0,00%
Data management and data analysis	2	14,29%

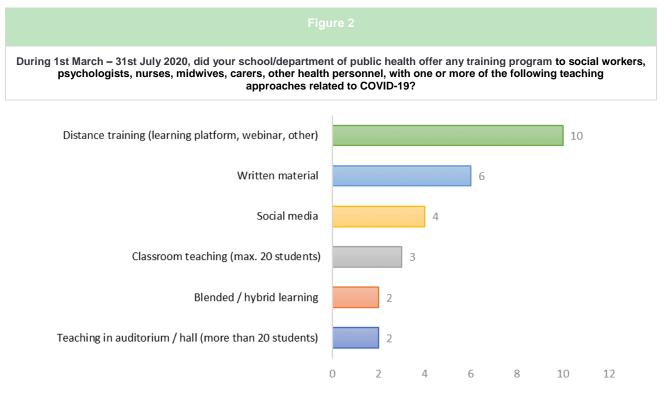
7



Technologies and strategies used for training were dominated by the use of distance training (14) followed by the use of written material (8) while 4 used social media (Figure 1).

Other strategies listed were:

- Practical training for contact tracing, including roleplay prior to engaging in real contact tracing
- Tutorial with senior colleagues
- One-to-one practical training



For the group of other students, distance learning was applied in 10 schools, 6 reported the use of written material and 4 the use of social media. A total of 11% used classroom teaching (max 20 students) [Figure 2]. Other strategies listed were:

• Role play for contact tracing

3. HEALTH COMMUNICATION TO THE PUBLIC

The main themes communicated to the public are about epidemiological surveillance (57%), epidemiological indicators (43%) and field epidemiology (36%) [Table 3]. No one reported to have communicated on the health economics of the pandemic, its socio-economic impact, or the cost-effectiveness of interventions.

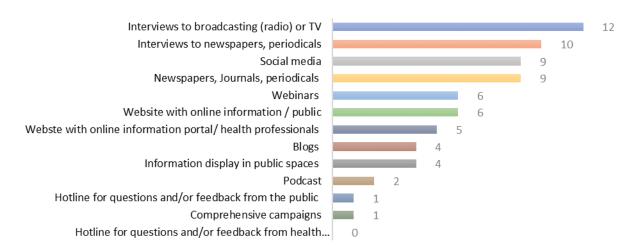
Table 3

During 1st March – 31st July 2020, did your school/department of public health or members of the staff communicate one or more of the following themes related to COVID-19, to the public?		
Answer	Count	Gross %
Surveillance	8	57,14%
Epidemiologic indicators for the management of the pandemic	6	42,86%
Epidemiologic literacy	4	28,57%
Applied / field epidemiology	5	35,71%
Outbreak investigation	2	14,29%
Contact tracing	5	35,71%
Prediction of epidemic development, mathematical modelling, patterns, co-morbidities	5	35,71%
Anti-epidemic strategy development, implementation and monitoring	3	21,43%
Prevention and infection control, confinement: methods, effects, ethics	4	28,57%
Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other	4	28,57%
Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment	4	28,57%
Health services organisation and management	4	28,57%
Capacity of health services, the health workforce	2	14,29%
Occupational health	2	14,29%
Environment (climate, pollution)	2	14,29%
Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other)	3	21,43%
Health inequity	2	14,29%
Refugees and migrants	2	14,29%
Minorities and vulnerable groups	2	14,29%
Children's health	2	14,29%
Impact on people with chronic conditions	1	7,14%
Mental health	2	14,29%

Table 3		
During 1st March – 31st July 2020, did your school/department of public health or members of the staff communicate one or more of the following themes related to COVID-19, to the public?		
Answer	Count	Gross %
Testing theory, strategy, practice, validity and accuracy of tests	3	21,43%
Vaccines (production, distribution, characteristics, equitable access) and vaccination	2	14,29%
Health communication, health literacy	3	21,43%
Social and individual behaviour, including interpersonal violence	2	14,29%
Peer to peer teaching, e.g. School of Patients	2	14,29%
Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions	0	0,00%

Figure 3

During 1st March – 31st July 2020, based on one or more of the following media, did your school/department of public health or members of the staff communicate one or more of the above themes related to COVID-19, to the public?



Almost all respondents used to communicate COVID-19 themes to the public by interviews via: radio or TV (12), newspapers and periodicals (10) and Social media (9) [Figure 3]. No institution had established a hotline for questions and/or feedback from health professionals. No other media were listed.

4. RESEARCH

A wide range of themes were covered in the schools' research and in scientific publications. The most frequent themes were social determinants (50%), epidemiologic indicators (36%) and prevention and infection control (36%) [1 Table 4].

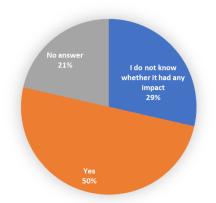
There were no publications registered for the following subjects: infection high risk environments, occupational health testing theory, strategy, practice, validity and accuracy of tests, health communication, health literacy and voluntarism. No other themes were listed.

Table 4		
During 1st March – 31st July 2020, did your school/department of public health or members of the staff publish research with one or more of the following themes related to COVID-19 in the scientific press?		
Answer	Count	Gross %
Surveillance	5	35,71%
Epidemiologic indicators for the management of the pandemic	5	35,71%
Epidemiologic literacy	2	14,29%
Applied / field epidemiology	3	21,43%
Outbreak investigation	3	21,43%
Contact tracing	2	14,29%
Prediction of epidemic development, mathematical modelling, patterns, co-morbidities	3	21,43%
Anti-epidemic strategy development, implementation and monitoring	3	21,43%
Prevention and infection control, confinement: methods, effects, ethics	5	35,71%
Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other	0	0,00%
Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment (PPE)	1	7,14%
Health services organisation and management	1	7,14%
Capacity of health services, the health workforce	1	7,14%
Occupational health	0	0,00%
Environment (climate, pollution)	2	14,29%
Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other	7	50,00%
Health inequity	4	28,57%
Refugees and migrants	1	7,14%

Table 4		
During 1st March – 31st July 2020, did your school/department of public health or members of the staff publish research with one or more of the following themes related to COVID-19 in the scientific press?		
Answer	Count	Gross %
Minorities and vulnerable groups	2	14,29%
Children's health	1	7,14%
Impact on people with chronic conditions	2	14,29%
Mental health	4	28,57%
Testing theory, strategy, practice, validity and accuracy of tests	0	0,00%
Vaccines (production, distribution, characteristics, equitable access) and vaccination	1	7,14%
Health communication, health literacy	0	0,00%
Social and individual behaviour, including interpersonal violence	2	14,29%
Peer to peer teachin, e.g. School of Patients	1	7,14%
Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions	2	14,29%
Voluntarism - motivation, contribution, management, impact	0	0,00%
Advocacy	1	7,14%

Figure 5

Was there any impact on political decisions of your research?

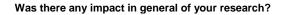


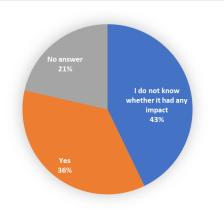
Comments:

- "It is too soon to say. It is hope that research using surveillance data, and research requisitioned by the Government's National Public Health Emergency Team on healthcare workers will contribute to a thorough investigation, review and reform of long-term residential care facilities for the elderly and other vulnerable groups."
- "Studies were communicated to policy makers and media, presented also in parliament's discussions"

- "It is difficult to say at a general level, but we had a strong impact on the decision-making process at our university."
- "Results are taken into account by Lombardy Region Task force"
- "Stop patient contact at risk of getting infected, attending emergency room at hospital"
- "We were part of the national scientific advisory group. Our models were used for decision making"
- "Modelling for the impact of the lockdown on the mortality rate in France."

Figure 6





Comments:

- "Adoption of strategies such as surveillance methods (e.g. sewage alert system), school opening"
- "Containment measures related to epidemiological situation"
- "Results were published and took into consideration for accelerating COVID-19 response at national level"
- "Yes, we published couple of paper and did online survey"
- "Participation in advisory team to the rector"

5. CONSULTANCY/ADVICE

A wide range of themes of advice were given to public health authorities. With surveillance (10) being the most frequent, followed by prevention and infection control (9) and prediction of epidemics (8) [Table 5, Figure 7-9]. No additional themes were listed.

Table 5		
During 1st March – 31st July 2020, did your school/department of public health or members of the staff give any advice to public authorities within public health, health administration, university education or politics, concerning one or more of the following themes related to COVID-19?		
Answer	Count	Gross %
Surveillance	11	78,57%
Epidemiologic indicators for the management of the pandemic	7	50,00%
Epidemiologic literacy	5	35,71%
Applied / field epidemiology	4	28,57%
Outbreak investigation	8	57,14%
Contact tracing	6	42,86%
Prediction of epidemic development, mathematical modelling, patterns, co-morbidities	8	57,14%
Anti-epidemic strategy development, implementation and monitoring	6	42,86%
Prevention and infection control, confinement: methods, effects, ethics	10	71,43%
Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other	6	42,86%
Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, PPE		35,71%
Health services organisations and management	6	42,86%
Capacity of health services, the health workforce	5	35,71%
Occupational health	5	35,71%
Environment (climate, pollution)	2	14,29%
Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other	2	14,29%
Health inequity	3	21,43%
Refugees and migrants	3	21,43%
Minorities and vulnerable groups	2	14,29%
Children's health	5	35,71%
Impact on people with chronic conditions	4	28,57%

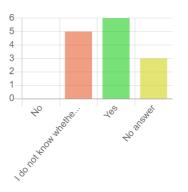
Table 5

During 1st March – 31st July 2020, did your school/department of public health or members of the staff give any advice to public authorities within public health, health administration, university education or politics, concerning one or more of the following themes related to COVID-19?

Count	Gross %
6	42,86%
4	28,57%
3	21,43%
2	14,29%
5	35,71%
3	21,43%
4	28,57%
4	28,57%
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Figure 7

Was there any impact on political decisions of your advice?

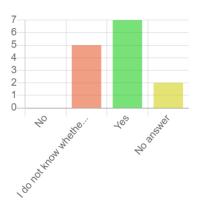


Comments:

- *"Implementation of indicators contact tracing strategies, interventions to tackle health inequalities"*
- "Task Force Region Lombardy"
- *"Some of them were considered during the different steps of the lockdown. Others for organising contact-tracing."*

Figure 8

Was there any general impact of your advice?

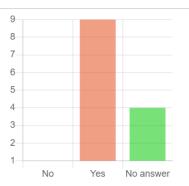


Comments:

- "Improved processes and procedures in Contact Tracing"
- "Adoption of interventions"
- "Advice to future research funding, advice to rector, advice to MUW operations"
- "Increase of School's visibility"

Figure 9

During 1st March – 31st July 2020, was your school/department of public health or members of the staff directly involved with public authorities related to COVID-19?



Comments on level of involvement:

- *"Members of the School activity contributed to the National COVID-19 Contact Management Programme (CMP) and to mobilising capacity for COVID-19 testing."*
- "Ministry of health both regional and national level, interaction with WHO-Europe, other ministries education, welfare"
- *"Using predictive models of the pandemic. Collaborating in different steps of the management of the pandemic."*

- *"Advisor at the National Center for Disease Control and Public Health, responsible for global and public health"*
- "Institutions of the federal states; at national level"
- "The Ministry of Health and Local Health Authorities"
- "National Ministry of Health; Regional Health Administration; Local University Task Force"
- "Several participations to inter-ministerial Covid crisis taskforce; participation to several regional health authorities' committees."

Table 6

During 1st March – 31st July 2020, did your school/department of public health or members of its staff give advice to any of the authorities or institutions mentioned beneath?

Answer	Count	Gross %
Health authorities	7	50,00%
Public health authorities	8	57,14%
Administrative authorities	4	28,57%
University education	8	57,14%
Research authorities	5	35,71%
Government, political authorities	6	42,86%
Local, municipality or regional political authorities or administration	7	50,00%
Schools	4	28,57%
Workplaces	4	28,57%
Sports organisations, youth organisations	3	21,43%
Nursing homes	4	28,57%
Hospitals	4	28,57%
General practitioners	2	14,29%
Patients associations	4	28,57%
International organisations	6	42,86%

More than 50% of schools got involved in providing advice to health, public health, and local authorities. A bit less than 50% provided advice to schools, workplaces, nursing homes and hospitals (Table 6).

Other public authorities or institutions listed:

- Training in contact tracing for Regional Authorities other than Andalusian ones
- International Higher Education Partner institution

Table 7

During 1st March – 31st July 2020, did your school/department of public health or members of the staff interact with the following structures/bodies or professional networks, focusing on the COVID-19 pandemic?

Answer	Count	Gross %
National Government Committees / Panels	9	64,29%
The Ministry of Health	10	71,43%
The National Board of Health	2	14,29%
The National Institute of Health	7	50,00%
The Regional Board of Health	6	42,86%
The Local/Municipal Board of Health	3	21,43%
Public Health PProfessional Training Bodies, Faculty of Public Health	9	64,29%
Clinical Professional and/or Organisations / Bodies	6	42,86%
ASPHER activities	12	85,71%
EUPHA activities	5	35,71%
EAPH activities	0	0,00%
EuroHealthNet activities	1	7,14%
EHMA activities	0	0,00%
IANPHI activities	2	14,29%
Public health networks	4	28,57%
CDC Europe activities	0	0,00%
WHO Europe activities	5	35,71%
European Observatory of Health Systems and Policies	2	14,29%
Networks of universities	5	35,71%
Students and alumni associations	7	50,00%

Almost all the schools (12) interacted actively with ASPHER on COVID-19, 72% with their ministry of health and public health professional training bodies. More than 50% got involved with their national government, the national institute of health, and with students and alumni associations. No interactions were recorded with EAPH, EHMA or CDC Europe (Table 7).

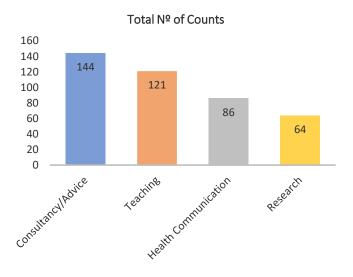
Other professional networks listed:

- Health Information for ALL (HIFA)
- Ibero-American Ministerial Network for Health Learning and Research (RIMAIS)
- Spanish Public Health Society (SESPAS)
- Health care and social care system managers' Professional networks

6. OVERALL ENGAGEMENT

Given the heterogeneity of the associated Schools of Public Health, the involvement in the different section varies. We can observe that mostly consultancy/advice was provided, followed by teaching (Figure 10).





CONCLUSION

This survey was constructed to serve as a baseline and presents a snapshot status of the COVID-19 epidemic engagements of a number of European schools of public health representing (12) European countries. The pilot survey, within this small sample of Schools of Public Health, has demonstrated a substantial engagement in the combat against COVID-19. These pro-proactive engagements at teaching, providing health communication to the public, focussing research on COVID-19, and giving consultancy/advice at public and authority levels should be diseminated widely to allow a better transparency and recognition of the role of Schools of Public Health in the combat of the COVID-19 pandemic. In additon, best practices should be widely shared with other schools of public health for inspiring reasons. It is hoped that the profile of European Schools and Departments of Public Health in this respect will be solidly mirrored in the survey itself, to take place during Autumn 2020.

RECOMMENDATIONS

Comments achieved in the pilot about the questionnaire itself will be included in considerations on the development of the final questionnaire, which later in autumn 2020 will be circulated to all 120 ASPHER member schools.

We can observe, that there was a tendency to click in all four sections. Therefore, to reduce a potential overresponse bias, and considering that the characteristics of the ASPHER associated institutions is diverse, we plan to introduce a pre-selective filtering question (e.g. was your institution involved in consultancy activities YES/NO) allowing to have access or not to continue to the detailed themes. In addition, we will improve the way of comparing involvements of the different sections.

As well, we will analyse further what were the drawbacks from completing the survey and will ask the members, to ensure that mailing lists for one contact person per institution are updated before the survey will go out to all schools by October 2020.

APPENDICES

1. QUESTIONNAIRE

ASPHER Survey

The role of Public Health Schools in the COVID-19 response and beyond

1. TEACHING

COVID-19 themes taught to public health students

During 1st March – 31st July 2020, did your school/department of public health offer any training program to your public health students (bachelor, master, PhD), with one or more of the following themes related to COVID-19?

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- Outbreak investigation
- □ Contact tracing
- D Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring
- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- □ Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment (PPE)
- □ Health services organisation and management
- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- Refugees and migrants
- □ Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- Mental health
- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination

- □ Health communication, health literacy
- □ Social and individual behaviour, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- Data management and data analysis
- □ Other themes

If other themes - Please specify:

Please write your answer here:

Teaching approach

During 1st March – 31st July 2020, did your school/department of public health offer any COVID-19 related training program to your public health students, based on one or more of the following

technologies/strategies?

Check all that apply

Please choose **all** that apply:

- □ Classroom teaching (max. 20 students)
- □ Teaching in auditorium / hall (more than 20 students)
- Distance training (learning platform, webinar, other)
- □ Blended / hybrid learning
- □ Social media
- □ Written material
- □ Other teaching approach

If other teaching approach - please specify:

Please write your answer here:

COVID-19 themes taught to other students than public health students

During 1st March – 31st July 2020, did your school/department of public health offer any training program to social workers, psychologists, nurses, midwives, carers, other health personnel, with one or more of the following themes related to COVID-19?

Check all that apply

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- Outbreak investigation
- □ Contact tracing

- □ Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring
- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- □ Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, PPE
- □ Health services organisation and management
- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- □ Refugees and migrants
- Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- Mental health
- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination
- □ Health communication, health literacy
- □ Social and individual behavior, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- Data management and data analysis
- □ Other themes

If other themes - please specify:

Please write your answer here:

Teaching approach

During 1st March – 31st July 2020, did your school/department of public health offer any training program to social workers, psychologists, nurses, midwives, carers, other health personnel, with one or more of the following teaching approaches related to COVID-19?

Check all that apply

- □ Classroom teaching (max. 20 students)
- □ Teaching in auditorium / hall (more than 20 students)
- Distance training (learning platform, webinar, other)

- □ Blended / hybrid learning
- □ Social media
- □ Written material
- □ Other teaching approach

If other teaching approach - please specify:

Please write your answer here:

2. HEALTH COMMUNICATION TO THE PUBLIC

COVID-19 themes

During 1st March – 31st July 2020, did your school/department of public health or members of the staff communicate one or more of the following themes related to COVID-19, to the public?

Check all that apply

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- Outbreak investigation
- □ Contact tracing
- D Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring
- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- □ Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment (PPE)
- □ Health services organisation and management
- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- □ Refugees and migrants
- □ Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- □ Mental health

- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination
- □ Health communication, health literacy
- □ Social and individual behavior, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- □ Other themes

If other themes - please specify:

Please write your answer here:

Means of Health Communication

During 1st March – 31st July 2020, based on one or more of the following media, did your school/department of public health or members of the staff communicate one or more of the above themes related to COVID-19, to the public?

Check all that apply

Please choose **all** that apply:

- □ Social media, such as Facebook, Twitter, Instagram, Quora, LinkedIn and You Tube
- □ Blogs
- □ Webinars
- □ Website with online information portal for the public
- □ Website with online information portal for health professionals
- □ Hotline for questions and/or feedback from the public
- □ Hotline for questions and/or feedback from health professionals
- Podcast
- □ Information display in public spaces through posters, leaflets, billboards
- □ Newspapers, Journals, periodicals
- □ Interviews to newspapers, periodicals
- □ Interviews to broadcasting (radio) or TV
- □ Comprehensive campaigns
- Other media

If other media - please specify:

Please write your answer here:

3. RESEARCH

COVID-19 themes

During 1st March – 31st July 2020, did your school/department of public health or members of the staff perform or start up any research with one or more of the following themes related to COVID-19?

Check all that apply

Please choose **all** that apply:

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- □ Outbreak investigation
- □ Contact tracing
- D Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring
- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment PPE
- □ Health services organisation and management
- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: Infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- □ Refugees and migrants
- □ Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- Mental health
- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination
- □ Health communication, health literacy
- □ Social and individual behavior, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- Voluntarism motivation, contribution, management, impact
- □ Advocacy
- □ Other themes

If other themes - please specify:

Please write your answer here:

Was there any impact on political decisions of your research?

Choose one of the following answers

Please choose only one of the following:

- □ No
- □ I do not know whether it had any impact
- □ Yes

If yes - please specify:

Please write your answer here:

Was there any impact in general of your research?

Choose one of the following answers

Please choose only one of the following:

- □ No
- □ I do not know whether the research had any impact
- □ Yes

If yes - please specify:

Please write your answer here:

Covid-19 publication in the scientific press

During 1st March – 31st July 2020, did your school/department of public health or members of the staff publish research with one or more of the following themes related to COVID-19 in the scientific press? Check all that apply

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- Outbreak investigation
- □ Contact tracing
- D Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring
- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, Personal Protective Equipment (PPE)
- Health services organisation and management

- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- Refugees and migrants
- □ Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- Mental health
- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination
- □ Health communication, health literacy
- □ Social and individual behavior, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- □ Voluntarism motivation, contribution, management, impact
- □ Advocacy
- □ Other themes

If other themes - please specify:

Please write your answer here:

4. CONSULTANCY/ADVICE

Themes

During 1st March – 31st July 2020, did your school/department of public health or members of the staff give any advice to public authorities within public health, health administration, university education or politics, concerning one or more of the following themes related to COVID-19?

Check all that apply

- □ Surveillance
- □ Epidemiologic indicators for the management of the pandemic
- □ Epidemiologic literacy
- □ Applied / field epidemiology
- Outbreak investigation
- □ Contact tracing
- D Prediction of epidemic development, mathematical modelling, patterns, co-morbidities
- □ Anti-epidemic strategy development, implementation and monitoring

- D Prevention and infection control, confinement: methods, effects, ethics
- □ Infection high risk environments, e.g. nursing homes, schools, supermarkets, ballrooms, sports facilities, cultural facilities, other
- Infection prevention and control and preparedness for COVID-19 in healthcare settings and nursing homes, PPE
- □ Health services organisations and management
- □ Capacity of health services, the health workforce
- Occupational health
- □ Environment (climate, pollution)
- □ Social determinants: infection or fatality high risk (vulnerable) population groups, e.g. elderly, other
- □ Health inequity
- □ Refugees and migrants
- □ Minorities and vulnerable groups
- □ Children's health
- □ Impact on people with chronic conditions
- Mental health
- □ Testing theory, strategy, practice, validity and accuracy of tests
- □ Vaccines (production, distribution, characteristics, equitable access) and vaccination
- □ Health communication, health literacy
- □ Social and individual behavior, including interpersonal violence
- D Peer to peer teaching, e.g. School of Patients
- □ Health economics of the pandemic, socio-economic impact, cost-effectiveness of interventions
- Data management and data analysis
- Other themes

If other themes - please specify:

Please write your answer here:

Was there any impact on political decisions of your advice?

Choose one of the following answers

Please choose only one of the following:

- □ No
- □ I do not know whether they had any impact
- □ Yes

If yes - please specify:

Please write your answer here:

Was there any general impact of your advice?

Choose one of the following answers

Please choose only one of the following:

- □ No
- □ I do not know whether the advice had any impact
- □ Yes

If yes - please specify:

Please write your answer here:

During 1st March – 31st July 2020, was your school/department of public health or members of the staff directly involved with public authorities related to COVID-19?

Choose one of the following answers

Please choose only one of the following:

- 🗆 No
- □ Yes

If yes - please specify with which authority and at what level:

Please write your answer here:

Recipient(s) of advice

During 1st March – 31st July 2020, did your school/department of public health or members of its staff give advice to any of the authorities or institutions mentioned beneath?

Check all that apply

- Health authorities
- Public health authorities
- □ Administrative authorities
- □ University education
- □ Research authorities
- □ Government, political authorities
- □ Local, municipality or regional political authorities or administration
- □ Schools
- □ Workplaces
- □ Sports organisations, youth organisations
- □ Nursing homes
- □ Hospitals
- □ General practitioners
- Patients associations
- □ International organisations
- □ Other public authorities or institutions

If other public authorities or institutions - please specify:

Please write your answer here:

Representation, collaboration and networking

During 1st March – 31st July 2020, did your school/department of public health or members of the staff

interact with the following structures/bodies or professional networks, focusing on the COVID-19

pandemic?

Check all that apply

Please choose **all** that apply:

- □ National Government Committees / Panels
- □ The Ministry of Health
- □ The National Board of Health
- □ The National Institute of Health
- □ The Regional Board of Health
- □ The Local/Municipal Board of Health
- D Public Health Professional Training Bodies, Faculty of Public Health
- □ Clinical Professional and/or Organisations / Bodies
- □ ASPHER activities
- □ EUPHA activities
- □ EAPH activities
- □ EuroHealthNet activities
- □ EHMA activities
- □ IANPHI activities
- □ Public health networks
- □ CDC Europe activities
- □ WHO Europe activities
- European Observatory of Health Systems and Policies
- □ Networks of universities
- □ Students and alumni associations
- □ Other professional networks

If other professional networks - please specify:

Please write your answer here:

5. INFORMATION ON COMPILER

Institution

Status (University, private...)

Country

Please write your answer here:

2. LIST OF PARTICIPANTS

Annex 2			
Participating schools			
Institution	Status (University, private)	Country	
Center for Public Health	University	Austria	
College of Medicine. Department of Preventive Medicine and Public Health	University of Valencia	Spain	
EASP (Escuela Andaluza de Salud Pública/Andalusian School of Public Health)	Public Institution of the Regional Government of Andalucia/ Junta de Andalucía)	Spain	
EHESP French School of Public Health	University	FRANCE	
Faculty of public health	Medical University Sofia	Bulgaria	
HAW Hamburg	University	Germany	
Institute of Public Health, College of Medicine & Health Sciences	United Arab Emirates University	United Arab Emirates (UAE)	
INSTITUTO SAÚDE PÚBLICA UNIVERSIDADE DO PORTO (ISPUP)	University	Portugal	
Maastricht University	Public	The Netherlands	
PSPH	University	Germany	
School of PH University Vita-Salute San Raffaele Milan Italy	Private	Italy	
School of Public Health, Ben Gurion University of the Negev	Public	Israel	
University College Dublin	University	Ireland	
University of Georgia	Private University	Georgia	