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# Alumni Evaluation of a Community-Oriented Master of Public Health Program

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**Abstract** Health workforce development is a public health priority for the World Health Organization. Public Health training programs need to be relevant in a public health perspective and efficient in and educational perspective. This implies evaluating the programs: in this regard student's perception might be interesting, or the opinion of external experts, or the experience of alumni. To study the perception of alumni of a master's program in public health in order to reevaluate the goals and objectives of the program, a crosssectional survey through a self-administered questionnaire among former students that graduated from the Geneva University Master in Public Health program was done. This self-administered questionnaire included closed questions on a Likert five-point scale for regarding the use at work of tools acquired during the course, as well as open questions. Overall the alumni gave a positive evaluation of the course. As strong points were mentioned: networking opportunities, student-centered approach and multi-professional background of the student body. More critically judged were: tutorship, time constraints and costs. As most useful tools in their professional settings alumni mentioned: communication skills, project evaluation competencies and literature search strategies and again networking which in this case

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Unit of Development and Research in Medical Education, Faculty of Medicine, University of Geneva, Geneva, Switzerland seemed to be quite active. Evaluation surveys among alumni allow reevaluation of the program's goals and objectives in the light of their professional needs.

**Keywords** Training program evaluation · Master in public health · Graduates · Public health competencies

# Introduction

Health workforce development is a public health priority for the World Health Organization [1]. For academic institutions in charge of public health programs, the challenge is to train people in relevant public health topics and tools [2] giving them specific competencies, some critical thinking and a commitment to life-long learning as recommended in the literature [3–5]. An equally important challenge is to find efficient training approaches that facilitate learning [6] and to implement various evaluation mechanisms in order to collect data that ultimately allow the improvement of the program [7, 8].

Evaluation of a teaching program is often limited to the perception of students in training, which raises questions about objectivity [9]. The input of alumni, being more independent, could be an asset, all the more their perception of the program is shaped by their professional realities [10], yet it does not seem to be a frequent approach by evaluators.

A health needs assessment in French-speaking Switzerland in the late 1980s [11] showed that there was an urgent need of competent public health professionals ready to develop health prevention and promotion intervention projects at community level as well as community health research projects. Therefore the University of Geneva decided to develop an on-job public health training program of master's level. Adopting the recommendations of andragogy [12] the program adopted a heavily communityproject-based learning strategy aiming at concrete public health outcomes [13].

Our paper presents the results of an evaluation survey implemented among alumni who had taken the MPH course over a 20-year period and discusses some challenges such a community-oriented curriculum might face.

### Methods

A cross-sectional survey through a self-administered questionnaire was done among former students that graduated from the Geneva University Master in Public Health program (n: 94) between 1991 and 2010. There were closed questions on a Likert five-point scale regarding the use at work of tools acquired during the course (0: no opinion; 1: no, never; 2: yes, occasionallyseveral times a year; 3: yes, regularly once a month; 4: yes, frequently—once a week) as well as questions on the mobilization of the network of former student colleagues. The survey took place between December 2009 and September 2010 with 2 recalls using the survey monkey interface [14]. Data were aggregated into a MS Excel file and exported for analyses to STATA version 10 [15]. Standards statistical analysis was done: frequencies and descriptive summaries for the categorical data, internal consistency for the Likert-scale data, as well as the Cronbach alpha for internal consistency [16] and 95 % confidence intervals.

This study was approved by the institutional review board of the Geneva Institute of Social and Preventive Medicine.

# Results

The overall participation rate was 47 %. There was no difference in the response rate between male and female students. Among the respondents 40 % were physicians, 35 % were health professionals (nurses, mid-wives, physiotherapist, etc.) and 25 % had a non medical/paramedical background (sociologists, economists, biologists, etc.).

The former students' perception of the program, as collected through the open questions of the survey, can be summarized as follows: overall the alumni gave a positive evaluation of the course. Indeed, the course has helped former students in their careers (57.4 % had job promotions) and has given them some useful tools (100 %). Were mentioned as most positive, the networking the program allowed, its interactive and student-centered educational approach, as well as the multi-professional background of the student body. Appeared as the least convincing, the tutorship considered as too loose (insufficient feedback on assignments, insufficient availability of tutors). Were also mentioned as quite problematic the time constraints due to excessive workload (homework, job, family) and the costs of the course.

The former students' use in their professional setting of acquired public health tools during the training is summarized in Table 1: the most often used tools are those of literature search and of communication, followed by evaluation and epidemiology tools. The least frequently used tools are those related to ethics and legislation and health economics. The overall Cronbach alpha coefficient of internal consistency is 0.8093.

Concerning the usefulness of the network established during their study, a high percentage of the alumni have agreed to: "I have been asked to be an expert of a project by a former student colleague" (78 %); "I have been co-opted by a former student to collaborate in a public

Tools in:	Mean	SE	95 % confidence interval		Percentage responding at levels 3–4 (%)
Project planning	2.60	0.14	2.35	0.14	54
Project evaluation	2.76	0.12	2.5	0.12	68
Epidemiology	2.82	0.13	2.55	0.13	60
Micro-informatics	2.42	0.19	2.03	0.19	50
Literature search	3.02	0.13	2.76	0.13	62
Communication skills	3.00	0.14	2.71	0.14	80
Negotiation skills	2.72	0.18	2.35	0.18	62
Ethics and legislation	2.28	0.16	1.96	0.16	40
Method in social's sciences	2.28	0.14	1.98	0.14	38
Health policy	2.56	0.15	2.24	0.15	52
Health economics	2.00	0.15	1.69	0.15	26
Pedagogy	2.44	0.18	2.07	0.18	46

Table 1Self-declared use atwork of tools acquired duringthe course

Mean on a Likert scale with 0: no opinion; 1: no, never; 2: yes, occasionally—several times a year; 3: yes, regularly once a month; 4: yes, frequently—once a week; percentage 3 and 4 pooled health project" (72 %); "Former student colleagues were of help in supporting an idea/a project that I have brought forward" (72 %); "Former student colleagues have supported my candidacy for a new job" (56 %).

# Discussion

Overall the former students gave a positive evaluation of the program. Especially the networking dimensions of the program were considered as extremely useful, as has been reported in the literature [17]. Yet, such a dimension is too often neglected by curriculum designers, who often have a more academically oriented approach. Alumni also considered the multi-professional backgrounds of students as very positive and stimulating, which has been recommended for graduate education [18]. They also considered as positive the student-centered and project-oriented educational approach, which allowed them to make synergies during their curriculum with their employing institutions giving to the program more public health relevancy as has been recommended [6]. Yet in such a program, i.e. a program favoring a studentcentered and a project-oriented approach, there might be serious difficulties in covering the main disciplinary methods, even though some authors have warned from a common attitude among curriculum designers which might induce "coveritis" (the diseases of the curriculum) [19].

When asked how often they use at work the different tools they were familiarized with during the course, the alumni put forward, "Search of literature", "Communication and Negotiating skills", but also knowledge in "Epidemiology" and competencies in "Project Planning and Evaluation". This might reflect the highly inter- and transdisciplinary nature of public health [20]. To a lesser degree they seem to use tools in the field of Health Economics, Ethics and Law or Social Sciences, which could partially be related to the nature of their professional tasks.

Networking has been identified as a strong point of the program by alumni. There even seems to be a functioning network among them: indeed a majority has been in touch with former student colleagues during the months prior to the survey. The program therefore appears as facilitating networking among professionals, thus possibly contributing to well-coordinated public health actions, as recommended at European level [21].

# Conclusion

Surveys like this one can be useful for periodic evaluations of training programs. The input of alumni allows reevaluation of the programs goals and objectives in the light of their professional needs. Ultimately such evaluations help programs to adapt to the real world.

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