

Health Staff Ready to Work without Borders

Franco Locatelli, Sabina Tangerini, Mattia Viano, Chiara Schiavo, Lisa Di Mascolo, Alessia Montanari, Laura Palmucci and Marilena Bertini

Comitato Collaborazione Medica, International NGO Turin 10152, Italy

Abstract: Introducing courses on global health in Italian University curricula is essential to improve public health in Italy and to raise awareness in health professionals about global health challenges and inequalities. CCM (Comitato Collaborazione Medica) has developed a structured strategy to provide medical and nursing students and health professionals eager to work/volunteer in low- and middle-income countries with the necessary skills and knowledge to carry out sustainable health-care interventions, that require not only clinical expertise, but also foremost the understanding of local contexts and approaches to care. The comprehensive understanding of the variety of health-care systems at a global level can also help Western health professionals to properly address global migration challenges and the continuously evolving health needs in their own countries. Since 2004, CCM has been organizing training courses for a wide range of Italian health staff (e.g. physicians, nurses, midwives, laboratory technicians, psychologists, social workers) to transfer knowledge, skills and tools that may help them to address health needs in a globalized world. These courses aim to provide participants with soft skills meant at improving the doctor-patient relationship in a variety of contexts and to address health needs holistically; an additional goal is to raise awareness of global health inequities and inequalities and the determinants of health.

Key words: Global health, cultural competence, health staff.

1. Introduction

Education and training of health care professionals working in LMIC (low- and middle-income countries) is pivotal to international development [1]. Building the capacities of local health staffs, especially of those with low and medium skills (e.g. health workers, nurses, midwives) less likely to migrate, is crucial to ensure the availability of health care also in remote and underserved areas. On the other hand, Western health professionals committed to work or volunteer in LMICs are required not only (nor primarily) to directly provide health care, but to transfer their knowledge and competence to local staffs, being fully aware of the huge differences in terms of resources, contexts, health challenges and approaches to care between HICs (high-income countries) and LMICs. The comprehensive understanding of the variety of health care systems at a global level can also help

Western health professionals to properly address global migration challenges and the continuously evolving health needs in their own countries [2-4].

In the three overlapping domains of cultural competence, health inequalities and communities of care, the deep connection between health and culturally affected perceptions of wellbeing can be understood [5].

Valuing cultural competence in biomedical profession is essential. Medical schools should be the primary agents of change by taking the necessary steps in their institutional setup, curriculum development and delivery of medical education [6].

With this in mind, over the past 10 years in Italy students' associations and health professionals boards have started advocating changes of university curricula, with the introduction of courses on global health, to provide health care professionals with the skills and competences required to address health challenges in a globalized world [7-10]. Hence, many courses—both at undergraduate and graduate level—have been

Corresponding author: Marilena Bertini, M.D., President of Comitato Collaborazione Medica, research fields: global health, hematology.

started, though most of them are not mandatory. Besides, they highly differ in terms of objectives, content, teaching methods, duration and targets.

2. CCM Contribution

CCM (Comitato Collaborazione Medica) [11] is an Italian NGO founded in Turin in 1968 to promote the right to health for all. Over the past 50 years, it has been operating in sub-Saharan countries to support health care development and health system strengthening, mostly through the education and training of local staff and the support to local health facilities.

Methods of intervention have evolved over the decades and the approaches used throughout the 70-80s are now out of date. Initially, CCM used to organize several missions in the field carried out by Italian medical and paramedical volunteers, with the aim of both addressing gaps in health care provision and building the capacities of local health staffs via the so-called on-the-job training. Commonly, volunteers were required to have technical and relational skills, but no specific background education on global health. In the last decade, CCM began to develop a more structured strategy to equip expatriate health staffs and volunteers operating in LMICs with the necessary competencies and knowledge to carry out sustainable health-care interventions. In particular, close attention was paid to pre-departure training.

CCM understood that operating in LMICs required not only clinical skills, but also foremost the understanding of local contexts and approaches to care, priority health needs of local communities and the functioning of local health systems. Our awareness of the importance of boosting Italian health professionals' soft skills was further strengthened by the increase in migratory flows and the demographic transition experienced in most HICs. Today multiethnic and intercultural societies in Western countries include an increasing number of citizens that are poorly or not familiar with the biomedical approach to care, and whose relation with biomedical health systems is

deeply pervaded by the culture, traditions and healing systems of their countries of origin.

Therefore, since 2004 CCM has been organizing training courses for a variety of Italian health professionals (e.g. physicians, nurses, midwives, laboratory technicians, psychologists, social workers) to transfer knowledge, skills and tools that may help them to address health needs in a globalized world. In all our courses, teachers with different academic backgrounds (e.g. medical doctors, medical anthropologists, psychologists, experts in global and public health, international cooperation and right to health) examine in depth various topics, providing inputs useful to both health professionals willing to work/volunteer in LMICs and their colleagues dealing with migrants in Italy.

Similarly, since 2010 we have also begun a collaboration with the Departments of Medicine and Nursing of the University of Turin, to introduce courses of global health in the study plan of medical and nursing students. These university modules would provide future health professionals with soft skills suitable to improve the doctor-patient relationship in a variety of contexts and to address health needs holistically; they would also increase students' awareness of global health inequities and inequalities and of the determinants of health.

3. Materials and Methods

CCM developed and perfected different education packages, targeting medical/nursing students and health professionals respectively.

Courses offered to university students take the form of either elective or curricular modules, and in both cases they are integral part of students' curricula. Courses addressed to health professionals are officially acknowledged as CME (Continuing Medical Education), they are reserved to a limited number of trainees per class and they commonly require a small registration fee.

All CCM courses are evaluated via the

administration of:

- Tests, measuring the level of acquired competences and skills (effectiveness evaluation);
- Questionnaires, investigating the students/participants' appreciation for the course in terms of both content and methodology.

3.1 Elective Modules for University Students

3.1.1 Medical Students

CCM collaboration with the Department of Medicine of the University of Turin began in 2004, with the organization of one elective module on Tropical Medicine, offered to fourth-year students. At that point of their university curriculum, students had already completed some clinical courses and had adequate knowledge and competences to compare biomedical techniques adopted in HICs with approaches to health care in resourceless countries. The module focused on the following topics:

- Health in LMICs and the related problems;
- AIDS and malaria: how to face pandemics in LMICs;
- Mother and child health and related complications/pathologies;
- Neonatal mortality;
- Severe acute malnutrition: diagnosis and possible interventions;
- Monitoring and evaluation of interventions against malnutrition;
- Child health in LMICs, with particular focus on WHO protocols on the diagnosis and management of children conditions;
- Epidemiology of the most frequent diseases in LMICs;
- Emergency surgery in LMICs;
- Orthopedics in LMICs;
- Treatment of burns in LMICs;
- Preventive medicine in LMICs;
- Migration-associated diseases;
- Health professionals' education and training.

In 2012, in agreement with the Department of

Medicine, the module was reorganized and made suitable for second-year students, who are still lacking specific clinical knowledge. Therefore, it was renamed "Global Health Module", the contents were updated and more generic topics were included:

- Global health within the scope of the millennium/sustainable development goals;
- Water and sanitation;
- Mother and child health;
- The great pandemics: HIV, malaria, TB;
- Surgery and appropriate technology;
- Migration and health;
- Environment and health.

3.1.2 Nursing Students

Since 2010, CCM has been partnering the Nursing Department of Turin in the organization of two elective modules, respectively addressed to the first and second-year students.

First-year students can attend a 15-hours module on Intercultural Care, focusing on the epidemiological profile and health vulnerabilities of migrants, the Italian/local health system and access to care for illegal migrants. Particular attention is paid to the presentation of locally available health services, as well as barriers (e.g. linguistic, cultural, bureaucratic, financial) to the access to care. The module also provides notions on the communication and relational competences needed by health workers to establish a trustful relationship with migrants.

The module for second-year students lasts 10 hours and it deals with the determinants of health focusing on the risk (and ways to prevent it) of stereotypes, prejudice and discrimination in health and social care. Fight against discrimination and promotion of social inclusion are presented as powerful means to preserve/reinforce individual and community health. A small number of motivated students attending the module are also offered the opportunity to carry out an internship, joining CCM team in one of the extra-curricula education activities carried out in local secondary schools. Indeed, every year CCM organizes

interactive classes for 13/14-year-old students to stimulate the participants to think about the consequences of discrimination and stereotypes, and to develop awareness towards differences and respect thereof. During internships, nursing students attend these school activities as bystanders and they have the opportunity to directly experience the pupils' reaction to such issues.

3.2 Curricular Module for University (Nursing) Students

Since 2016, CCM has been collaborating with the Nursing Department of the University of Turin for the development and implementation of a curricular module for third-year students focusing on community health. The course, specifically meant for students specializing in health prevention and promotion, is structured in three parts: 1) a general overview of the concept of community health; 2) a role-playing game requesting students to design social projects relevant to solve specific health issues at community level; 3) the presentation of community health best practices worldwide, in both LMICs and HICs. Great attention is paid to the role of nurses within the Italian health system, and on job opportunities not only in clinical settings but also at community level.

3.3 Continuing Medical Education for Health Professionals

The CCM course in Global Health, with its first edition in 2011, stemmed from a previous course in Tropical Medicine, carried out over the period 2006-2010. This course was specifically addressed to Italian health professionals committed to volunteer or work in LMICs, and ready to leave for short-term missions. It was structured into four main modules (infectious diseases, mother and child health, surgery and orthopedics, planning and monitoring/evaluation of health projects), providing some theoretical background and practical information helping participants to familiarize with the health and social

contexts/issues of the resource-poor settings they would go to.

Since 2011, the course has been renamed (Course in Global Health) and restructured in order to answer educational needs not only of health professionals leaving for LMICs, but also of their peers dealing with migrants in Italy. The general division into separate modules was maintained, but their number varies from year to year (three or four), based on CCM training capacities and participants' requests. Modules that can be activated, with contents updated yearly, include:

- Mother, child and adolescents/reproductive health;
- Infectious diseases (HIV/AIDS, malaria, TB and Ebola);
- Surgery, orthopedics and physical disability;
- Mental health;
- The right to health, global health and development;
- Cultural competences in health care.

CCM technical partner in the organization of the course is the University of Eastern Piedmont, based on Novara, providing logistic support and IT support for the management of the e-learning platform. Indeed, some modules are organized mostly or entirely as e-learning, others include face-to-face lessons and/or practical laboratories. Lectures are given by highly qualified health professionals or professors, mostly recruited on voluntary basis. Each module is accredited as CME, and participants can choose which and how many modules to attend.

In each year/edition of the course, a small number of participants (from 2 to 4) are given the opportunity to carry out a short mission in one of the LMICs where CCM operates under the supervision of a senior volunteer/health staff.

4. Results

All the courses were successful with a high number of participants in all editions. The analysis of the questionnaires administered revealed that participants

considered the acquisition of soft competences on global health very important for a more effective clinical practice.

4.1 Elective Modules for University Students

Since its 1st edition, the course Tropical Medicine/Global Health was attended by the maximum number of students possible (100). Thus, on the whole, from 2004 to 2017, 1,000 medical students acquired competencies on priority health issues in LMICs and on the most appropriate and sustainable techniques to manage them, and they became conscious of global health inequalities. During the 2017 edition of the module, about 25 students were offered the opportunity to carry out a short internship in a health facility: each of them could attend as a spectator two different outpatient clinics in Turin, both specialized in providing assistance and care to vulnerable patients and migrants.

Great appreciation for the debated topics emerged from the final questionnaires administered to all students attending the theoretical lessons. In particular, students highly valued the possibility to acquire fundamental information to understand health inequalities both among and within countries. Several students pointed out that their standard study curriculum would not have enabled them to attain this kind of knowledge, that they consider a crucial part of a comprehensive medical education. Finally, some students expressed the desire to receive additional information on some of the treated subjects, while others enquired about the possibility to carry out short internships at local health facilities treating vulnerable patients/migrants in order to experience the patient-centered approach in intercultural settings.

Students who carried out the internship were invited to take part in a focus group, to get their feedback on their experience. All of them highly valued the opportunity and suggested an expansion to all the students. They also admitted that they had never thought about the importance of soft skills in the

clinical practice, and they confirmed that the course/internship enabled them to approach medical studies in a different way.

Also the elective module offered to first-year nursing students was attended every year by most registered students (approximately 80%). Since its first edition, on the whole about 630 nursing students attended the course. As their medical colleagues, they also appreciated the module and the teaching methods, and they expressed great interest for the topics addressed. Many appreciated the opportunity to think about the determinants of health and the importance of promoting social inclusion and access to preventive and therapeutic services for all to improve health.

4.2 Curricular Module for Nursing Students

Up to date only 2 editions of the module were carried out (2016 and 2017). On the whole 110 students attended the courses and successfully passed the final tests. Participants also answered the questionnaire investigating the level of appreciation for the course. On the basis of the reactions to the first edition of the course, the second one was slightly revised to make teaching clearer and the information provided more responding to students' expectations and requests. In particular, the role-playing was simplified and the presentation of best practices in community health mostly focused on HICs, to present possible job opportunities in settings similar to the Italian one.

The part of the course that students liked most was the one discussing good practices. In fact they said the discussion allowed them to understand better what was meant by community health.

The most appreciated aspects of the course were:

- The methods used (interaction, videos, discussion);
- The concept of health presented (“A global and insightful vision of health within a community”);
- The working perspective which encompasses not

only hospital jobs but jobs in territorial facilities (*“It offered a vision outside the hospital”; “The nurse should not necessarily work in a hospital”; “The course discloses a working reality not necessarily linked to the hospital”*).

Many reported that the course helped them to understand that their future profession did not necessarily have to be limited to health structures but it could be important on the territory and in the community. Many showed great surprise and enthusiasm discovering that their role in the community could be interpreted in non-traditional ways.

4.3 Continuing Medical Education for Health Professionals

Since its first edition to 2011, the Course in Global Health was attended by an average of 65 participants/year (454 health professionals on the whole), out of whom 10 carried out short-term missions in sub-Saharan Africa, accompanied by CCM senior staff/volunteers.

In Table 2, the details of each edition of the course (duration, participants, credits and modules) are presented.

All participants answered the questionnaires

administered at the end of each edition of the course (Table 1). Generally, high appreciation was expressed both for the contents and the teachers' preparation. This opinion was common among participants to single modules as well as among attendees of the whole course.

In particular, participants expressed satisfaction for the mixed teaching methodology (combination of e-learning and face-to-face lessons), and for the attention paid to lecturers' personal experiences either in Italy or abroad. This latter aspect was considered very stimulating and educational, since concrete recommendations could be provided based on direct experiences.

The e-learning platform was appreciated thanks to its high flexibility (participants could get connected, study available materials and participate in the online debates moderated by the teachers at any time and from any device) and to the possibility to interact with both lecturers and peer-students. Indeed, the availability of the speakers throughout the period of the e-learning session allowed a deeper interaction with the participants and timely answers to participants' doubts/questions. The occasional IT difficulties experienced by some in getting access to the platform and to use it were easily and quickly solved.

Table 1 Questionnaire and student satisfaction in 2016 and 2017.

	2016	2017
<i>How do you rate your general appreciation of the course?</i>	Not satisfied: 6.28% Slightly satisfied: 31.83% Very satisfied: 33.93% Extremely satisfied: 27.96%	Not satisfied: 0% Slightly satisfied: 3.2% Very satisfied: 24.9% Extremely satisfied: 71.9%
<i>Did the course meet your expectations?</i>	No: 21% Not entirely: 31% Sufficiently: 11% Yes: 24% NA: 13%	No: 8% Not entirely: 4 % Sufficiently: 4 % Yes: 84% NR: /
<i>Do you think the contents of this course are useful for the training of your professional figure?</i>	Yes: 68% No: 32%	Yes: 96.3% No: 3.7%

Table 2 Details of the single editions of the Course in Global Health.

Year	Duration	Participants	CME credit	Modules
2011	15 days (face-to-face lessons)	84		Primary health care Orthopedics, surgery, anesthesiology Mothers' and children's health
2012	20 days (face-to-face lessons)	63	142	Infectious diseases Global health policy Disability, physiotherapy, burns Multiculturalism and health system organization in Italy
2013	18 days (face-to-face lessons)	67	102	Infectious diseases Social factors in public health programmes Cultural and language competence in health systems
2014	2 e-learning modules (1 month e-learning each) + 10 days face-to-face lessons	65	38	Health and health systems Infectious diseases Orthopedics, surgery, anesthesiology Mothers' and children's health Health, care and migration
2015	3 e-learning modules (1 month each) + 7 days (face-to-face lessons) Internship possibility in the Hospital for Infectious Diseases in Turin	62	91	The right to health in a globalized world Infectious diseases Orthopedics, surgery, anesthesiology Cultural competence
2016	2 e-learning modules (1 month each) + 6 days (face-to-face lessons) Internship possibility in Africa	55	174	Infectious diseases Mothers' and children's health Orthopedics, surgery, anesthesiology
2017	2 e-learning modules (1 month each) + 10 days (face-to-face lessons) Internship possibility in Africa	58	177	Globalization, development and the right to health Elements of global health Infectious diseases Mental health

5. Discussion

Health professionals and university students' demand for education and training in the fields of global health, community health and determinants of health have been on the rise over the past decade.

In Italy, global health issues are included in the university curricula of medicine only for students specializing in Public Health. This means that the great part of medical doctors specialized in any clinical practice has no or extremely poor notions on health inequalities or health challenges in a globalized world, as well as no soft competences to improve the quality of doctor-patient relationships in intercultural contexts.

With this in mind CCM has developed a module for second-year medical students envisaging a combination of theoretical lectures and practical internships in local health facilities assisting migrants and vulnerable patients. Unfortunately, the possibility to organize the internships depends on the university

capacities to cover the related costs. CCM strongly believes that tackling global health issues since the very beginning of university studies offers future health professionals the opportunity to perceive clinical practice in a holistic way. In particular, prevention and health promotion at individual, community and population level—with the aim of tackling all determinants of health—are stressed as extremely important and effective in improving citizens' health conditions.

Elective and curricular modules developed by CCM for nursing students pursue the same goal, namely to stimulate students to think about the determinants of health, health promotion and preventive care.

Issues such as the cultural competence to prompt a patient-centred approach in intercultural relationships, health inequalities both within and across countries and the role of social determinants of health in shaping health conditions are commonly neglected in the standard curricula of Italian health professionals.

On the contrary, in other countries (e.g. the UK, the USA) they are integral part of the educational path.

CCM is aware that living in a globalized world requires the utmost open mind to change the perspective of education and training from local to global.

Such considerations encouraged CCM to develop training modules not only for students but also for health professionals. Being aware of global health challenges and of the different approaches to care is extremely important both for health professionals working in LMICs and for those dealing with immigrants in Italy. In a borderless world, health professionals have to be not only technically qualified but also equipped with relational/communication and cultural competences.

6. Conclusion

In Italy, high-level education on global health and community health issues is requested for both future health professionals and already specialized/working health staff. The modules and courses developed and promoted by CCM to fill these gaps have so far received great appreciation.

Medical students (about 100/year) attend lectures mostly regarding health conditions typical of LMICs (e.g. great pandemics, malnutrition, neonatal mortality, emergency surgery, water & sanitation). Nursing students (around 120/year) are offered lectures on intercultural care, discrimination and community health, mostly relevant to the care of migrants. Health professionals can attend Continuing Medical Education meant at conveying skills and competencies useful both to work in LMICs and to treat migrants in

Italy.

References

- [1] Rowson, M. et al. 2012. "The Evolution of Global Health Teaching in Undergraduate Medical Curricula." *Global Health* 8: 35. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3539925/>.
- [2] Williams, J. H., and Marais, E. A. D. 2016. "Global Health Education." *Soc. Work Res.* 40 (1): 3-6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4885033/>.
- [3] Yerramilli, P. 2016. "The Need for Global Health Education in Medical Training." *The Blog* 08/31/2015 04:03 pm ET Updated Aug 31, 2016, https://www.huffingtonpost.com/pooja-yerramilli/the-need-for-global-health-education-in-medical-training_b_8044546.html.
- [4] Bertini, M., and Locatelli, F. 2016. *MMG Sans Frontiers*.
- [5] Napier, A. D. et al. 2014. "Culture and Health." *Lancet* 384: 1607-39.
- [6] Sorensen, J. et al. 2017. "Enhancing Cultural Competence in Medical Education." *International Journal of Medical Education* 8: 28-30.
- [7] Göpfert, A. et al. 2014. "Do Medical Students Want to Learn about Global Health?" *Glob Health Action* 7: 10.3402/gha.v7.23943. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4028928/>.
- [8] Il contributo della Rete Italiana per l'Insegnamento della Salute Globale. "Ripensare La Formazione Medica." <http://media.fnomceo.it/Media/downloadFile.dwn?id=199&version=1>.
- [9] Bodini, C. et al. 2015. "Ripensare la formazione in salute. Un dibattito a cura della Rete Italiana per l'Insegnamento della Salute Globale." *Quaderni Acp.* 3: 127-9. https://www.acp.it/wp-content/uploads/Quaderni-acp-2015_223_127-129.pdf.
- [10] Tangerini, S., Locatelli, F., and Di Gennaro, F. 2017. "Una scuola che promuove diritti, promuove salute." <http://www.saluteinternazionale.info/2017/06/una-scuola-che-promuove-diritti-promuove-salute/>.
- [11] www.ccm-italia.org.