

Myanmar health professionals' educational needs: a pilot study

Gloria Mosca¹, Valentina Cappi², Clelia D'Apice¹, Sandra Rossi¹, Giovanna Artioli³, Leopoldo Sarli¹

¹Department of Medicine and Surgery, University of Parma, Italy; ²Department of History and Cultures, University of Bologna, Italy; ³Azienda USL-IRCCS of Reggio Emilia, Italy

Abstract. *Background and aim of the work:* The main factor hindering the development of the Myanmar health system lies in the scarcity of financial and human resources attributed to the health system. This paper presents the preliminary results of a pilot study on the educational needs of Myanmar health professionals, addressing the empowerment of human resources as a strategic pillar for delivering the essential packages of health services. *Methods:* An explorative study following a qualitative approach has been conducted through semi-structured interviews to a convenience sample of 15 persons, selected as authoritative key-informants. *Results:* In addition to the lack of infrastructures, medicines, ambulances and health instruments, and the health disparities between the urban and rural areas, some widespread problems are reported as requiring health professionals' training empowerment: traumas due to road accidents, management of childbirth, non-communicable diseases' management and poor health education of the population. *Discussion:* Some areas can be evidenced for an improvement of professionals, training: maternal, neonatal and child health; communication between professionals and laypeople; Myanmar population's health education; inter-professional training between doctors and nurses, but also between health personnel and non-health personnel. *Conclusions:* The educational needs of Myanmar health professionals emerge as closely related to the social and health needs of the Myanmar population, to the available resources and missing resources of the country's health system and to the role of professionals within professionals/patients' relationship. (www.actabiomedica.it)

Key words: Myanmar, health professionals, educational needs, Myanmar health system, Myanmar primary care

Introduction

After many decades of military rule, Myanmar transitioned to a civilian government in March 2011. Although the democratic process has accelerated since then, many crucial issues still remain unresolved, as the healthcare situation in the country has seen little improvement (1, 2).

Following the World Health Organization (WHO), Myanmar health system is placed at the bottom of the world rankings (3). The lack of attention to the health care delivery system of the country during over 50 years of military dictatorship has led to

weak health infrastructures, low quality health care services, and insufficient number of adequately skilled human resources. Being the budget allocated to health extremely low, households' out of pocket spending remain the major source of financing for health, hence pushing households in poverty and preventing them from seeking necessary health care (4). The situation is further worsened by weak supportive supervision and referral, limited public financial management, oversight, leadership and accountability (4).

So far, specialized and tertiary care in urban areas has been prioritized at the expenses of basic essential care for the majority of the population residing in rural

areas. In addition, human resources for health are inequitably distributed, with the majority of health workers largely concentrated in urban areas, hence leaving rural areas uncovered (5, 6). As a consequence, people residing in rural areas refer to private health care providers, such as general practitioners (GP), or to ethnic and community-based organizations (1).

In order to answer to the severe pitfalls of the country health system, the Government of Myanmar has set up the National Health Plan (NHP) 2017-2021, an ambitious path for a primary health care (PHC) system strengthening (HSS) as means to achieving universal health coverage (UHC) in the country by 2030. As to reduce disparities between rural and urban areas, the plan foresees a decentralization of health services and health resources, as centralization increases disparities. Major attention will be given to service prioritization, strengthened collaboration between health care providers, and community engagement. In particular, the Ministry acknowledges as a priority the development and empowerment of human resources for health both in public and private sectors as a strategic pillar for the delivery of the UCH essential package of health services (EPHS), hence recalling attention on the pivotal importance of tailored education for health professionals.

From a literature review conducted on Pubmed, Cochrane and Cinhal databases using as keywords “educational need” OR “training need” AND “health professionals” AND “Myanmar” OR “Burma” AND “assessment”, it emerged that there are no studies directly investigating the educational needs of Myanmar health professionals. However, the few available studies concerning the health needs of the Myanmar population, highlight some processes that would be more adequately managed through a better coordination and the improvement of health professionals’ specific skills. Among these: the need to strengthen the public-private partnership for what concerns the treatment of tuberculosis, which is managed in over half of the cases by general practitioners (7, 8); the need to involve health professionals in the health education of the population, in particular with regard to the management of postpartum (9) and diabetes (10); the improvement of the education of midwives (11) and nurses for what concerns the postoperative handover

in orthopedic surgical setting (12); the need for an adequate training’s update regarding malaria’s early diagnosis and treatment (13). Furthermore, the largely unexpressed potential of interprofessional training between physicians and nurses is highlighted (14).

Aim

The purpose of this paper is presenting the preliminary results of a qualitative research on the analysis of the educational needs of Myanmar health professionals. The research aims at providing propedeutics to the co-construction of a post-graduate specialization course for Myanmar primary health care professionals, identifying during this first phase the most suitable themes and interlocutors for a training needs’ assessment.

Methods

The research, an explorative study following a qualitative approach, has been conducted through semi-structured interviews to a convenience sample of 15 persons, selected as authoritative key-informants about the aim of this research.

The interviews, collected between March and June 2019, have been conducted in person (6), or via email (9), in English or, when possible, in Italian. The interviews have then been faithfully transcribed and thematically analyzed through paper and pencil by a specially trained researcher under the supervision of an expert qualitative researcher.

The interview scheme has gauged some areas of investigation:

- Strengths and pitfalls of the Myanmar health system;
- Strengths and pitfalls of the education and training of Myanmar health professionals;
- Myanmar population health needs;
- Educational needs of the Myanmar health professionals;
- Relation between Myanmar health professionals and local population.

Results

A total of 15 professionals were interviewed, belonging to different professional roles and with different experience: 3 General Practitioners, 1 nurse, 1 hospital doctor/university professor, 1 expert of public health, 1 professor involved in the training and education of medical doctors, 3 health and social workers and 5 Italian medical students, having recently conducted an internship in Myanmar hospitals. In table 1 we describe the main characteristics of the sample.

In this study, the training needs that the interviewed professionals considered useful to fill or improve start from the reconstruction of the Myanmar socio-health context.

The highlighting of the most frequent pathologies with which professionals are confronted in daily clinical practice and the identification of resources, both human and material, made available to the system as well as lacking resources, enable respondents to identify areas of training that can be enhanced in order

to respond more effectively to the health needs of the population.

The thematic analysis of the interviews has made it possible to enucleate four main macro-areas, connected between them and useful to individuate the educational and training needs.

Social and Health Needs of the Myanmar Population

The training of health professionals is - or should be - addressed to answer the health needs of the Myanmar population. With regard to the Myanmar context, the social and health needs mostly mentioned (perceived as most widespread or urgent) by the interviewed concern: communicable diseases as malaria, TB and HIV (especially in border areas, where prostitution is highly spread), rabies and dengue; non-communicable diseases, as diabetes, hypertension, stroke, cardiac problems and, more in general, debilities such as malnutrition and musculoskeletal diseases; finally, concerns related to road accidents and home births.

Table 1. Participants' characteristics

N°	Profession	Provenance	Main Features
3	General Practitioners	Myanmar	Experts of Public Health and Primary Health Care in Myanmar; focus on rural areas. Collaborating with Myanmar Health Authorities to strengthen Myanmar Health System
1	Nurse	Parma, internship in Myanmar	Internship at the Yangon General Hospital, focus on Palliative Care
5	Medical Students of the University of Parma	Parma, internship in Myanmar	Medical internship in Myanmar health structures: Yangon Central Women's Hospital (focus on Obstetrics and Gynecology), Yangon General Hospital (General Surgery, Medicine, Paediatrics)
3	Health Workers	Kawthaung	Experience in rural areas of Myanmar, in particular in the Kawthaung area; focus on Primary Healthcare
1	Teacher	Italy, working in Yangon	Teaching Italian Language to Myanmar Medical Students and to Myanmar Health Professionals
1	University Professor	Parma, experience in Myanmar	Expert of Public Health, and International Cooperation; involved in the collaboration between Italy and Myanmar. Experience in Myanmar (Yangon area, Kawthaung area, Mandalay area)
1	Expert of International Relations and Public Health	Parma, experience in Myanmar	Expert of International Relations, Public Health, Right to Health and International Cooperation; involved in the collaboration between Italy and Myanmar. Experience in Myanmar (Yangon area, Kawthaung area, Mandalay area, Border Area Myanmar-Thailand)

“The rector of the university of medicine, when we started working together, the first thing he wanted to do was to enhance emergencies because he says he gets so many cases of car accidents that they don’t know how to handle them” (Interviewee 10)

“The main problem is the high percentage of home births (70%), which cannot always be performed immediately despite the fact that there are students and midwives who go there to carry them out” (Interviewee 6)

“In plantations, in rural areas [...] there are more common diseases but there is also a different rate of malnutrition of children [...], because they follow an extremely reduced varied diet, because they do not have access to a variety of foods. Other health problems are related to work on plantations: muscle pain, frequent accidents that require minor surgery, suturing of wounds, fractures and respiratory problems” (Interviewee 4)

Furthermore, the majority of the respondents considers that the scarce health literacy of the population is becoming an emergency: indeed, not being able to recognize the symptoms of certain diseases, people, especially in rural areas, arrive to the hospital in already advanced stages or after having resorted to homemade treatments having worsened their conditions.

This is linked to the deficiency of secondary prevention, in particular that of screening.

“With the exception of the population of large cities, that of rural areas completely lacks health literacy. They do not have the tools to understand the importance of prevention and to critically evaluate any health risks, even any kind of symptoms and signs of disease are ignored and neglected sometimes until it is too late to have a complete resolution” (Interviewee 6)

“In general surgery I have been able to observe many cases of colorectal and breast carcinomas treated only with palliatives because they were discovered in stages that are now too advanced” (Interviewee 6)

“Some patients are doing the wrong treatment themselves, for example, buying medicines without doctor’s instructions, or using only herbal medicines. After many treatment errors they go to the hospital” (Interviewed 1)

Available Resources and Missing Resources

The majority of the interviewees individuates some structural problems related with the Myanmar

health system. The first, with a cascading effect over others, is the scarcity of economic resources. The State finances health care with only 1% of per capita GDP (15) and this contributes to the fact that there are poor infrastructures, underpaid doctors, absence of specialist tools, insufficient medicines. A non-homogeneous allocation of resources between suburban and urban areas also worsens the socio-health condition of rural areas.

“The problem does not fall within the skills, but in the resources that are missing and consequently certain precautions cannot be implemented or simple investigations, as a CT scan, cannot be carried out for us whenever necessary” (Interviewee 10)

The totality of those interviewed recognize, among the main pitfalls of the Myanmar health system, the scarcity of medicines and means of emergency transportations (i.e. ambulances) provided with life-saving equipment.

“If there is an emergency and you load a person in the car, say that you can transport the person to the hospital, but there is no equipment on the ambulance to revive, defibrillate so it is not enough anyway. Patients don’t know how to get to the hospital or community center, or to the clinic” (Interviewee 3)

“Doctors don’t have many medications available except a great amount of paracetamol, aspirin, and little else. The stations hospitals have sixteen beds and therefore the supply of medicines is calibrated on those sixteen beds and does not take into account the outpatient department. Therefore, even if the problems are the same as in the city, the stocks of medicines are exhausted immediately so then patients must buy them in pharmacies. This is easier in the city because there are pharmacies” (Interviewee 11)

The lack of human resources is the first immediate consequence of the scarcity of economic resources: in hospitals there are few doctors, underpaid, while in rural clinics very often there are no doctors but people who have received health education and therefore able to provide basic care or, at best, recent graduates who carry out an internship period.

“There is only one doctor who works at the station hospital, and sometimes only two or three doctors who work at the same hospital need to see 200 patients, sometimes 300 patients, and in addition there are over 50 ill patients in hospital” (Interviewee 15)

The majority of the interviewed, however, identify the main strength of the Myanmar health system in the adaptability and inventiveness of its health professionals, who try to compensate for the few resources available with the provision of quality care.

“Adapting” in medicine is not easy, it means [...] having to assist people in disastrous conditions due to the absence of screening techniques, seeing children die from intoxication or overdose due to abandonment. In these life experiences I have identified the true essence of being a doctor, the true essence of working for others and for the future of one’s country with the ability to “adapt” to the situations in which we find ourselves by introducing knowledge and professionalism” (Interviewee 6)

Supporting the work of professionals would also be the attitude, attributed above all to the younger generations, to the creation of voluntary associations that seek, through their activity, to improve the quality of life of people, very often financed by religious communities.

“The new generations want to fight, they want to grow, they want to see, they want to know and learn. This is the great strength: having a society that is certainly no longer in a decadent phase” (Interviewee 1)

“There are also [...] charities, charity organizations, which raise funds for the less well-off to pay for health care” (Interviewee 4)

It is also widely believed that awareness-raising campaigns on the prevention of certain diseases, such as malaria, and vaccination campaigns are now effective and efficient both in the urban area and in the suburban areas:

“Thanks to the presence of international organizations operating in the area, the State is implementing vaccinations for newborns. Although it is still common to find measles cases in pediatric patients, the situation from a general point of view has improved significantly compared to the past 5 years (assessment made by the pediatric primary)” (Interviewee 9)

Role of Professionals and Professionals/Patients Relationship

The interviewees claim that doctors are socially respected in Myanmar and that the population places extreme trust in these professionals, especially as re-

gards the formulation of diagnosis and the prescription of certain treatments.

“The decisions they make are unlikely to be contested, on the contrary, there is a tendency to blindly trust their abilities and the certainty that the treatment chosen is undoubtedly the best” (Interviewee 1)

The analysis of the context has provided important data that differentiate, in suburban and urban areas, the consideration of the doctor by the population and the latter’s approach to patients. Especially in the suburban and rural areas of the country, where the relationship with the doctor is more confidential and familiar, the doctor is seen as a “hero” from whom people feel totally taken care of. Interviewed noted that the doctor acts through a holistic approach towards the visited patient.

“Doctors are like heroes, they are like God, they are healers” (Interviewee 11)

“The attitude they have towards the person as a person and not just as a patient. Since they don’t have so many tools to diagnose or do tests, they work more on the relationship with the patient, in listening to his/her personal history” (Interviewee 6)

“The doctor does his very best to put the patient in the best condition to follow the therapy. So, for example, in the case of an illiterate patient, the doctor writes the therapy with symbols to make him/her understand at what time of day or evening the medicines are to be taken or for how long” (Interviewee 5)

Instead, interviewed who completed an internship in urban areas say that communication between doctor and person is very poor, as doctors believe that patients cannot understand health information. Furthermore, in this context, doctors often use English as the vehicular language, which cannot actually be understood by the majority of the population.

“Doctors themselves say that the patient is unable to understand a certain type of information and therefore they do not try to make them aware of what is going on. Another noteworthy problem is that doctors among them often deal with different cases in English, and this creates even greater social detachment between doctor and patient, who in most cases cannot understand it” (Interviewee 2)

Even with respect to the role of the nurse, there is a substantial difference between urban and rural areas. The interviewed argue that, in the urban areas, nurses

occupy positions that are not essential and not complementary to the role of the doctor. Therefore, very often, nurses are stressed and frustrated by the lack of responsibility within the structures and the tasks they are called upon to perform are mainly the administration of medicines, patient hygiene, bandages and bureaucratic issues. What in Italy is the job of the nurse in Myanmar seems to be done by the student of the last year of medicine, called “house surgeon”, who in fact makes withdrawals, inserts catheters, etc.

“The nurse is not yet included in daily work as a supporting and complementary figure to that of the doctor” (Interviewee 3)

“They are often defined “stressed” for being allowed to do so little within the healthcare facility” (Interviewee 5)

“The nurse tends to deal with the patient’s oral medicine, washing or changing bandages and bandages” (Interviewee 5)

The interviewed point out that nurses normally do not take part in consultations with doctors and that therefore the team work model or integrated assistance is not present.

“I have never seen the nurses stop to consult with the doctors in the ward or with the professor during the examination tour, although they take part in it. Doctors often use lunch breaks to organize presentations of particular cases and discuss them together, nurses do not participate” (Interviewee 6)

Among the interviewed there is only one discordant opinion, which gives the nurse in urban areas a key role in the care and reports a good team work with the doctors.

It is in fact especially in rural areas that most of the interviewed recognize a fundamental role for the nurse in taking charge, in patient care and in providing this also with basic health education. From the collected interviews, it emerges that the nurse is an essential figure within an integrated model of care, whose presence allows to assist more patients in a limited period of time.

“When the patient arrives in the clinic, he/she is immediately taken care of by the nurse, who takes the measurements, the parameters and then passes to the doctor’s visit, who makes prescriptions of therapies and then goes back to the nurse, who administers the therapy and who also gives medicines and explains well how medicines should be administered at home” (Interviewee 9)

“The nurse is necessary. The integrated care model allows us to speed up the work a bit because the clinic is quite crowded and if the doctor had to manage the situation entirely by himself, he wouldn’t be able to treat more than 20 patients a day in this case instead, he can visit up to 50 or 60 patients” (Interviewee 9)

Finally, as regards the relationship between nurses and patients, the persons interviewed are divided equally between those who claim that the nurse is the health worker closest to the patient who receives special attention and loving kindness, and those who say instead that the relationship between nurses and patients is a very cold and distant because the time available is limited.

“As part of this role the nurse also has a greater relationship with the patient’s relative also for organizational aspects. During hospital visits I have always seen them very attentive and loving towards the patient” (Interviewee 5)

“The time they spend with the patient is very little and therefore also the patient–nurse relationship is almost non-existent or in any case distant” (Interviewee 7)

Professionals, Training Needs

According to the interviewed, training of medical and nursing staff is well structured, despite the fact that there is a lack of homogeneity in the quality of education in relation to the different areas of the country and the need for updating. If nurses can become nurses through a university or a professionalizing diploma, which in both cases consist of frontal lessons and traineeships, medical training in Myanmar follows the British model and, in fact, lessons and exams are held in English. A professional civil service of at least two years is compulsory for doctors.

“Medical training in Myanmar is very similar to ours considering that they have to do civil service for at least two years, the type of study is certainly different from ours, it is much more practical and schematic, characterized by lists carefully repeated by students by heart” (Interviewee 5)

Most of the persons interviewed believe that the training provided is capable of training competent professionals both as regards doctors and nurses, who are prepared in terms of practice and also of resource management.

"They are very prepared and trained for the health requests of the population" (Interviewee 4)

"Doctors know how to manage their resources very well. Without having laboratory and instrumental reports available in a short time they are very good in clinical evaluation with anamnesis and objective examination of the patient" (Interviewee 10)

The analysis shows that the expertise reached by many of these doctors is also due to the fact that they specialize abroad (United States, England) and then return to work in Myanmar.

"Often many students specialize abroad in countries such as the United States or England, therefore coming into contact with realities that are much more advanced and richer from an economic point of view than their country of origin, but most of them return to their native country to practice" (Interviewee 5)

In general, the interviewed find that Myanmar health personnel need updating, especially as regards the identification of symptoms of some widespread diseases, the area of prevention and that of Public health. In addition to training on basic surgical treatment, medicines for families and emergency medicine, there is also the need to train specialized health workers.

"Healthcare workers may need both short-term and long-term education" (Interviewee 15)

"Working simultaneously on the dissemination of general practitioners' skills and also on prevention and health education" (Interviewee 2)

"The role of midwives should be strengthened" (Interviewee 2)

"The quality of our nurses must be improved" (Interviewee 15)

"We would like to enhance everything that makes you avoid going to the hospital. In a country with few resources and a vast territory, the most important thing in my opinion is to work on the "before", you end up in the hospital" (Interviewee 2)

Rural areas feel the need for training specifically aimed at managing the doctor-patient relationship:

"At hospital level in Kawthanung they have shown interest in receiving training regarding the development of the doctor-patient relationship and therefore for the management of this relationship. I do not know if they feel the need to have training in this sense because university edu-

cation does not include any relative activity or if they need updating training" (Interviewee 11)

Discussion

Both the literature analyzed and the interviews collected agree that the first and most serious factor hindering the Myanmar health system lies in the scarcity of financial and human resources attributed to the health system. As underlined by Han (1), the limited resources allocated to health system and lack of a national insurance mechanism, lead to out of pocket payment, which is likely to be an unbearable burden for the majority of the population, especially for people with chronic illness. The missing of human resources, accordingly to Saw et al. (6) is mainly due to a mismatch between supply and demand for health and to the brain drain of health professionals to places with better working conditions or to the private sector. As emerges from the analysis of the interviews, in hospitals there is a limited number of underpaid medical doctors, whilst clinics in rural areas generally lack medical doctors and are provided with people with a limited health education. The low level of literacy of the population, in turn, is associated with a lack of health awareness and low demand for health care (2). This is one of the reasons why it is clear that health policies and programmes must aim for synergy with other sectors (education, employment, economic and rural development). This collaboration, especially at skills level, training and equipment supply, is considered by interviewed positively, as they define, for example, as fertile the collaboration with NGOs, voluntary, ethnic and religious organizations that operate on the territory.

Studies in literature agree on highlighting wide health disparities between the urban and rural areas of Myanmar. The same finding emerges recurrently in the interviews collected for this study, which identify for example HIV as a widespread problem especially in the border and southern areas of the country or the problems related to malnutrition, muscle pain and bone fractures especially in plantation areas. Traumas due to road accidents, management of childbirth, diabetic pathology and poor health education of the

population, which leads to late diagnosis, are instead reported as problems that afflict the Myanmar population regardless of the region of residence. Already in 2008 Muecke et al. reported a need for programs in Myanmar to induce a behavioral change in diabetic patients with regards to screening examinations (10). One area that they report as needing more training for GPs is that which concerns regular fundal screening of diabetic patients.

GPs are the first point of contact also as regards the timely diagnosis of tuberculosis. If in 2009 there was still a considerable delay found between the onset of symptoms of tuberculosis and seeking treatment (7), denouncing the need for high technical quality of care and guidelines to interact with the private sector for the management of the disease, our interviewed today bring tuberculosis as example of those diseases on which targeted health interventions have allowed great progress. Soe and colleagues, as well, in 2017, detected how national tuberculosis programs benefited from the fundamental support of international non-governmental organizations, especially in those settings where community involvement had proved necessary (8). A similar case is that of malaria. Nyunt et al. (13) reports local health volunteers as the major human resources for diagnosis of malaria using RDTs in containment areas and invites reflection on the need to homogeneously implement training sessions, refresher courses and supervision to allow these volunteers to continue efficient work already started. The training and periodic updating of health workers is a need perceived as essential by our interviewed not only with regard to GPs but also with regard to the figure of midwives. The management of childbirth in fact emerges from the interviews as a current criticality in Myanmar, especially when this takes place at home and without specific professional health care. Indeed, literature shows that skilled birth attendance, both independently, and in concert with packages of integrated reproductive health services, emerges as a critical strategy to reduce maternal mortality (11). Once again, this criticality is especially evident when we talk about the peripheral areas of the country where, in the event of an emergency, women do not have the possibility, due to insufficient infrastructure, to move to specialist clinics. Therefore, it is essential ensuring that

healthcare providers supporting women in home deliveries, should an emergency occur, have all the necessary resources to quickly transfer women to appropriate facilities. In this as in other critical situations, the education and health training of the patients themselves is very important. The literature and the interviews in this regard indicate that, due to an insufficient health culture and poor literacy, patients return to do-it-yourself treatments that prove to be harmful to their health, even in the case of child delivery. Despite maternal healthcare programs emphasizing the receipt of antenatal care and its related components, this study suggests that there may be a lack of culturally appropriate and sensitive postnatal care information, which may cause women to practice potentially harmful traditional practices (9). The midwife figure therefore appears essential and of fundamental importance, also in the preventive field, but nevertheless the literature on the subject underlines that they have lacked the preparation and authorization needed to provide the full range of globally recommended services expected of skilled birth attendants (11). From the collected interviews, the methods of collaboration and communication between doctor/nurse/patient also seem to express themselves differently in the health contexts of urban and rural areas. In fact, the majority of respondents say that in urban hospitals, nurses take care of low-responsibility tasks (washing the patient, changing bandages, oral administration of medicines) and are not very involved by doctors in consultations relating to the treatment of patients, obtaining often feelings of frustration. In rural areas, however, the nurse would have, in the words of the interviewed, a role complementary to that of the doctor and of recognized importance with respect to the competent taking charge of the patient, including also the latter's health education. Burgess-Shannon et al. (14) note, in the context of pediatric care, that inter-professional education is not yet widely used in Myanmar and that it would be beneficial and welcomed by practitioners, encouraging communication and teamwork, preparing them for collaborative practice. Good communication between members of the health team and good inter-professional collaboration practices are also reported as necessary by Tun et al. (12) which identify, in Orthopedic surgical setting, postoperative handovers as a critical step in the man-

agement of surgical patients and a well-recognized risk factor for patient safety. Exchange of patients' critical information between the care providers (especially when nurses and physicians) are an important phase of perioperative care.

A lack of attentive listening to verbal handovers and task-oriented practice was a common experience of handover personnel, according to Tun et al.'s work (12), which highlight as a challenge to overcome this ineffective form of teamwork and communication.

Conclusions

The limitations of this research are mainly linked to the small sample size and the heterogeneity of the respondents' roles. This is due to the fact that this research is a pilot study: the exploratory interviews, on a small scale, had, in fact, the purpose of obtaining information that allow to determine the size and composition of the final study sample.

Despite the limited sample of interviewed, which allows us to make only some preliminary hypotheses on the training needs of Myanmar health professionals, a convergence can be observed between what has been highlighted by the most recent scientific literature on the subject and what has been found during this investigation. Beyond the structural limits that the organization of care in Myanmar is facing, mainly due to the socio-economic situation of the country, some areas can be evidenced for an improvement of professional training that could be effective for a better quality of care and assistance.

Among these, the following stand out: the area of maternal, neonatal and child health, which requires a more effective education (including health) of the population and a more qualified and specialized training of midwives; the field of communication between professionals and laypeople, aimed at more timely diagnosis and easier long-term management of chronic diseases, as well as effective basic health education for the population. The latter, in fact, could discourage harmful DIY treatments, delays in accessing treatments and limit, for example, the spread of communicable diseases. Finally, an area still underdeveloped and widely promising is that of inter-professional training,

between doctors and nurses, or other health workers, but also between health personnel and non-health personnel (educators, teachers, volunteers, etc.), in the perspective of taking charge of health issues capable of embracing not only the needs of individuals, albeit in a holistic perspective, but also taking into account the socio-cultural and economic context in which certain diseases and health problems still find today an extremely easy ground to develop.

Conflict of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article

References

1. Han SM, Rahman M, Rahman S, Swe KT, Palmer M, Sakamoto H, Nomura S, Shibuya K. Progress towards universal health coverage in Myanmar: a national and subnational assessment. *Lancet Glob Health* 2018; 6: e989-e997.
2. Sein TT, Myint P, Cassels A. How Can Health Equity be Improved in Myanmar? Myanmar Health Systems in Transition Policy Notes Series. World Health Organization 2015; 2: 1-7.
3. Tandon A, Murray CJL, Lauer JA, Evans DB. Measuring Overall Health System Performance for 191 Countries. World Health Organization GPE Discussion Paper 2000; 30: 1-23.
4. Ministry of Health and Sports. Myanmar National Health Plan 2017-2021; retrieved 30/12/2019 from <http://mohs.gov.mm/Main/content/publication/national-health-plan-2017-2021-eng>
5. Brennan E. Myanmar's Public Health system and policy: improving but inequality still looms large, Teacircleoxford 2017 (August, 30); retrieved 29/12/2019 from <https://teacircleoxford.com/2017/08/30/myanmars-public-health-system-and-policy-improving-but-inequality-still-looms-large-2/>
6. Saw YM, Than TM, Thaung Y, Aung S, Shiao LWS, Win EM, Khaing M, Tun AN, Iriyama S, Win HH, Sakisaka K, Jimba M, Hamajima N, Saw TN. Myanmar's human resources for health: current situation and its challenges. *Helivyon* 2019; 5:e01390.
7. Saw S, Manderson L, Bandyopadhyay M, Sein TT, Mon MM, Maung W. Public and/or private health care: Tuberculosis patients' perspectives in Myanmar. *Health Research Policy and Systems* 2009; 7: 19.
8. Soe KT, Saw S, van Griensven J, Zhou S, Win L, Chinakali P, Shah S, Mon MM, Aung ST. International non-governmental organizations' provision of community-based tuberculosis care for hard-to-reach populations in Myanmar,

- 2013-2014. *Infect Dis Poverty* 2017; 6(1): 69.
9. Diamond-Smith N, Thet MM, Khaing EE, Sudhinaraset M. Delivery and postpartum practices among new mothers in Laputta, Myanmar: intersecting traditional and modern practices and beliefs. *Culture, Health & Sexuality* 2016; 18(9): 1054-1066.
 10. Muecke JS, Newland HS, Ryan P, Ramsay E, Aung M, Myint S, Esmail-Zadeh R, Zborowska B, Selva D. Awareness of diabetic eye disease among general practitioners and diabetic patients in Yangon, Myanmar. *Clin Exp Ophthalmol* 2008; 36(3): 265-73.
 11. Fullerton JT, Johnson P, Lobe E, Myint KH, Aung NN, Moe T, Linn NA. A Rapid Assessment Tool for affirming good practice in midwifery education programming. *Midwifery* 2016; 34: 36-41.
 12. Tun KS, Wai KS, Yin Y, Thein MK. Postoperative handover among nurses in an orthopedic surgical setting in Myanmar: a best practice implementation project. *JBI Database System Rev Implement Rep.* 2019; 17: 2401-2414.
 13. Nyunt MH, Aye KM, Kyaw KT, Han SS, Aye TT, Wai KT, Kyaw MP. Challenges encountered by local health volunteers in early diagnosis and prompt treatment of malaria in Myanmar artemisinin resistance containment zones. *Malar J.* 2016; 15: 308.
 14. Burgess-Shannon J, Wootton M, Bowyer J, Taylor S, Halbert J. Exploring health-care provider experiences and attitudes towards inter-professional education in Myanmar through semi-structured surveys and focus groups. 7th Congress of the European Academy of Paediatric Societies 2018; poster.
 15. Teo HS, Jewelwayne Salcedo C. Myanmar Health Financing System Assessment Discussion Paper. World Bank 2018; 1-60.

Received: 10 January 2020

Accepted: 26 February 2020

Correspondence:

Clelia D'Apice

Department of Medicine and Surgery, University of Parma

E-mail: clelia.dapice@unipr.it