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Volunteering in an emergency project in response to the COVID-19 pandemic crisis: the experience of Italian midwives

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Volunteering in an emergency project in response to the COVID-19 pandemic crisis: the experience of Italian midwives

ABSTRACT

Objectives: During the first wave of the COVID-19 pandemic, the Region of Lombardy in Italy and its Regional Emergency Service (AREU) created a dedicated 24/7 free phone service to help the Lombard population. After an invitation from their professional order, local midwives collaborated on the AREU project as volunteers to address the needs of women from antenatal to postnatal periods. The aim of this article was to explore the experiences of midwives who volunteered in the AREU project.

Study design: A qualitative study using an interpretative phenomenology approach (IPA).

Methods: The experiences of midwives volunteering in AREU (N = 59) were explored using audio diaries. Written diaries were also offered as an alternative. Data collection took place between March and April 2020. Midwives were provided with semi-structured guidance that indicated the main areas of interest of the study. The diaries were thematically analysed following a temporal criterion; a final conceptual framework was created from emerging themes and subthemes.

Results: The following five themes were identified: (1) choosing to join the volunteer project; (2) the day-to-day difficulties; (3) strategies to cope with the unexpected; (4) professional relationships; and (5) reflecting on the personal experience.

Conclusions: This is the first study to investigate the experiences of Italian midwives who volunteered in a public health project during a pandemic/epidemic. According to participants, taking part in the volunteer activities was informed by and impacted on both their professional

and personal lives. Overall, the experiences of midwives who volunteered in AREU were positive and of humanitarian value. Providing midwifery services within a multidisciplinary team for the benefit of public health represented both a challenge and personal/professional enrichment.

Keywords: Midwifery, experience, volunteering, pandemic, audio diary, phenomenology.

INTRODUCTION

In the last 2 years, the COVID-19 pandemic has creating unprecedented worldwide pressures on healthcare systems, economies and the lives of individuals. Compared with the initial phase of the pandemic, current knowledge about SARS-CoV-2 and the availability of vaccines has enabled many countries to control the spread of the virus[1]. However, lessons learnt at the beginning of this global emergency should not be forgotten if maternal and infant care is to be improved at a global level. The experiences during the first lockdown in Italy provide insightful information.

The first case of SARS-CoV-2 in Italy was confirmed by the Italian National Institute of Health (Istituto Superiore di Sanità-ISS) on 21 February 2020[2]. In response to the rapid spread of the virus and its impact on human health, the Italian government introduced rigid control measures, including a strict national lockdown. During this initial lockdown, it was apparent that new strategies to support healthcare services and professionals were necessary[3].

Italian midwives offered their time and skills, proposing a reorganisation of existing services and collaboration with local stakeholders and multidisciplinary teams (MDTs) to set up new groups[4,5].

This study focuses on an initiative from the region of Lombardy in collaboration with the Regional Emergency Service (Azienda Regionale Emergenza Urgenza [AREU]). AREU is a service responsible for addressing, coordinating and monitoring out-of-hospital emergency services (also known as '112')[6]. During the pandemic, AREU created a dedicated 24/7 toll-free number in response to requests from the population for information on the measures for preventing and managing the spread of the SARS-CoV-2 infection[7].

On 25 February 2020, the Interprovincial Order of Midwives of Bergamo, Cremona, Lodi, Milano and Monza-Brianza finalised a proposal of collaboration with AREU ensuring the availability of local midwives to work as volunteers to provide telephone information and counselling to pregnant and infant-feeding women. The project included direct guidance on prevention, hygiene measures, self-isolation, support to lay volunteers for dealing with health-related queries on the phone and help for people who contacted the emergency telephone number to access ambulance services[8]. The ultimate aim of the project was to enhance public health and facilitate appropriate and timely access to healthcare services in response to the increasing pressures on the healthcare system[8]. The availability of midwives to contribute to the project, in addition to their usual activities, was not straightforward, especially as there was a high number of COVID-19-related deaths among healthcare workers (HCWs) at that specific time in Italy[9,10]. The project with AREU ended in May 2020.

The volunteer contribution of healthcare professionals to address critical/emergency situations has been explored in previous research. Studies focused on the volunteer experiences of medical students[11–14], residents[15], registered doctors and nurses during various epidemic and/or pandemic situations[16,17]. Previous authors have highlighted the prompt response of midwives to the COVID-19 emergency;[18] however, there is limited research investigating the experiences of volunteer midwives in such a scenario.

This study aims to offer an original contribution by exploring the experience of the midwives volunteering in the AREU programme during the first lockdown in Italy.

METHODS

Study design

A qualitative study using an interpretative phenomenology approach (IPA)[19] was undertaken to explore the experiences of midwives who provided help and support to the Lombard population when volunteering in AREU during the first wave of the COVID-19 pandemic.

IPA was chosen as the preferred qualitative approach as it is a participant-oriented method, hence ideal to enable midwives to freely express themselves when recounting their lived experiences. Furthermore, IPA gives researchers the opportunity to understand how specific groups of participants make sense of phenomena that are happening in their lives[20] at a particular period of time and context through their own interpretation of the events[21]. The IPA

typically involves seven analytical steps, as follows: (1) immersing oneself in the original data; (2) initial noting; (3) developing emergent themes; (4) searching for connections across emergent themes; (5) moving to the next case; (6) looking for patterns across cases; and (7) taking interpretations to deeper levels[21].

Participant recruitment and setting

The AREU service represented the setting for this research. All midwives volunteering in AREU during the first lockdown were deemed eligible to take part in the study. The inclusion criteria were as follows: having worked at least one shift during the first month of the project and availability to participate in the study. As many participants as possible were recruited during the data collection period, independent from achieving data saturation.
As midwives used a WhatsApp group to share information and queries related to the AREU voluntary activities, it was decided to use this channel to reach all eligible professionals.
The recruitment process started 3 weeks after the beginning of the AREU project.
A message was sent to all midwives in the WhatsApp group, informing them of the study, its aim and the practicalities of participation. Information sheets and consent forms were made available to individuals who responded to the invitation. Participation was voluntary and midwives were free to decline or withdraw at any time. The researchers remained available during the study for clarifications, questions and further discussion about participation in the study.

Data collection

Data were collected between March and April 2020 using audio diaries. After obtaining informed consent, participants were asked to record an audio file, using their mobile phones, to share their reflections on their first month of volunteer activity. Participants sent their audio files to the principal investigator via a dedicated email address.

Ethical issues

Data were only used for research purposes and in line with the General Data Protection Regulations (UE/2016/679). Digital recordings and electronic data were anonymised and

coded. Electronic storage devices were encrypted. All data were kept on password-protected databases and any paper information was safely stored in locked cabinets accessible only by the research team.

Research tools

According to O' Reilly et al.[22] an audio diary represents an ideal method for reporting emotions, critical events and reflections, and it "can be open-ended and relatively unstructured, giving fewer constraints on responses that may lead to unique data, complexity, contradictions and messiness of human life". By using audio diaries, participants have greater control on how to record their accounts; moreover, according to Markham and Couldry[23], when compared to written diaries, "diaries spoken into voice-recorders tended to be less structured but often saw the diarist reflect on his or her relation to a particular issue in great depth". Audio diaries appeared to be particularly suitable and appropriate for the current study as data could be immediately collected while respecting the anti-contagion measures in force at that time. Moreover, it allowed midwives to record their reflections at their most convenient time.

Participants were not given a specific length/duration for the audio-diary. In case of any difficulties with the audio diary or different preferences, participants were offered the alternative of using written diaries. Participants were provided with semi-structured guidance that indicated the main areas of interest of the study, which included:

- the reasons that led them to participate in the AREU programme, as well as any hesitations;
- fears and doubts, if any, before joining the scheme;
- difficulties encountered along the way;
- resources adopted to overcome challenges; and
- the impact of the experience in AREU on their personal and professional spheres.

Data analyses

All recordings were transcribed verbatim. The transcripts were anonymised and thematically analysed according to IPA[19] using the NVivo software[24]. All diaries were analysed following a temporal criterion of the experience lived by the midwives.

Three members of the research team (GT, AL and IA) initially read all texts to become familiarised with the data, then re-read all transcripts for coding purposes. Themes and subthemes were identified, and relevant supporting quotes were selected; any conflicting data were discussed and resolved within the team. After agreeing on the final categories, all authors further discussed the findings and created a final conceptual framework.

Reflectivity, particularly from the position of the researchers[25], was fostered and encouraged at all stages of the study; the team maintained openness to the data and recognised the possible influences of the researchers' pre-existing personal/professional views. In terms of the authors' backgrounds, four are experienced midwives (three are academics and scholars in Midwifery [SF, AN and LI] and one is a representative of the professional body at the regional level [RN]). The other authors include an occupational health doctor (AMR) and three undergraduate and postgraduate student midwives (IA, AL and GT).

RESULTS

A total of 85 midwives worked in the initial stages of the AREU project and 59 agreed to participant in the study (response rate = 69.4%). All participants were female. The age of participants ranged from 22 to 65 years (mean = 30.72, SD ±11.94) and the majority (32 of 59) were employed. Supplementary Table S1 shows the sociodemographic characteristics of the study population.

The start date and time spent on the project varied between participants, as a result of individual availability. On average, midwives worked 4.6 shifts per month (SD ±4.29; range 1-20). A total of 2168 hours of volunteer activity were recorded. Unemployed midwives covered more than 60% of the total number of shifts. Supplementary Table S1 shows the distribution of the time spent by midwives in AREU and their employment status.

A total of 52 audio diaries were collected; six midwives preferred to use written diaries and one described her experience through a drawing integrated with written comment.
The audio recordings had an average length of 405 sec (SD ±187; range 104-791 sec). The mean of the words used in the written diary was 189 with a range of 122-318 words.

Five main themes emerged from the thematic analysis, as follows: (1) choosing to join the volunteer project; (2) the day-to-day difficulties; (3) strategies to cope with the unexpected; (4) professional relationships; and (5) reflecting on the personal experience (see table 1).

A conceptual framework was created, starting with themes and subthemes (Figure 1), which shows the intertwined influence of personal and professional factors the experiences of midwives.

Choosing to join the volunteer project

Following the proposal to join the AREU project and prior to acceptance, there was a reflective phase when midwives scrutinised the reasons for choosing to volunteer, fears, doubts and possible obstacles they could encounter if agreeing to collaborate. Some midwives reported joining the scheme without hesitation, while for others the choice was more considered. Commitment to the project was influenced by personal and professional factors, which functioned as either motivators or barriers.

Several personal facilitating/reassuring factors that positively influenced the decisions of midwives included feeling useful, curiosity and previous experience of volunteering.

Despite the heavy workload experienced during the health emergency, the willingness of midwives to be useful, going above their ordinary activities within an extraordinary circumstance, represented one of the main drivers to join the AREU scheme.

The unprecedented situation also generated curiosity among some participants who considered the project as an opportunity to further investigate, understand and meet the needs of the community.

"I certainly wanted to be useful in such a critical moment [...] *to do something more for other people. I keep doing my job, but* [...] *this should not prevent the possibility of working as a volunteer and to be even more useful to other people."* (Interview 8)

"I was interested in understanding [...] *how a midwife could give her professional contribution also in a context like this where she was never planned to be before the start of this emergency. So I decided to immediately participate because I was really curious to find out whether we were supposed to answer phone calls, whether it was 112* [emergency number] *calling, and I didn't know about the toll-free number at that time."* (Interview 18)

Previous or current participation in other volunteer activities led a number of midwives to volunteer in AREU.

"I truly felt this was my type of initiative, because it represents me, as I have always given so much for the population as a volunteer, and having the opportunity to combine my professional skills and my volunteer competence was certainly something that everyone could benefit from, so I did it." (Interview 14)

The fear of contagion for themselves and/or significant others represented the main personal reason for questioning whether to collaborate with AREU.

"We would have been in a room with many people and however there was [still] *a potential risk of contagion...so it was for that reason, not for myself per se, but thinking about my parents, that I slightly hesitated [to volunteer]."* (Interview 9)

Furthermore, time was perceived as either a facilitator or a barrier for committing to the volunteer activities; differences in engagement were mostly based on the individual life and work situations of the midwives. Most of the midwives who considered time as a facilitator were unemployed at that time and considered volunteering in AREU as their opportunity of provide midwifery care to contribute to public health.

"Being a newly qualified midwife [...] *I had free time available, I thought this was a way I could have helped, as I could, to this period of emergency."* (Interview 19)

However, having flexible time and the possibility of integrating the volunteer activities with their work demands underpinned similar experiences amongst employed midwives.

"Because my work activity allowed me [to volunteer] *as I work 20 hours per week, so being in the position of offering* [my contribution and] *selecting my shifts, I immediately decided to participate."* (Interview 10)

Participants who experienced difficulties in making time for AREU reported conflicts with family and work demands as the main reason.

"In addition to [my] *work, being a wife and a mother of three, managing to find the time to dedicate to extra-family activities is not always easy. That is why I could do only 2 shifts* [in AREU] *so far."* (Interview 50)

The key professional motivator to join the volunteer project was a sense of responsibility both towards the wider community and the Professional Order.

"To me, each and every one of us is responsible, is called to be responsible towards the community they belong to, hence, to make their skills available to the community." (Interview 1)

Some professional aspects, however, emerged as discouraging factors/barriers. Midwives feared that they may be unable to adequately understand and evaluate the needs via telephone. Participants envisaged challenges originating from the rapid and constant change in COVID-19-related health information, and the dearth of experience in the type of telephone triage and counselling likely to be provided in AREU.

"Having only your voice to use, scared me a little [...] *you have to be careful with words, you need to have a thorough understanding of the situation from the little signs, the little clues you have."* (Interview 46)

"Doubts and fears before starting…well, certainly the fact that it was a completely new situation and activity, that I was going to a place I didn't know, with people I didn't know, starting something completely unknown." (Interview 22)

"I started during the very first days [of the pandemic] *and we didn't know what could pass through maternal milk, the impact of the virus at placental level* […] *the fear of saying something inappropriate or incorrect* [was high] *as there was not* [much] *evidence available.*" (Interview 14)

The day-to-day difficulties

Once the collaboration with AREU started, midwives reported dealing with difficulties almost daily. Some of these challenges were partly expected and some were unexpected. Factors influencing these difficulties belonged to both the personal and professional spheres.

Time management and constraints were some of the crucial difficulties faced by participants. Some midwives found integrating the shifts in AREU with their other work and family commitments hard to organise and manage. Finding a work-volunteering-life balance seemed particularly difficult for hospital midwives given the increase in their workload in response to the pandemic.

"After a while, unfortunately, I couldn't make it anymore to participate for greater demands due to sickness of colleagues or family members that made the managing of work shifts heavier." (Interview 41)

Anticipated difficulties included working in an unusual area of practice (out of the comfort zone of the midwives), providing, on occasion, telephone counselling to the wider population and on general, rather than midwifery related, health issues, and the availability of little/ever-changing scientific evidence to inform practice.

"Amongst the difficulties I faced [...] *they actually were the ones I had envisaged* [...] *I indeed ended up providing paediatric advice, which is not my specific competence, I had, thus, to consult with the present doctors who were, however, very busy."* (Interview 7)

Midwives had, thus, to constantly adapt their skills and actions to the situation. The limited time available to answer phone calls, due to the large number of calls received, was perceived

by some as an obstacle to effective communication. Midwives acknowledged that similar difficulties were experienced by the lay volunteers and started offering them further support.

One unexpected outcome of volunteering in AREU was dealing with physical and emotional fatigue. Physical fatigue was mostly attributed to standing for long hours and moving from one area to another during volunteer activities. Listening to and witnessing service users' stories and concerns amplified midwives' perception of the seriousness of the situation and of the pandemic's devastating effects on people's lives, leading to participants' emotional distress.

"What I didn't consider [at that time]*, but that I actually noticed started feeling it as heavy* [...] *it is the emotional side* [of participating in AREU] *at a personal level too* [...]. *At the end of the shift what I heard, what I said, what I answered has worn me out a bit."* (Interview 4)

Working in a new setting emerged as the sole overlooked difficulty from a professional perspective. Midwives did not expect to be asked to also collaborate in Regional Operating Rooms (called SOREU) in addition to the volunteer activities in AREU. Within SOREU, participants ended up managing unplanned situations, such as whether to send an ambulance in response to calls to 112. This situation made participants feel inadequate, unprepared and without appropriate training. Some midwives experienced this as being *"out of place, because it seemed like something that someone else and not me should have done."* (Interview 20)

Strategies to cope with the unexpected

Previous volunteer experiences of midwives emerged not only as a motivator for volunteering, but also as a great asset when working in AREU.

"My [past] *activity as a volunteer has taught me how to recognise critical situations, much more than the* [learning in the] *Midwifery programme did in fact* [...] *To be able to recognise the* [quality of] *breathing at the phone, from the way the person talks, the tone of the voice, they are all things that volunteering has taught me, and I fully applied in this context.*" (Interview 14)

In general, participants acknowledged the importance of their midwifery communication skills and professional knowledge.

“A resource that being a midwife has given me, is the ability to empower, to listen [...]*, and the patience with people…that's certainly something I've acquired through all labours I assisted* [...] *these resources definitely helped me in handling some difficult calls.”* (Interview 1)

The personal study, training, knowledge, information and experience acquired during their volunteer time in AREU represented the main unforeseen resources to cope with unexpected challenges. In this sense, all components were valued as equally important, including the professional conversations occurring within the WhatsApp group.

"Having a [WhatsApp] *group with all midwives who are living the same experience* [was a resource] ...*any doubts were clarified in a prompt and rapid manner and this enabled me to be more tranquil in what I was doing."* (Interview 19)

Professional relationships

Relationships with both lay volunteers and other healthcare professionals was an important feature of the volunteering experience for midwives.

Rapports between midwives and lay volunteers were unexpectedly difficult. Challenges were mostly attributed to hearing conflicting messages or misleading information provided by the non-healthcare professionals on the phone. Re-directing users to accurate information and ensuring safe practice in a professional manner was a hard situation for midwives to manage.

“Sometimes I was called to answer some women’s queries and found out that the volunteer who answered the phone gave them inaccurate indications on self-isolation [...] *other times I witnessed a non-reassuring conversation or even arguing on the phone… so the main difficulty was to the surveillance and management of these situations.*” (Interview 13)

In contrast, the relationships with the other professionals within the MDT emerged as mostly positive and enriching.

"Having the opportunity to discuss and interact with professionals who you may have not interacted with before, comparing with other professions is always enriching, as everyone develops a specific perspective within their own profession." (Interview 50)

"The environment and your colleagues, both the other midwives and doctors, registrars, psychologists…each and everybody has given me support and tools to better help other people." (Interview 8)

Senior midwives seemed particularly keen on supporting junior colleagues, as emerged from this unemployed newly qualified midwife:

"I have always felt in the right place, at ease, able...being not alone but with a [senior] *colleague that helps you is such an optimal situation."* (Interview 15)

Overall, positive experiences were gained with other healthcare professionals who were volunteering; however, there were occasions when this was not the case. Nevertheless, participants seemed to take this as an opportunity to increase self-awareness of their professional identity and to highlight the contribution of midwifery to public health rather than create interprofessional conflicts.

"There were other health workers who didn't know much about the midwife's skills, so much so that once a psychologist saw a [lay] *volunteer reaching me for some help, and she called him saying 'no, you need a healthcare professional!'... and I had to clarify 'I am a healthcare professional, midwives are healthcare professionals, we know how to deal with this."* (Interview 30)

Reflecting on the personal experience

Participants had conflicting experiences regarding their collaboration as volunteers. Some midwives made sense of their volunteer work as a fully satisfactory, enriching and useful experience; however, others shared negative emotions such as anger, sadness and helplessness. A few participants expressed mixed feelings about the experience.

"I certainly realised how much the best and the worst of people come out, and in my case, it came out a beautiful part of me that I hadn't discovered before and that I'm happy to have found." (Interview 5)

"From this experience, I take home the awareness of making an important contribution [...] *during an enormous emergency. The strength of the midwives who were able to face this emergency as they could, with the means at their disposal, with patience, solidarity, seriousness and so many of them participating in the project…I would have never anticipated it. On the other hand, I also take home a lot of impotence, a lot of sadness, and a lot of worries…indeed at times after some shifts, especially at 112 I couldn't go to sleep as anxiety is slightly contagious and it is difficult to manage it in people."* (Interview 18)

Joining AREU represented an opportunity to implement midwifery skills, especially communication ones, in a totally different setting, so much so that some participants reported the experience as achieving a new/enriched professionalism. Many participants found the further skills acquired in relation to telephone triage, critical problem-solving, organisation and prioritisation of interventions to be particularly meaningful. An increase in compassion and kindness experienced within the teamwork additionally contributed to this feeling of enrichment.

"For the first time we have approached [such] *a reality of urgency/emergency, where midwives are* [usually] *not much represented, they are not present, and I hope this* [experience] *may give a positive impetus towards* [midwives] *being considered more* [by stakeholders] *in a not-too-distant future."* (Interview 29)

"I have certainly learnt and improved a lot as regards my job, the team-spirit, the teamwork which is very strong [...] *the opportunity to discuss things with other professionals* [in this emergency context] *is certainly an advantage for my own professional growth… but also personal one."* (Interview 42)

Lastly, a deep sense of the humanitarian value of the experience in AREU dominated the reflections of the midwives. Some midwives seemed to see it as a 'mission' that illuminated their belonging to humanity and left them with an immense sense of gratitude.

"A great feeling of belonging within the great strain of such an important moment, the fact that the 'living tissue' of health workers moved and midwives moved in such an extraordinary way, this gives me a great sense of gratitude." (Interview 41)

"I perceive myself as strong too, I felt part of them, of this great strength… if I think about this I am moved to tears even now… this great strength of being human, this big generosity, this altruism, this willingness to help those who are in need. And I felt all this very strongly, it has been a very, very beautiful experience, [showing] *truly the greatness of the human soul.* [...] *I am grateful for it."* (Interview 27)

An ultimate sense of hope amid a humanity storm was portrayed (see Supplementary Figure S1) by the participant who preferred to draw her reflections with the accompanying comments:

"The little white boats at the mercy of the waves, together with the two sinking ones, are the people I was calling back [on the phone] *and trying to help. I am the little red boat, trying to hold course, sailing through the storm. The beacon is the hope of making it, of managing to get to a safe harbour... At the horizon, it can be caught a glimpse of a fine band of light, which, like the beacon, switch on* [illuminates] *the hope that some serene* [time] *is approaching."*

DISCUSSION

To the best of the authors' knowledge, this is the first study exploring the lived experience of midwives volunteering in an emergency programme in response to public health needs during the first COVID-19 lockdown in Italy.

Most of the findings of this study can be extended to any HCW, not just midwives, to aid reflections on the role of HCWs in volunteer projects in the context of a public health emergency.

The different ages and occupational statuses of participants influenced their availability to join the volunteer activities, but did not seemed to prevent them from having similar experiences. The conceptual framework created shows the intertwined influence of personal and professional factors on the experiences of midwives at all phases of the project. This combination of personal and professional factors, also documented by other authors[26], was evident from the very beginning (e.g. when midwives hesitated to join scheme due to the fear of putting their families/significant others at greater risk of contagion). Similar considerations around fear of contagion also appear in previous studies investigating the experience of healthcare professionals involved in global emergencies[4,11,27]. The current findings confirm

results in the literature concerning altruistic reasons and a sense of responsibility as the main professional motivators for adhering to voluntary activities in emergency contexts[11,14,16,27,28]. Moreover, the current results are in line with previous studies that reported on HCWs offering their professional skills within volunteer activities as a way of putting the common good before the individual, and HCWs considering serving the community as part of their profession[29].

The question remains whether greater global efforts and planning during the pre-pandemic time could have resulted more efficient systems that were better prepared to face the COVID-19 pandemic. If better preparation had took place, it might not have been necessary for midwives and/or other HCWs to volunteer in such activities for the benefit of public health during this emergency. Additionally, this research suggests that, where HCW participation in humanitarian projects is requested, their involvement and an adequate work-life balance should be facilitated by means of greater flexibility of contracts and shift patterns. The current findings highlight to stakeholders where to prioritise investments, with the aim of moving from what has been defined as a 'tragedy of commons' to a real 'global commons' for the post-pandemic world[30].

The worries of midwives about being unable or unprepared to face the demands of the volunteer project, with their sole midwifery skills in an uncertain and ever-changing scenario reflect what has emerged in other studies during the COVID-19 pandemic[4,31]. The specific concerns relating to dealing with telephone triage has previously been discussed by authors who reported midwives relating the challenges of providing counselling without observing the person and the lack of familiarity with certain triage tools[32,33].

O' Connell et al.[31] highlighted how preparing midwives for risky situations involves making a balance of priorities and learning from previous pandemic experiences, but the authors also remarked how midwives already have the 'skills and experiences to do this in exemplary ways'. This 'exemplary way' also seemed to emerge in the current study. HCWs fear of being unprepared or unable to deal with a situation seems to characterise any 'unprecedented' emergency scenario; an example is seen in the Yang et al.[29] study on nurses volunteering to assist the victims of the earthquake in Wenchuan.

This study highlights the importance for public health programmes, both at academic and continuing professional development (CPD) levels, to seriously consider the experiences and feelings of HCWs when planning and evaluating courses. The findings can inform future education programmes by indicating the required areas of learning as they emerged directly

from the lived experience of professionals. For example, interprofessional communication should be monitored and possible issues promptly addressed in order to optimise MDT work and quality of services. Ensuring an adequate learning and level of preparedness in relation to health emergency across the different disciplines (including midwifery) should be considered as a priority.

Previous studies reported both an emotional and physical overload experienced by midwives during the COVID-19 pandemic in other work settings[4,31,34,35]. Authors described midwives' increase in workload and in anxieties for themselves and their families during the pandemic, and a psychological fatigue resulting from activities such as trying to reassure women, sanitising areas, keeping up-to-date on latest evidence and guidelines and attending training sessions[4,34,36]. The physical and emotional fatigue of midwives has been previously reported. For example, the impact of listening to people's difficulties, fears and loneliness was also described by Nanavaty;[16] however, participants in the current study had not anticipated the level of fatigue that they would experience as a result of volunteering in AREU.

In contrast with other studies where midwives benefited from factors in their personal sphere (e.g. personal relationships and supportive network) to face and overcome difficulties[4], the current study participants indicated only professional factors (e.g. professional competences, knowledge and skills) as coping strategies. Interestingly, participants did not mention any mechanisms used to deal with their emotional distress as a result of volunteering in AREU.

The psychological impacts and stress reported by the study participants reflects the recent evidence of mental health issues and related long-term effects experienced by HCWs during the pandemic[37–40]. The possible risk of burnout and post-traumatic stress disorder should be considered for those who volunteered in healthcare projects during the COVID-19 pandemic and in general in health emergencies.

Previous studies have indicated that the prioritisation of HCW mental health and wellbeing should be seen as an urgent global public health priority.[41] Offering additional support services could also help HCW retention in their workplace[40]. Ignoring this problem can only contribute to increasing the global shortage of staff within healthcare systems and cause serious negative impacts on population health.

The current findings highlight the need to consider the health workforce not only as the provider of public health services but also as users themselves, which remains rarely acknowledged in research and practice.

The positive aspects of teamwork emerging in the current study confirm how much MDT spirit and collaboration represent an asset in emergency situations[15,16,42,43]. The call for a 'blurring of traditional professional boundaries' has been suggested as a way of promoting greater cooperation between all stakeholders in response to global health crises[31]. Midwives in AREU were collaborative, adaptable and open to learn from all members of the team. However, the current study also reported some negative experiences within the MDT, mostly regarding the relationships between healthcare professionals and lay volunteers. Limited data on these relationships are available within the literature and thus would be worth further exploration. Professional relationships appeared to play a key role in midwives' experiences and not only in a set temporal period; thus, professional relationship were places in a non-linear order within the framework.

Previous research has indicated that volunteer activity for healthcare professionals in response to epidemics/pandemics generally resulted in positive social and personal outcomes[16,44], volunteer satisfaction, enhanced professionalism, professional identity[11], the acquisition of broader clinical skills and the ability to engage in optimal multidisciplinary teamwork[15]. The current findings are in line with such results and offer the following additional insights: for newly graduated midwives, the increase in professional identity was given by the possibility of working for the first time as registered professionals; and for the non-employed and retired midwives, it was the opportunity to re-enter a midwifery setting and use their midwifery skills to renew their sense of belonging to the midwifery community. The Interprovincial Order of the Midwives played a crucial role in creating a sense of cohesion, mutual help and positive relationships amongst its members stressing the importance of the support of the professional body.

Finally, midwives described an experience that was enriching from a human(itarian) point of view. This sense of human(itarian) richness seems to embrace the whole midwives' journey as depicted in our framework. Such richness emerged strongly from the audio diaries and even within the limited words in some written diaries; this confirms the depth of insights that the use of audio diaries can offer[23].

The main strength of the current study is that it provides a better understanding of the reasons underpinning midwives' decision to commit to volunteer projects to promote and support public health in response to health emergencies, as well of the difficulties encountered and the strategies adopted to cope with them.

Limitations of this study include the variability of time spent and number of shifts worked, hence differences in participants' individual involvement in the project and the impact of this on their lived experience. Furthermore, the use of audio diaries allowed for a more limited exploration of participants' experiences compared to other methods, such as individual interviews and/or focus group. However, as explained, pragmatic reasons oriented the methodological choices.

Ultimately, the findings from this research demonstrate that midwives' contribution to public health is not limited to the remit of perinatal care, but can also be extended to areas of practice for the benefit of a broader population. This study confirms that 'public health has much to do with midwifery and midwifery has much to do with public health'[45] during the pandemic and beyond.

Future research can help to increase the knowledge and understanding of areas that remain unclear and/or deserve further investigation, including facilitators and barriers for optimal interprofessional interactions and effective multidisciplinary phone triage/counselling to the general public, as well as coping strategies for HCWs during health emergencies. Finally, future studies should investigate the experiences of the service users (i.e. women and their partners), which will offer new insights from a different perspective of volunteer projects, such as AREU, that are aimed to meet the health needs of the general population in emergency situations.

AUTHOR STATEMENTS

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Ethical approval

Ethical approval was obtained prior to commencing the study (Ethical Committee approval 0099805/20).

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Competing interests

None declared.

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Table 1. Themes and subthemes identified from the thematic analysis

THEMES AND SUBTHEMES	**No. of supporting quotes**
THEME 1: CHOOSING TO JOIN THE VOLUNTEER PROJECT	199
Facilitating/reassuring personal factors	56
Fear of contagion	13
Time as either a barrier or a facilitator	19
Sense of professional responsibility	43
Professional barriers	68
THEME 2: THE DAY-TO-DAY DIFFICULTIES	118
Difficult time management/ work-volunteering-life balance	23
Confirmation of expected professional challenges	41
Dealing with an unexpected physical and emotional fatigue	36
Dealing with a new work-setting	18
THEME 3: STRATEGIES TO COPE WITH THE UNEXPECTED	92
Previous volunteer experience	13
Professional knowledge and skills	79
THEME 4: PROFESSIONAL RELATIONSHIPS	69
Relationship with lay volunteers	27
Relationships with health care professionals	42
THEME 5: REFLECTING ON THE PERSONAL EXPERIENCE	178
Experiencing an ambivalence	55
A new/enriched professionalism	93
The humanitarian value of AREU experience	30

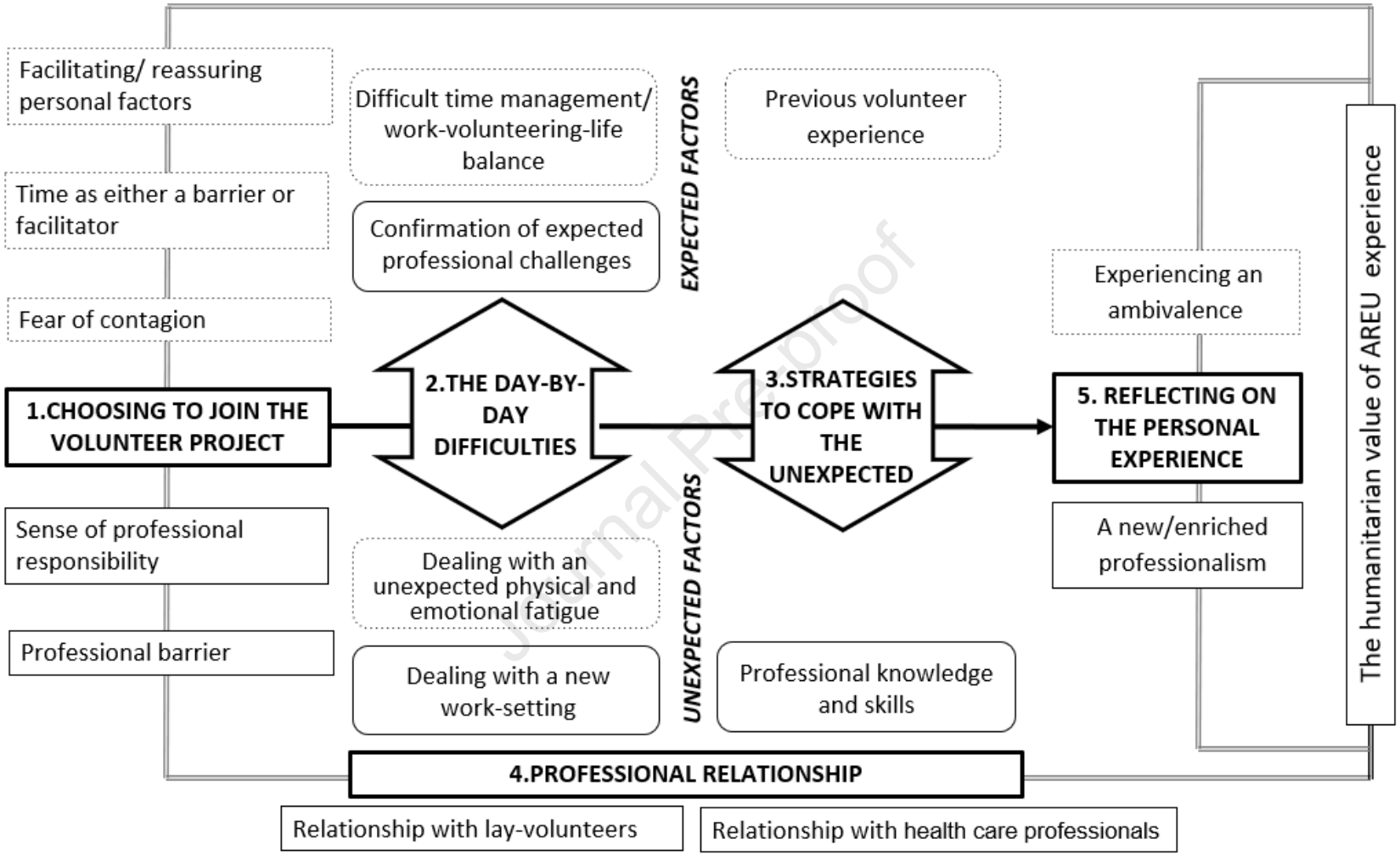

Figure 1: Our conceptual framework from research findings. The boxes with the dotted borders indicate the subthemes belonging to the participants' personal sphere; the boxes with straight line borders represent those pertaining to the professional sphere.