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Short Communication

A qualitative exploration of pharmacy students' opinions and experiences of volunteering during the COVID-19 pandemic

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ABSTRACT

Introduction: This study explored the experiences of pharmacy students volunteering during the COVID-19 pandemic and the perceived impact of volunteering on experiential learning and development of core pharmacy skills.

Methods: Online semi-structured interviews were conducted with current master of pharmacy, entry-to-practice, professional degree students in the United Kingdom (UK). Participants were recruited through email invitations sent to six schools of pharmacy in the UK, pharmacy student organisations in the UK, and social media. Data were analysed using thematic analysis. Implications from the findings were mapped against the Higher Education Learning Framework.

Results: Fifteen students from a range of UK universities were interviewed. The participants described their motivations for volunteering, experiences of working during COVID-19, and the impact of COVID-19 on their learning experiences. A prominent motivating factor for joining the workforce was a sense of moral responsibility to contribute towards the global effort. The opportunity to learn above and beyond routine coursework placements, personal and professional development, social wellbeing at the time of crisis, and national lockdowns were key outcomes that the participants linked to their experiences of volunteering.

Conclusions: Participants of this study perceived a high level of satisfaction, pride, and humanity in their contribution to the global effort to fight the COVID-19 pandemic. Harnessing students' motivation, skill sets, and opportunities during the pandemic added an important workforce in the fight against COVID-19 while increasing the student learning experience.

Introduction

Since COVID-19 was declared a global pandemic in March 2020, it has claimed over three million lives globally.[1] The pandemic has affected all walks of life and presents unprecedented challenges to economies, livelihoods, and public health services across the world. While vaccines approved for use form the mainstay of the effort against COVID-19, equitable access to vaccines globally, public awareness and confidence in vaccines, and the emergence of new strains of viruses is expected to lead to various waves of the pandemic affecting different regions.

The pandemic and social lockdowns affected healthcare education globally, forcing education providers to rapidly readjust

Abbreviations: BPSA, British Pharmaceutical Students' Association; GPhC, General Pharmaceutical Council.

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learning, teaching, and assessment practices. Many aspects of pharmacy education were affected by COVID-19, including changes to exam delivery, alternative methods for pre-registration recruitment, delayed or cancelled graduations, and a huge shift towards working remotely.[2,3] Face-to-face teaching hours were largely replaced by online teaching in most courses. Education and training standards published by the United Kingdom (UK) pharmacy regulators provide no stipulated hours, structure, or learning outcomes for practical experience placements.[4] As such, there is much variation in the provision of experiential learning by universities across the UK.[5] When a considerable number of placements had been cancelled due to COVID-19,[3] students lost out on valuable opportunities for experiential learning. Despite this, over the course of the pandemic many students took the initiative to volunteer in various settings such as hospitals, primary care, and community pharmacies. This created a unique opportunity for students to experience learning through practice during a changing time.

Recent studies of pharmacy practice during the pandemic have suggested student volunteers are an integral part of the pharmacy workforce by contribution to the fight against the pandemic and helping to maintain routine clinical services at the time of the crisis.[6] Such findings suggest a potential for students' roles and contributions to be further studied, acknowledged, and harnessed to allow such experiences to benefit students, health services, and patients.

Kolb's experiential learning theory promotes learning through a cycle of four principles.[7] This theory has long been used as a guide to develop knowledge from experience in healthcare education. In Great Britain, the most common route to become a pharmacist is via a four-year master of pharmacy degree (MPharm) from one of the General Pharmaceutical Council (GPhC) accredited schools of pharmacy. The MPharm degree is followed by a foundation year in training after which the candidate needs to pass the GPhC registration exam to become a qualified pharmacist. As part of the MPharm curriculum, students undertake practical experience such as placements,[4,8] which students should reflect upon, drawing contextualised conclusions and testing ideas in practice. Such placement experiences are aimed to develop the professional and clinical skills needed by the students to become successful practitioners. MPharm students are expected to meet many of the GPhC standards of initial education and training through experiential learning in practice through placement activities.[4] There are no stipulated minimum hours for students to spend in placements and exposure varies across pharmacy schools.[4] Typically, however, placement hours increase as students progress through their MPharm and may range from six days in year one up to 18 days in year four.[8] The foundation year (52 weeks) training allows MPharm graduates to spend 12 months in practice placements, which could include rotations in different practice settings including hospitals, community pharmacies, and primary care.[9]

Research has shown that students value experiential learning as a means to improve professionalism and communication skills and to help them to apply their knowledge in real-life scenarios,[10] particularly when faced with new challenges.[11] Students have reported both positive and negative opinions of the university organised experiential placements,[10,12] suggesting that whilst the experience is invaluable, there is much scope for improvement. The quality of experiential placements may also be impeded by busy or complex situations such as that presented by COVID-19.[11]

The aim of this study was to explore the experiences of pharmacy students in relation to volunteering during the COVID-19 pandemic and the perceived impact of volunteering on experiential learning and the development of core pharmacy skills.

Methods

Ethics approval

This study was reviewed and approved by the University of Birmingham, School of Pharmacy Safety and Ethics Subcommittee (Reference number: UoB/SoP/2020–24).

Sampling

Eligible participants were current MPharm students in the UK who had volunteered for seven days or more at any point after 3 January 2020, when the COVID-19 pandemic gained momentum.[13] Students who were engaged in both paid (outside their regular part-time work) and unpaid non-curricular volunteer activities were eligible to participate. Students were recruited using a combination of convenience sampling and snowball sampling methods. Different strategies for participant recruitment were used to develop a representative sample. An email describing the nature and purpose of the study was sent to pharmacy departments at six UK universities to be forwarded to their current MPharm students. Further, a social media post was prepared and distributed via the University of Birmingham student-led Facebook page, which also included members from other universities. The researcher also contacted a British Pharmaceutical Student's Association (BPSA) representative to distribute information about the study to its members. The BPSA is the largest student organisation representing pharmacy students in the UK. A £10 Amazon voucher was offered as an incentive for participation. Those who showed interest in contributing were provided with a participant information sheet and question guide to review before signing the consent form and agreeing to be interviewed. Participants were allowed to withdraw from the study at any point up to one-week post-interview.

Data collection

Semi-structured interviews using an interview guide were used to explore students' opinions of their volunteering experience. The interview guide was developed through the use of published literature, researchers' own experiences of volunteering and research during the COVID-pandemic, and through iterations and feedback within the research team. The interview guide pilot was tested on

two MPharm students. Minor amendments were made post-piloting. The interview guide consisted of two parts, a short general discussion where students were asked to provide an overview of their experiences and opinions followed by more focused questions on motivation for volunteering, working experiences, and key learning. Open-ended questions were used to allow students to discuss their opinions freely and provide a more reflective account of their experiences. Interviews were conducted by a final year MPharm student who had completed the research methods module and received training in qualitative interviewing. Interviews were conducted via Zoom at a prearranged mutually agreed date and time. Each interview lasted between 30 and 45 min. Interviews were digitally recorded. Data were stored securely on a password-protected university server and personal identifiable information was removed from transcripts immediately following the interview.

Data analysis

Data were transcribed verbatim by the interviewer. The interview transcripts were subjected to thematic analysis using a six-step framework as a guide.[14] This involved repeated familiarisation with the transcripts, followed by identification of codes, generation of themes, and final definition of the key themes and sub-themes. The primary researcher read through each transcript line-by-line to identify and arrange prominent codes and impactful quotes according to statements made by the participants. These codes were then organised using NVivo software, version 10 (QSR International), and both codes and raw transcripts were reviewed approximately 10 times in order to achieve data saturation. As prominent themes began to emerge, codes were categorised into broad themes and sub-themes using a mind map (Fig. 1). Data analysis was conducted in parallel to interviewing. The interview transcripts and mind map were both periodically reviewed amongst the research team. The two authors (TP and MAH) held regular meetings to discuss themes and sub-themes until an agreement was reached.

To further establish rigor, a series of established methods were employed.[15] Two of the coded transcripts were sent back to respondents for member checking. Additionally, peer debriefing was undertaken in the form of discussion with a peer who was not directly involved with this study, but was experienced in qualitative research. Informal pre-interview engagement with the participants allowed the first author (TP) to establish rapport and encourage participants to share their opinions freely with the primary researcher.

Results

A total of 15 eligible students were interviewed for this study (Table 1). Participants represented a range of universities and years of study. Most participants were female. The mean age of the students was 22.2 (SD ± 1.03; range 21–29) years. All participants volunteered in community pharmacies.

Students showed a generally positive attitude towards their experiences of volunteering, describing the overall experience as "useful" and "valuable." One of the key benefits perceived by students was that their experience had provided insight into the daily running of community pharmacy, as well as highlighting the importance of community pharmacies during the COVID-19 pandemic as a "primary point of contact for patients" due to closure of GP surgeries.

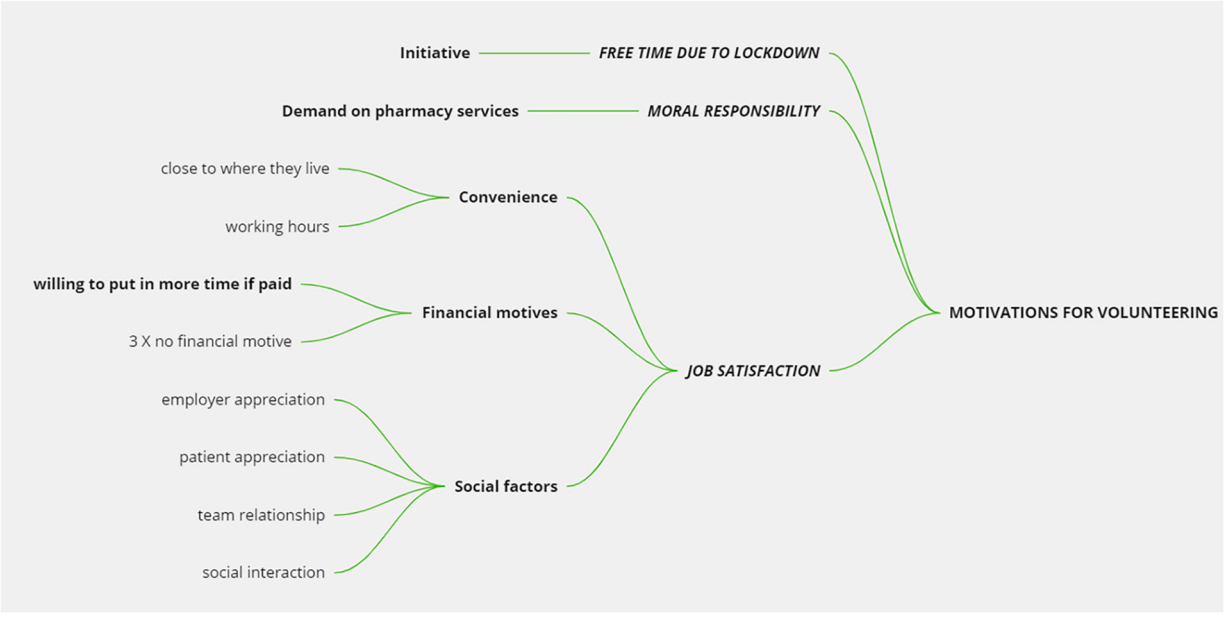

Fig. 1. Mind map of codes from transcript analysis.
Original map access via: https://miro.com/app/board/o9J_lf91DxY=/

Table 1
Demographic characteristics of participants included in the study.

Participant number	Gender	Age	UK region	Year of study
1	F	21	East Midlands	3
2	F	23	East Midlands	4
3	F	22	East Midlands	4
4	M	21	East Midlands	4
5	F	22	East Midlands	4
6	F	23	East Midlands	4
7	M	23	Greater London	4
8	F	20	Greater London	2
9	F	21	Greater London	2
10	F	22	Greater London	4
11	F	20	Greater London	3
12	F	29	North West	3
13	F	22	North West	4
14	F	21	East Midlands	4
15	F	23	Greater London	4

F = female; M = male; UK = United Kingdom.

"It was nice to see more of community pharmacy than just the little snapshots I had at placement" – Participant (P)4.

"It was definitely a really useful experience and I'm glad I did it." – P3.

Three main themes were derived from the data, each with three sub-themes (Fig. 2). These were identified and defined according to the most prominent codes appearing during transcript analysis.

Theme 1: Motivations for Volunteering.

Students identified a number of factors that motivated them to volunteer during the pandemic. Many returned to their hometowns during lockdown and seized the opportunity to replace lost university experiences with a new approach to working, socialising, and learning.

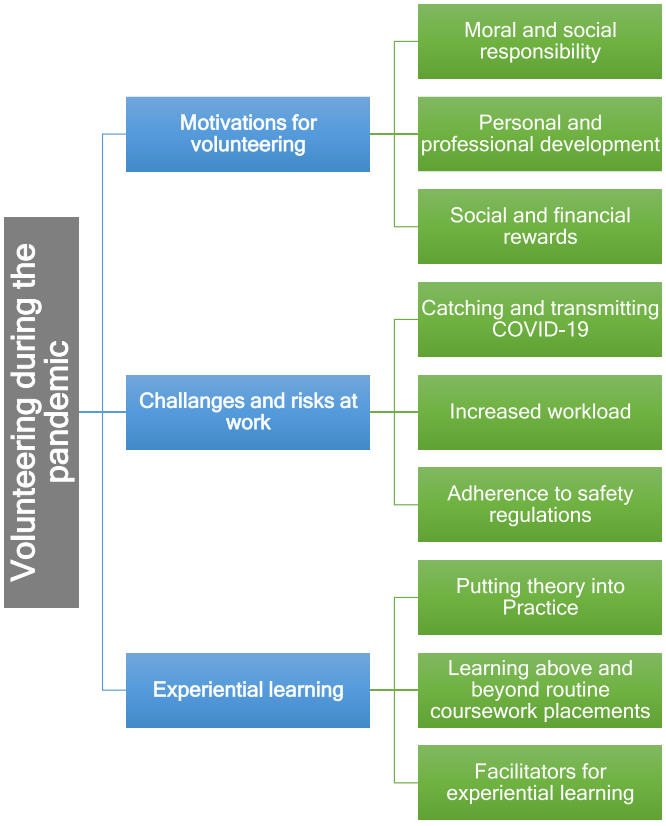

Fig. 2. Key themes and subthemes emerging from data analysis.

Table 2
Mapping of research findings on the Higher Education Learning Framework.

HELF theme	HELF principle	Implications for teachers	Implications for students	Implications for assessment
Learning as 'becoming'	A university education provides a learning experience that broadens students' knowing and being for life beyond the classroom	• Consider experiential learning opportunities to be an integrated experience with campus-based teaching. • Treat students as evolving young professionals and explore how the placement environment can contribute to wider working skills and personal development. • Encourage students to take initiative in their own learning and to examine and question their existing knowledge.	• Avoid relying on supervisors as an absolute source of knowledge and opportunity. Instead, appreciate them as facilitators for experiential learning and take initiative in seeking new knowledge and experiences. • Engage in self-reflection to identify gaps in existing knowledge and consider how these can be filled. • Consider how experiential placements can prepare students for both pharmacy and non-pharmacy working roles.	• Include regular self-reflection in the placement curriculum. Use Kolb's experiential learning cycle as a means to structure reflection and encourage students to contextualize knowledge, try new ways of applying this knowledge, and therefore to perpetuate the learning cycle.
Contextual learning	Learning occurs in context, and context can be used to enhance the learning experience	• Integrate real patient cases to provide opportunities for students to contextualize learning to reflect professional practice. • Facilitate student thinking about application of knowledge from experiential placements to other contexts such as university; and vice versa.	• Seek to expand on university learning and gain a wider context of pharmacy roles. • Be aware of the ever-changing nature of healthcare; and how current events can impact working and learning. • Relate university learning to clinical and professional environments. Consolidate key learning and expand on knowledge based on these experiences.	• Seek to provide diverse but realistic scenarios for assessment. • Consult with pharmacy professionals on real-life practice to understand current developments and experiences in healthcare and emulate this in assessment items e.g., OSCEs, written exams, coursework.
Emotions & learning	Emotions play a role in how and why students learn	• Promote a positive working and learning environment that fosters a good team relationship. • Build good working relationships with students, focusing on quality engagement and not just quantity of time spent together. • Reassure students of their role and value in the team. • Explore with students how they can regulate their emotions in challenging scenarios.	• Engage with patients, other students and pharmacy professionals. In doing so, explore how you can relate to a variety of people through shared experiences. • Reflect on how to self-regulate emotions in distressing or challenging scenarios in order to build resilience.	• Offer a high-quality support system for students. Ensure students feel that their concerns are taken seriously. Take appropriate action where necessary. • Offer ongoing feedback dialogues that are student specific and provide clear suggestions for improvement. • Seek opportunities to commend students for achievements outside of academia e.g., outstanding clinical communication, contribution to placement etc.
Interactive learning	Leverage the social dynamics of learning to enhance the learning experience	• Seek to provide opportunities for interprofessional communication and teamwork. • Promote social interaction with a diverse range of patients and peers. • Facilitate a safe and inclusive environment where students feel free to share perspectives freely.	• Contemplate the benefits of a diverse range of social interactions in expanding knowledge and communication skills. • Seek opportunities to engage in a wide range of social experiences with people from varied backgrounds. • Reflect upon how you can enhance social interactions through communication and social skills.	• In socially interactive components (e.g., OSCEs, clinical communication sessions), provide opportunity for reflection and feedback based on the social dynamic of the scenario. Explore the resulting impact on student thinking and learning.
Learning challenge & difficulty	Challenge and difficulty can be beneficial for students' learning process	• Facilitate active experimentation of learning by students as per Kolb's Experiential Learning Cycle. Provide support and allow	• Appreciate that the nature of healthcare professions involves many challenges. Recognise that challenges present unique	• Incorporate regular informal feedback with students regarding their experiences of challenge and difficulty. Explore student thought processes in reaching a solution and

(*continued on next page*)

Table 2 (*continued*)

HELF theme	HELF principle	Implications for teachers	Implications for students	Implications for assessment
		students to take reasonable risks in testing concepts. • Ensure students are adequately supported in the face of changes to working and learning caused by current events and updates in the healthcare system. • experiences. Explore strategies with them for dealing with difficulties.	opportunities for learning and that difficulty can be a useful part of the learning process. • Use challenges as opportunities to work on adaptability, resilience, and dealing with pressure. • Seek guidance from peers and supervisors in dealing with challenges. Take initiative in asking questions to supplement thought processes and reach solutions.	provide suggestions for correction/ improvement. • Engage in dialogue with students to assess the level of difficulty/challenge faces. Consider optimal levels of challenge to facilitate learning without introducing excessive stress/difficulty.
Learning to learn & higher order thinking	When students employ effective methods of thinking, and understand how they learn, they can improve the way they learn	• Guide and assist students in their methods of reasoning. • Demonstrate examples of critical thinking in the pharmacy environment and relate these to professional practice. • Encourage student self-awareness of experiential and other learning styles. Allow students to make evaluated decisions for their own learning and therefore support self-regulation and initiative. • Utilize opportunities for student-directed learning as a method to integrate clinical and professional practice and evaluate learning.	• Recognise that effective thinking and learning are as much about the thought process as the solution. Reflect on strategies as well as solutions to identify strengths and weaknesses in learning. • Self-reflect on your own most effective learning methods. Experiment with a range of learning styles to find what works best and seek to implement this across educational experiences. • Critically examine knowledge and learning content. Question assumptions, beliefs and strategies of working.	• Involve students in creating assessment criteria for experiential placements. Provide examples of how to meet these criteria so that students understand how they are being assessed. • Provide feedback on students' methods of reasoning as well as solutions to given problems/tasks.
Deep & meaningful learning	Learning is built on prior knowledge and engages students in deep and meaningful thinking and feeling	• Provide purpose and context to enable students to connect prior learning with practical applications of knowledge. • Challenge students to think critically about their learning and experiences. Encourage students to perpetuate the experiential learning cycle by reflecting on experience, drawing informed conclusions, and testing concepts in future practice.	• Explore applications of knowledge across past and new experiences. • Intentionally seek meaning and relevance in learning content. • Use effective learning methods to connect new understandings with prior knowledge and vice versa.	• Provide assessment opportunities which enable students to expand on existing knowledge by using problem solving and research skills.

HELF = Higher Education Learning Framework; OSCE = objective structured clinical examination.

Subtheme 1.1: Moral and Social Responsibility. Participants were also inspired by a sense of moral responsibility and a desire to use their skills and knowledge to help others in a time of need. Being trainee healthcare professionals, students believed that they were able to make a meaningful contribution towards the public health effort.

> "As a future healthcare professional, I feel like it's my responsibility to help on the front line when possible." – P2.

All of the students relished the opportunity to put their learning into practice and make a positive impact on their local communities in this public health emergency.

> "I wanted to feel as though I was contributing or helping." – P9.

Since students had some free time on hand due to cancelled placements, exams, and other university teaching as a result of COVID-19, they felt the need to put make this time useful by volunteering and utilising their energies for the right cause.

> "If I wasn't volunteering, I would literally just be at home doing nothing. So, at least with volunteering I was doing something valuable with my time." – P9.

> "[It] was quite rewarding on a personal note, and it did make me feel like … I am an asset to the health care system." – P4.

Subtheme 1.2: Personal and Professional Development. The students perceived volunteering during the pandemic as an opportunity for personal and professional development.

> "I think I just found that exams are cancelled… I kind of had nothing to do… I was already feeling a bit like almost depressed. Like there's no reason to wake up… so that made me think maybe I'll volunteer, because you know it's for my own personal development as well." – P4.

The majority of participants discussed gaining confidence with their communication skills, particularly when interacting with patients. The students had more opportunities to talk to patients, counsel them on the use of medicines and address their concerns with regards to COVID-19. The students felt that these skills are critical in delivering their duties as pharmacists in future.

> "It helped more with how to talk to patients, how the pharmacist should act around the staff and people, how to talk to the nurses at the GP, how to answer phone calls, how to deal with complaints." —P8.

The majority of students agreed that their experience had prepared them in some way for their pre-registration year and for other future roles. The interviewees were also able to gain a range of wider working skills as a result of their roles such as time management, organisational, and interprofessional practice skills. Students also gained valuable career experience and felt more prepared for applying for pre-registration positions.

> "If I could say that I've worked in a pandemic. How much more pressure could I be under it'll just prepare me more for the future." – P2.

> "Working in a community pharmacy in general is going to be useful for future pharmacy role and working full time as well." – P3.

Subtheme 1.3: Social and Financial rewards. Although students considered financial rewards associated with volunteering important but a number of students expressed their willingness to work and support their pharmacy colleagues during this pandemic. Most students were paid for at least part of the time spent volunteering, with only two students worked in entirely unpaid positions.

> "In this circumstance money didn't have any effect on me. So, whether I was getting paid or not, I would have still done it." – P9.

However, some students were likely to commit more time if they were compensated financially. In addition to financial compensation, volunteering during the pandemic saw this as an opportunity to meet and interact with people as this was not possible otherwise due national lock down and other restrictions on socialising and mass gatherings. The ability to socialise albeit in a work setting had a positive impact on students' mental health as well.

> "It was a reason for me to get out of the house because everywhere else was shut like around April, May time so like…. I didn't actually mind going into work." – P11.

Theme 2: Challenges and Risks at Work.

Although the students enjoyed volunteering during the pandemic and gained valuable experience, they also faced various challenges and manage COVID-19 related risks. Student volunteers provided welcome relief in busy pharmacies, helping to adapt and run community pharmacy services. The students felt that these challenges also helped them to work in high pressure and demanding jobs.

Subtheme 2.1: Catching and transmitting COVID-19. Students expressed apprehension around catching and transmitting COVID-19. The students were however more concerned about their families as some of the participants mentioned their family members were classed vulnerable to COVID-19 related complications.

> "I don't want to catch it, but more so I don't want to give it to anybody who I'm living with [like] family." – P14.

> "I probably did have concerns related to like getting COVID and things… though it wasn't probably for myself, because I'm not exactly high risk, but it was just more like oh if I was to spread it to my family"

– P3

Some students felt that initial concerns with regards to safety were due to the novel nature of COVID-19 when evidence on the transmission and impact were still being understood by the scientific community. While some participants expressed their worries in regards to such lack of evidence, this did not stop them from persevering in their roles.

> "I was a little bit nervous myself and obviously there was much less known than it is now." – P4.

> "I think I was in the same boat with everyone else, just being quite scared" – P11.

Subtheme 2.2: Adherence to safety regulations. Some participants pointed out difficulties in implementing social distancing measures due to spatial constraints, particularly in the dispensary. The number of staffs required to run the pharmacy along with the nature of the work meant that it wasn't always possible to maintain two-meters distance between staff in the available space.

> "We couldn't [distance] because our dispensary was so small. Yeah, I had to wear a mask and full PPE, but we didn't distance in the back or anything like that because we could physically couldn't." – P5.

A few participants also mentioned a delay in acquiring appropriate personal protective equipment. However, they felt that colleagues at pharmacy worked really hard to ensure safety of the patients and staff.

> "It wasn't until quite a while on. So, then we got glass shields and got stickers we had to put on the floor about where people stand and then we did end up getting face masks in… But I just felt like it was delayed in comparison to when I sort of expected it to come in." – P15.

> "I did feel like all the staff that I was working with were doing everything they could and like cleaning and things like that. So yeah, I think everyone just tried their best" – P3.

Some participants raised poor adherence to COVID-19 safety procedures and protocols by patients and/or carers visiting pharmacies. The students felt that the guidelines with regards social distancing, wearing face masks and hand hygiene were quite clearly displayed but patients were reluctant to follow those protocols which caused frustration amongst students.

> "It was really hard dealing with some patients who are trying to question the law … All we can say is it's a necessary requirement, but they wouldn't listen… the number of patients who will refuse to wear a mask the number of patients who refused to do social distancing." – P10.

Participants also described observing heightened distress and anxiety amongst pharmacy clientele with some participants also describing experience of verbal abuse.

> "If they had to wait for their medicine, even five minutes longer. They're more likely to kind of kick off, whereas before they'd happily wait a bit and they were more understanding". – P8.

On the contrary, some patients were very helpful and understood the rationale of these protocols and adhered to all safety measures in place. This provided students peace of mind as they felt that they were working in safe environment.

> "A lot of people did stick to the rules, there were a few patients who didn't." – P10.

> "I think the more time you spend in the pharmacy environment, the [more] safe you feel because you can see the precautions are being kept in place." – P9.

Subtheme 2.3: Increased workload. All participants found that the pandemic prompted changes to the delivery of community pharmacy services. Participants reported an increase in demand of community pharmacy services and subsequently an increased workload when compared to pre-pandemic work experiences.

> "More prescriptions were coming through and more people coming in for stuff over the counter and it did really like add up and build up the workload." – P2.

> "Most patients were suddenly requesting three months at a time instead of one and wanted them sort of in the next five minutes please, rather than being happy to wait till the next day." – P12.

In the beginning of the pandemic, some participants observed a rise in face-to-face consultations as general practice surgeries in primary care were closed for face-to-face consultations to limit the transmission of infection. Patients considered community pharmacies as alternative source for advice.

> "There were more patients coming in with queries that they would take to the GP [general practitioner] because GPs weren't there." – P10.

Participants described that many patients regarded community pharmacies as the first point of contact to have their queries answered in regards to COVID-19. A few students highlighted the importance of ease of patient accessibility in providing effective community pharmacy services. One student summarised that:

> "You're not only providing medical advice; you're providing support in terms of reassurance as well during these difficult times. And [patients] do look up to you …….. because you are a healthcare professional that's easily accessible. – P3.

The participants also noticed changes in the nature of pharmacy services during the pandemic including increasing use of remote technologies. This was reflected in increased telephone queries, deliveries, and electronic transfer pharmacy of prescriptions (ETP) prescriptions.

> "I had to maybe walk or use my car to deliver the medication to patients that are shielding as well at times just to help out… ETP was quite used quite a lot… there was hardly any paper prescriptions because of transmission concerns… I think especially on the phone as well."–P7.

Theme 3: Experiential Learning During Volunteering.

Participants gave accounts of practicing during COVID-19, where they were able to test and apply their knowledge in a new and challenging context. They described that the first few months of the pandemic were a new experience for them and described having the drive and determination in their pursuit of knowledge and self-development.

Subtheme 3.1: Putting theory into Practice. Participants felt that volunteering during the pandemic gave them the opportunity to put 'theory into practice' and develop core pharmacy practice skills. Most of the interviewees used this experience as an opportunity to consolidate on learning from university. Many also believed practical experience to be key to reinforcing previous knowledge.

> "Reinforce the learning that you had from this period from university… putting it into practice in the real-life situation… just testing yourself really as to… how would you approach this… and gaining advice and tips from those that are there." – P7.

> "I feel like with regards to how much knowledge you hold, unless you actually get an opportunity to like put [it] into place. It's not the same." – P15.

However, a handful of students felt there was limited benefit to placements in community settings as they felt that they were doing the same work without learning new skills.

> "I feel like once you've been in community it just gets a bit repetitive and there isn't much else you sort of gain from it. – P15.

Subtheme 3.2: Learning above and beyond routine coursework placements. Participants felt that working experience and learning during the pandemic was very different to compulsory placement activities undertaken as part of university course. When compared to university organised placements, students found their volunteering role to be more meaningful and more realistic in nature. A few participants also mentioned that they did more independent learning than on university organised placements.

> "To be more hands on and practical is more realistic about what you're going to do when you are a pharmacist." – P2.

> "Compared to a normal placement, I did so much more hands on activities… and it was more [of] a steep learning curve." – P13.

Having more freedom in these roles than in organised placement experiences appeared to give the participants greater confidence and opportunity to try new things and develop their skills. Taking on more responsibility reinforced their work and further empowered them to make the most of the opportunities available to them.

> "It was very different to placements we had at uni[versity] because I always had someone or someone else had me to step in… But when I came here it was very independent." – P10.

In the beginning of volunteering work, the students felt unprepared to cope with the nature and amount of work and often felt overwhelmed as it was something that they had never experienced before. However, with time the participants described gaining confidence and were able to deliver their services efficiently.

> "I was always kind of like apologizing… just because I didn't really know what I was doing. But that got better over time so that's fine." – P14.

Subtheme 3.3: Facilitators for experiential learning. Ability to spend decent time in pharmacies was deemed to be beneficial in facilitating effective experiential learning. The participants highlighted that they had a greater opportunity to familiarize themselves with working practices, and build rapport with their patients and the team which enabled them learn more.

> "I think just being there for a longer period of time gives you a better insight and it allows you to kind of get used to the patients there as well so you can kind of get an idea of what it would be like actually working every day." – P3.

Another important factor that contributed to students' enhanced learning experience was nature of working relationship with practice supervisors. Participants who felt supported and encouraged gained more from their experience and were able to learn from both their successes and their mistakes during the pandemic. Students working in such encouraging and enabling environment motivated students to work with enthusiasm and developed confidence.

> "I think to be there for a longer period of time.... You feel like you're more part of a team and you can see what role you play." – P2.

Discussion

The aim of this qualitative study was to explore the opinions of pharmacy students in regard to their experiences of volunteering during the COVID-19 pandemic and its impact on experiential learning and development of core pharmacy skills.

Participants in this study showed great initiative in seeking pharmacy roles where they felt they could make a meaningful contribution to the public health effort. They were further motivated by a sense of moral duty to help the National Health Service and the public. A desire to work in this type of culture is intrinsic to the nature of healthcare professions[16] and is cited as one of the fundamental reasons for undertaking an MPharm degree.[16,17] Pharmacists, too, have taken great pride in fulfilling the responsibility of serving their communities in this time of need.[18]

Student volunteers observed an increase in demand on community pharmacies as a primary point of access to healthcare where GP services were either reduced or unavailable. In the UK, between April and August 2020, a 51.5% decrease in the number of face-to-face appointments within the primary care was noted compared to the same period in 2019. On the contrary, the number of remote consultations increased by more than 270% during the same period.[19] Furthermore, due to the increased demand on pharmacy services, participants were able to take on more applied roles with greater involvement in clinical practice. In this sense, the pandemic provided a valuable opportunity for experiential learning of core pharmacy skills required to become a successful practitioner. Notably, participants in this study emphasised the importance of developing effective communication skills. The students found communicating with patients challenging whilst wearing face masks and other social distancing measures in place during the pandemic. A recent study has shown that the use of personal protective equipment was found to be a barrier in effective communication between healthcare staff and patients, especially where elderly or cognitively impaired patients were concerned.[6]

Much like pre-pandemic literature, participants in this study reported both positive and negative opinions of their experience in community pharmacy.[10,12] Negative opinions in this study were most often tied to hostile work environments, where patient irritability due to the impact of COVID-19 or unprofessional behaviour by pharmacy staff created frustration for the students. It appears that the longer duration and more hands-on nature of this experience filled certain gaps in university organised placements as identified by participants in this and another recent study.[10] Students were therefore able to gain more experience in pharmacy skills and working practices.

Both tutor and student engagement are paramount to effective learning.[19] Interviewees described greater learning when their supervisors made an effort to teach them new things and facilitated reflection and testing of existing knowledge. The Higher Education Learning Framework (HELF)[20] provides seven evidence-based principles relating to university learning and suggest strategies for teachers, students, and assessments. The findings from this study were mapped against HELF in order to demonstrate the tangible implications for healthcare education in the context of experiential placements (Table 2). Further analysis of the framework and associated recommendations reveals many parallels with existing university teaching and assessment of professional practice placements.[20] However, findings from this study suggest that placements organised by universities are not currently long enough for students to engage in all of the principles of HELF. By mapping our study findings on HELF, we propose strategies to improve student experiential learning during university studies. Continued engagement with the framework by supervisors, students, and educational bodies alike may help to improve the quality of time spent in experiential placements and ensure students are engaging fully with their learning.

Strengths and limitations

This study addressed a gap in the literature pertaining to the experiences of students working in pharmacy roles during the COVID-19 pandemic and its impact on their learning. Although the study only explored the experiences of student pharmacists in undertaking volunteer work during COVID-19, these findings are transferable to other public health emergencies and disasters as it highlights the potentially important role these student volunteers can play in the effective delivery of the service. Participants in this study represented different universities in different geographical locations in England. However, all students had volunteered in community pharmacies and thus the findings will be less relevant to experiences in hospital settings. Furthermore, it is also possible that students who had positive experiences from volunteering were more likely to participate in the study as participation was voluntary.

Conclusions

The participants of this study shared positive experiences of volunteering during the pandemic. Participants were inspired by a sense of moral responsibility and a desire to use their skills and knowledge to help others in a time of need. Being trainee healthcare professionals, students believed that they were able to make a meaningful contribution towards the public health effort through volunteering experiences. Opportunity to learn above and beyond routine coursework placements, personal and professional development, social wellbeing at the time of crisis and national lockdowns were key outcomes that the participant linked to their experiences of volunteering. Harnessing students' motivation, skill sets, and opportunities to help during the pandemic an important workforce in the fight against COVID-19 while increasing the student learning experience.

Disclosures

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Declaration of Competing Interest

None.

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