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Original Research

# A mixed-methods cross-sectional study to evaluate the public acceptability of a novel pharmacy-based response service for domestic abuse and/or suicidal ideation

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## A B S T R A C T

**Background:** Domestic abuse (DA) and suicidal ideation (SI) are prevalent and often co-occur. Numerous practical and psychosocial barriers inhibit help-seeking, including accessibility and confidentiality concerns. Early intervention and referral are essential for both DA and SI. Pharmacies are accessible and may be perceived as a discreet venue for a DA and SI response service. There is a growing body of literature about the role of community pharmacy teams in suicide prevention and assisting domestic abuse victims globally. Whilst there have been some interventions in UK pharmacies to support domestic abuse victims and encouragement of staff training in suicide prevention, there is currently no commissioned service for DA and/or SI in pharmacies in the UK.

**Objective:** To assess public acceptability of a novel response service in community pharmacy for people in danger from domestic abuse and/or suicidal ideation.

**Methods:** Data collection consisted of an online public survey running for 6 weeks and qualitative interviews with pharmacy customers. Descriptive statistics were used to present the survey results and interviews were audio recorded, transcribed verbatim and then analysed using the Framework Analysis method and NVivo 11.

**Results:** The majority of 501 survey respondents and all 12 customer interview participants were supportive of offering a response service for DA and/or SI in community pharmacy. Participants emphasised the need for appropriate staff training and support. They considered it an ethical and accessible approach and the majority said that they would recommend such a service to family or friends, and use it themselves if needed. However, awareness of the service was low and marketing materials were considered insufficiently clear.

**Conclusions:** There is strong public support and acceptability for a response service covering both suicidal ideation and domestic abuse in community pharmacies. Further research is required to develop appropriate marketing materials.

## 1. Introduction

Community pharmacies are being increasingly and internationally recognised beyond the traditional dispensing and medicine supply role, as valuable patient-centred community healthcare hubs.<sup>1</sup> The accessibility, convenience and reliability of community pharmacies came to the fore during the Covid-19 pandemic in 2020–2021, where pharmacies remained one of the few services with guaranteed in-person provision.<sup>2–4</sup> There is further acknowledgement that pharmacies act as

“cultural hubs”, offering tailored support to diverse members of local communities and supporting underserved populations.<sup>5</sup> In the UK the location of pharmacies tends to adhere to a ‘positive care law’ whereby pharmacies are geographically most accessible in areas of highest deprivation.<sup>6</sup> Whilst pharmacy services are largely medication and health focused, studies have shown that community pharmacy staff support local communities with wider health and social care issues.<sup>7,8</sup> This often cross-cuts with public health support, including illness prevention and detection.<sup>9,10</sup>

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The role of community pharmacy in two major public health priorities, the prevention of suicide and domestic abuse, is beginning to be realised. Worldwide, 700,000 people die by suicide annually<sup>11</sup> and 27 % of women have experienced intimate partner violence,<sup>12</sup> which is one type of domestic abuse. In England and Wales, there were 5583 suicides in 2021<sup>13</sup> and 5 % of adults experienced domestic abuse in the year leading up until March 20, 22.<sup>14</sup> Early intervention and referral are essential for both domestic abuse (DA) and suicidal ideation (SI)<sup>11</sup> which often co-occur. People who have ever experienced intimate partner violence have a three-times greater risk of attempting suicide.<sup>15</sup>

There is a growing body of evidence about the role of community pharmacy teams in suicide prevention. Evidence from the UK, Ireland, Canada, USA and Australia broadly describes two roles. First is a perceived social, clinical and holistic role, whereby pharmacy staff can support people through conversation, questions and appropriate triage and referral.<sup>16–20</sup> Secondly, some studies cite a contribution to restricting access to means of suicide, specifically medicines.<sup>19</sup> Although discussed to a lesser extent in research, there is evidence from the UK<sup>21</sup> and USA<sup>22</sup> that pharmacy staff are willing to support victims of domestic abuse. For both suicide prevention and domestic abuse, pharmacy staff have identified a need for clearer and effective referral pathways and staff training to support interactions.<sup>17–19,21</sup> However, there are some existing examples of domestic abuse support being adopted into routine pharmacy practice and the encouragement of staff training in suicide prevention. During the COVID-19 pandemic, pharmacy organisations in the United Kingdom and many countries across Europe adopted safe spaces and code word initiatives (e.g., Ask for ANI) to encourage people to come to pharmacies if they were experiencing domestic abuse.<sup>23,24</sup> In England, community pharmacies were incentivised if their staff completed Zero Suicide Alliance training in 2021, with 72,000 pharmacy team members now trained,<sup>25</sup> while in the US state of Washington, suicide prevention training for pharmacists has been mandatory since 2017.<sup>26</sup> However, in the UK there remains no NHS-commissioned services related to suicide prevention in pharmacy.

Until now, the role of pharmacy teams in suicide prevention and domestic abuse has largely been explored from the perspectives of the professionals themselves, or services introduced based on commissioner-identified priorities. This is valid because pharmacy teams can describe their experience of intervening, or of missed opportunities or knowledge gaps to consider in the response to people in need, whether reactively or proactively. However, it is essential that any implemented service also meets the needs of potential users and ideally involves them in service design. To date there is just one published study about potential service users' insights into domestic abuse support in pharmacy.<sup>27</sup> This was conducted with female employees of a US university, and focused on intimate partner violence screening. There are no studies related to public opinion of suicide prevention or domestic abuse services in pharmacy. Therefore, this study aims to canvass public opinion on the awareness of, and acceptability attitudes towards, a novel community pharmacy service to support people experiencing domestic abuse (DA) and/or suicidal ideation (SI).

## 2. Methods and materials

This paper reports on a public acceptability phase of a wider feasibility study. The public acceptability phase was conducted following an earlier co-development phase<sup>28</sup> and parallel to a feasibility phase,<sup>29</sup> as part of the overall three-phase study.

In the co-development phase a novel service, "Lifeguard Pharmacy", had been co-developed through a series of focus groups, interviews and workshops with people with lived experience of DA or SI, representatives from DA/SI support organisations and pharmacy professionals.<sup>28</sup> The name "Lifeguard Pharmacy", a logo of a green and white life-ring and a marketing poster, was designed in an iterative process with people with lived experience as part of the co-development phase.<sup>28</sup> This complex healthcare intervention was then implemented and tested in a

feasibility phase in 8 intervention community pharmacies from January to July 2023.<sup>29,30</sup> The intervention was delivered as a service that could be as either client or staff initiated, resulting in a private consultation with one of the trained pharmacy staff members ("Lifeguards"), with supportive signposting, referral or - where necessary - a crisis response. Clients could indicate that they would like a consultation by picking up a business-card sized flash-card with the logo on it and handing it in at the counter (or they could ask). An additional four pharmacies acted as controls.

### 2.1. Design

Alongside the 6-months intervention period of the afore mentioned feasibility phase,<sup>29</sup> a separate public acceptability phase was conducted in which data were collected from the public to evaluate the awareness of, and acceptability towards this new response service using mixed-methods as part of the wider feasibility study. Firstly, a public online survey was conducted. Secondly, qualitative interviews were conducted with customers from the intervention pharmacies.

### 2.2. Public survey

#### 2.2.1. Development of the questionnaire

A bespoke questionnaire was developed with the aim of evaluating:

- Public awareness of the Lifeguard Pharmacy service
- The public's views on the acceptability of the Lifeguard Pharmacy service.

The questionnaire was based on aspects of the Theoretical Framework for Acceptability of Healthcare Interventions<sup>31</sup> and contained 28 closed and open questions on acceptability, plus a section on demographics (see questionnaire in supplementary material). Free-text boxes were provided for comments. The electronic survey was hosted on the Castor EDC platform.<sup>32</sup>

#### 2.2.2. Participant recruitment and data collection

The study aimed to recruit 600 respondents. This number had been identified as being sufficient to obtain a cross-section of the population in the immediate vicinities of the 8 intervention sites, based on the mean population density within a defined radius of the intervention pharmacies, and pragmatism about the time and resources available within the wider feasibility study.<sup>29,33</sup>

Eligibility criteria were that participants must be at least 18 years old, and resident in [name of county ANONYMISED]. Respondents were provided with information about participating at the beginning of the survey, followed by buttons to press to confirm that they met the eligibility criteria and give consent. After completing the survey, participants were directed to an optional link to be entered into a separate prize draw, with all personal details kept separate from the survey entries. The prizes were 1 x £100, 1 x £60 and 2 x £40 Amazon vouchers (appreciation payments).

The survey was promoted on social media (on local relevant community Facebook and Instagram pages) with general promotion plus specific blog posts linked to relevant news stories. In-person promotion was also conducted to mitigate against any bias towards participants' levels of digital literacy or accessibility. Members of the research team worked in pairs to approach "passers-by" in community settings to complete the survey with the researchers on an iPad. They conducted this over 6 days from May to June 2023, covering all 8 of the pharmacy localities. Business-sized cards with a QR code and information about the survey were also created and distributed to local shops and venues. The survey was open for 6 weeks.

#### 2.2.3. Data analysis

Data were extracted from Castor EDC<sup>32</sup> and analysed using

descriptive statistics in SPSS (version 28.0) for each question out of the total number of respondents for that question. No sub-group analysis was performed. Free-text comments were extracted into Excel. The free-text comments were analysed by grouping together the comments for each question, then collating into a summary of the points raised by that group of comments. These were then used to provide context for the quantitative results. Selected quotes were chosen to represent each grouping.

### 2.3. Qualitative pharmacy customer interviews

#### 2.3.1. Participant recruitment

Intervention pharmacies were asked to display a flyer about the interviews and to recruit two customers per pharmacy (convenience sampling). People aged 18 or over, with sufficient capacity to consent, and who were known to the pharmacy as a regular customer were eligible to participate (so they could report if the service had affected their normal services in any way). Customers did not need to have any knowledge about the service prior to attending the interview. To maximise participant diversity across the pharmacies, staff were advised to recruit two individuals that were different to each other in terms of age and gender if possible. If a customer was interested in participating, they were asked to read the participant information sheet, ask any questions they had about study and then complete a participant consent form and to provide their contact details, which were used by the researcher to arrange the interviews. Participants' contact details, consent forms and interview data were all stored separately and securely.

#### 2.3.2. Data collection

A topic guide was developed to explore views on acceptability (see supplementary material for full topic guide and summary of topics in Table 1), based on aspects of the Theoretical Framework for Acceptability of Healthcare Interventions.<sup>31</sup> The Topic Guide included a question about the participant's views on the marketing poster that had been designed through the co-development process. In an iterative process in response to participants' views in the first few interviews a second poster was designed based on their feedback, and both posters were then shown to the subsequent participants. The topic guide was not piloted. The interviews were conducted from February–May 2023 by AMB [PhD, female, experienced qualitative researcher] via telephone or Microsoft Teams. No other persons were present. No prior connection had been made between the participants and researcher. The interviews were audio-recorded and lasted between 10 and 38 min. No repeat interviews were conducted and field notes were not taken. Transcripts were not returned to participants due to the sensitive content. A £15 Amazon voucher was offered to each participant as a token of appreciation.

#### 2.3.3. Data analysis

Twelve customer interviews were completed [an additional participant was recruited but did not return the consent form – reason unknown]. Data saturation was achieved. The audio recordings were

transcribed verbatim and all identifiable information was removed. Participants were given a unique study code as an identifier. Initial inductive thematic analysis was performed independently on the first few transcripts by 2 of the research team (JS & AMB) to identify themes and then reach consensus on a coding tree. One researcher (AMB) then used the coding tree to continue the thematic analysis of all transcripts. The themes were then transferred into the four acceptability categories previously mentioned (see *Data collection*) in a process of framework analysis<sup>34</sup> to facilitate interpretation of the findings and comparison with the survey findings. The qualitative software programme NVivo 11 was used to code and organise the data.

## 3. Results

### 3.1. Public survey

A total of 501 people completed the survey, which took approximately 10 min each. Twenty-eight percent of respondents identified as male, 44 % female, 2 % indicated a non-binary or other gender identity and 26 % did not disclose their gender. Only 64 % reported their ethnicity, of whom which 89 % self-identified as White British.

The survey results are considered under four headings: public awareness and service opinions, scope of the service, opinions on the name and logo use and participants overall opinion of the service.

A summary of survey results is shown in Table 2 (sections a-j) below:

#### 3.1.1. Public awareness

The public's awareness of the service was limited, with 66 % of respondents indicating that they had not heard of Lifeguard Pharmacy. Fifteen individuals added free-text comments to state that they were aware of 'Ask for ANI,' and ten individuals mentioned this service ('Lifeguard Pharmacy').

#### 3.1.2. Public acceptability

Despite the limited awareness, the majority (75 %) of respondents were supportive of the concept of the service. Perceived benefits included that it is for the greater good, that it offers increased access to services and choice, that it reduces stigma and that pharmacies are seen as trustworthy. Echoing the interview findings, pharmacies were considered to be accessible in terms of being within walking distance, and being able to drop-in. Free text comments in the survey supported this:

*"Pharmacies see a wide range of people through their doors and may be the only people who witness a person in distress."*

*"Sometimes there is a stigma or shame and having someone discreetly signpost support could save lives."*

*"For those experiencing domestic abuse in a controlling situation, a pharmacy may be a more 'legitimate' place to visit and gain help than a GP surgery. Pharmacies may also be less intimidating than other support services."* Participant free-text comments.

Despite some reservations in the previous questions, the vast majority of respondents said that they would either use the service

**Table 1**

Summary of interview topics based on aspects of the Theoretical Framework for Acceptability of Healthcare Interventions.

Topic	Facets of acceptability	Explanation
<b>Awareness</b>	Awareness and general acceptability	Previous awareness of the service and promotional materials. If the participant had no knowledge about the service, the researcher explained what the Lifeguard Pharmacy service was and how it worked.
<b>Attitudes</b>	Affective attitude, Intervention Coherence, Perceived Effectiveness	General attitudes towards the service, does it make sense, do they think it is worthwhile?
<b>Suitability</b>	Ethicality, Self-efficacy of staff (customers' perception of the capability of the staff)	Perception about the suitability and capability of pharmacies and pharmacy staff for the implementation of the service. Exploration of perceived harms.
<b>Impact</b>	Burden, Opportunity Costs	Opinion on how the service impacts on other services in the pharmacy, their customer experience and any changes in their perception of the pharmacy and staff members as a consequence of them offering this service.

**Table 2**  
(a-j): Public survey results.

a.	No, not aware		Partially aware		Yes, fully aware		n										
Before now, were you already aware of any services offered in some local community pharmacies for people in danger from suicidal feelings or domestic abuse?	333	(66 %)	127	(25 %)	40	(8 %)	500										
b.	Very in favour		In favour		Neutral		Not in favour		Not at all in favour		n						
In general, how do you feel about pharmacies offering this service?	199	(41 %)	168	(34 %)	77	(16 %)	28	(6 %)	17	(3 %)	489						
c.	Yes				No				n								
Would you know where to find information about which pharmacies offer the scheme and what times the service is available?	219 (55 %)				177 (45 %)				396								
I would know how to find out the times that the service is offered	228 (58 %)				166 (42 %)				394								
d.	Very confident		Confident		Neutral		Not confident		Not at all confident		n						
To what extent do you have confidence in the abilities of the specifically trained staff in these pharmacies to offer an effective and professional service?	58	(15 %)	196	(50 %)	98	(25 %)	36	(9 %)	7	(2 %)	395						
e.	Very easy to access		Easy to access		Neutral		Difficult to access		Very difficult to access		n						
To what extent do you think that pharmacies are easy to access for people in danger, compared to other healthcare services?	63	(16 %)	193	(50 %)	77	(20 %)	44	(11 %)	9	(2 %)	386						
f.	Yes definitely		Possibly		Unsure		Unlikely		Definitely not		n						
If you had a friend or relative with either suicidal feelings or experiencing domestic abuse, would you recommend this service to them?	205	(55 %)	113	(30 %)	45	(12 %)	12	(3 %)	1	(0 %)	376						
If you yourself were in one of these situations, would you consider using service?	170	(45 %)	124	(33 %)	49	(13 %)	28	(8 %)	3	(1 %)	374						
g.	More likely to use				Not affect choice				Less likely to use				n				
Would the fact that your pharmacy offers this service change your inclination to use that pharmacy for normal pharmacy services?	149 (30 %)				221 (44 %)				6 (1 %)				376				
h. <sup>a</sup>	Both SI and DA (with or without other issues)				SI only		DA only		Other issues		n <sup>a</sup>						
We designed this service for people in danger 'from self or others', which includes both feeling suicidal and experiencing domestic abuse. What are your views on the issues that should be included?	362 (82 %)				57 (13 %)		23 (5 %)		n/a		442						
Indicated service should cover other issues	n/a				n/a		n/a		56 (13 %)		442						
i.	Yes				Neutral				Unsure				No				n
Do you think that it is ethical and morally right to offer a service like this in pharmacies?	280(56 %)				71(14 %)				24(5 %)				6(1 %)				381
j. Opinion on:	Like				Neutral				Dislike				n				
Lifeguard pharmacy name	243(60 %)				140(34 %)				24(6 %)				407				
Symbol/image/logo	247(61 %)				123(31 %)				32(8 %)				402				
Use of flash card to alert pharmacy staff to a customer's service need	273(67 %)				104(26 %)				29(7 %)				406				

<sup>a</sup> Please see notes under Scope of the service for explanation of 2 h responses breakdown.

themselves or would recommend it to a friend or family member. There were some negative comments that revolved around feelings of shame and embarrassment, with individuals expressing reluctance to return to

a pharmacy to collect medication if they had previously used the service noting "It's kind of embarrassing to admit things like this, I certainly wouldn't want other people ....to know".

**Table 3**  
Summary of coding framework for customer interviews based on the Theoretical Framework for Acceptability of Healthcare Interventions.

Awareness	Attitudes	Suitability	Impact
Mixed awareness of the service	Participants spoke about own experiences	Pharmacy setting considered suitable	Customer experience not affected by service other than increased positive perception
Perceived need for the service	Support for the service including both SI and DA	Pharmacy perceived to be more accessible than other settings	Would recommend to others
Support for Lifeguard name and logo	(no comments)	Customers valued positive relationships with staff	It's morally right to provide this service, as long as staff are trained
Marketing needs to be more explicit	(no comments)	Staff training should focus on how to empower clients as unique individuals	Encouragement to staff and research team

However, a resounding 99 % of participants indicated that it would not affect their likelihood of using the pharmacy for regular pharmacy services, or that they would be more likely to do so.

### 3.1.3. Scope of the service

Survey participants were asked what issues should be included in the Lifeguard Pharmacy service as shown in Table 2h. It was expected that individuals should tick one box to answer this question, indicating whether they felt the service should be restricted to DA & SI combined, be restricted to just SI or DA, or be extended to include wider issues. However, many respondents ticked more than one box, therefore, some interpretation of the results is required. Of the 442 people who answered the question about scope, 343 ticked the single box indicating that the service should cover both SI and DA. However, there were 19 other respondents who ticked 'other issues' without ticking both SI and DA and it is therefore unclear if they wished to include other issues as well as DA and SI. Assuming they wished to include SI and DA, results indicate that a majority of 362 (82 %) of the 442 respondents wanted the service to cover SI and DA either with or without other issues. It has also been assumed that participants who ticked all four boxes felt both DA and SI should be included. This leaves 57 (13 %) of the respondents believing the service should be for SI only and 23 (5 %) believing it should be for DA only. A total of 56 (13 %) of the 442 respondents felt that the service should cover a wider range of issues, such as other mental health issues, sexual violence, drugs and alcohol misuse and human trafficking, with a few participants suggesting including people aged under 18.

### 3.1.4. Opinions of the name, logo and flashcard use

The majority of respondents liked the name (60 %), logo (61 %) and use of a flash-card to alert pharmacy staff that a customer wished to have a Lifeguard consultation (67 %).

In elaboration, one participant commented: *"The name of the service is well thought out, as it implies that the pharmacy is offering a lifeline to those who are 'drowning' in their struggles, so to speak."*

The majority of participants (64 %) expressed confidence in the ability of staff to deliver the service. They cited reasons such as existing trust in their pharmacy staff, belief in the staff's skill set, and confidence in their discretion and non-judgmental approach. However, 25 % of respondents were neutral in their responses and 9 % expressed a lack of confidence, with 2 % stating they were not confident at all (see Table 2d). Their concerns centred around potential waiting times, the adequacy of staff training, and a desire for the service to encompass more than just providing referrals or signposting, stating a need for broader support and intervention. Concerns were raised about staff being over-worked, that this could be a cost-cutting means of providing psychological support and that it could be unprofessional.

### 3.1.5. Overall opinion

When noting an overall opinion on whether it is ethically and morally right to offer a service like this in pharmacies, 56 % stated that it is ethically and morally the right thing to do, only 1 % saying that it is not, and 19 % remaining neutral or unsure. Only 65 % of survey respondents expressed explicit confidence in the abilities of the specifically trained staff in these pharmacies to offer an effective and professional service with 25 % not expressing an opinion. These concerns perhaps explain the mixed findings towards the ethics of providing the service and highlight the importance of effective and comprehensive training and support being provided to staff to offer this service, which are both key elements of the Lifeguard model.

## 3.2. Customer interviews

Twelve customer participants were interviewed and data saturation was achieved. Eleven of the interviews were conducted on the phone and one online on Microsoft Teams. Of the 8 intervention pharmacies, 6

pharmacies recruited 2 customers each, one pharmacy recruited one customer and one pharmacy failed to recruit any customer participants. Participants were aged 29–76 years old. Half were male (n = 6), most were White British (n = 10), one was White British and Irish and one other chose not to share their ethnicity. The interviews lasted 10–38 min (median 25 min).

Specific findings related to the four main topics areas are described in the following subsections, and a summary of the coding framework is shown in Table 3.

### 3.2.1. Awareness

A few customers were aware of the service, but the remainder had not noticed any of the marketing materials. Once the service was explained to the participants, they understood it clearly and were very supportive of the concept.

### 3.2.2. Perceived need for service

Participants showed a genuine concern for others and thought the service was definitely needed:

*"It's definitely a good idea. People need it, to be fair. There's not much on offer, is there, for people [...] sometimes life can be hard, can't it, and bottling stuff like that up and then having dark thoughts, you're your own worst nightmare at times. And your brain can take you to some dark places, and without an outlet and someone to speak to, you can end up doing what my son did [took his own life], I suppose."* (Participant 10)

Most participants liked the name "Lifeguard Pharmacy", due to its metaphorical meaning. Initially, some individuals were confused and thought about swimming-related activities, but once explained they clearly understood the analogy and thought that it conveyed the concept of saving lives. They thought that it was discreet, minimised taboo, was poignant, gave a positive message of being rescued, and piqued people's interest, such that they would want to find out more. Participants understood the logo as being a combination of a life-ring and a green pharmacy cross:

*"I think it's very poignant (laughs) because it does... 'Lifeguard', it signifies saving lives, doesn't it? People that are there to help people who are in trouble, throwing them a lifeline, if that... Yeah, I think that it's perfect, if I'm honest."* (Participant 6)

Although participants were very supportive of the service, and of the name and logo, it was clear that the poster developed in the co-development phase was not sufficiently explanatory (see supplementary material). Participants generally reported that it was too discreet and difficult to understand what the service was and who it was for. The researchers subsequently developed a second, more explicit, poster based on feedback from the first few customer interviews (see supplementary material), which was then shown to the subsequent customer participants. This poster was considered to be clearer and easier to understand:

*"The (new) poster is clear and would get people to ask the staff."* (Participant 11).

However, several participants recognised the conundrum that the marketing must be discreet so as not alert perpetrators in the case of domestic abuse, but also clear enough to explain what the service is for potential users:

*"I think you're kind of in a very difficult position, because you're trying to covertly advertise a service which – those two words don't go together; being covert about something and advertising. And it's like if you're a lady or a gent that's being abused at home, then you don't want the abuser to know about the service."* (Participant 12)

One participant commented that the marketing material should make an emotional connection and resonate with the person, so therefore the imagery was helpful, but that there should also be just the basic



facts to explain how to get help, whilst avoiding an overload of information.

### 3.2.3. Attitudes

Four participants spoke about their own experiences of either experiencing suicidal ideation or being bereaved by suicide. These poignant accounts gave insight into the tragedy of their experiences which fuelled the imperative to provide this service:

*"I myself have tried to kill myself on one occasion. My brother died two years ago, as a result of a suicide. So yes, you're preaching to the converted here."* (Participant 9).

All participants thought that it made sense to include both SI and DA in the same service, because of the similar needs and because of the overlap of issues:

*"a lot of them go hand in hand. If you're suffering domestic abuse and you think that there's no way that you can get out of it, then that's when the suicidal thoughts start."* (Participant 2).

There was recognition that drug misuse could be an overlapping issue, and that this added to the suitability of the pharmacy setting due to their involvement with treatment for substance misuse.

All participants were strongly in favour of the Lifeguard Pharmacy service and thought that it should continue. Besides the service being perceived as being needed and beneficial for those experiencing DA/SI, participants also pointed out the lack of other local services for DA/SI. Even where local services existed, it was acknowledged that potential users may not be aware of them, or they may need help and support to access them.

### 3.2.4. Suitability

All participants thought that a community pharmacy setting was suitable for the service. Perceived advantages were that pharmacies are conveniently located (usually within walking distance); already seen as a safe place; are everyday accessed venues and therefore nobody would know why you are attending; have trained healthcare staff; and staff are approachable, supportive and helpful:

*"I think it's brilliant and I've been in a very bad place myself and that pharmacy was one of the safe places I could go to. It was one of the few places outside the house that I knew I could go to."* (Participant 5)

*"Somebody can just go in or can leave home and say, 'I'll be back in five minutes. I'm just going to pick some medication up.' And it's an excuse for them to go without being queried where they're going."* (Participant 2)

The combination of pharmacy being a clinical setting and there being good rapport and trust between patients and staff was seen as being a unique and particularly advantageous aspect of community pharmacy. Pharmacy was seen as preferential to any other public sector setting:

*"The one thing I would say in that context is that, say the Lifeguard aspect of it were to be promoted as part of a different public service sector, I don't think the responses would be as positive. Say, for example, librarians were asked to offer Lifeguard services. Would I feel as happy talking to a librarian at the first stage of domestic abuse or suicidal problems? And the answer to that is probably not. Would I talk to a clergyman? Possibly, but probably not."* (Participant 9)

Some participants noted that the support for SI or DA from General Practitioners (GPs) was not always ideal, because of the practical difficulties of obtaining an appointment and because GPs were sometimes considered to be dismissive of mental health concerns. Participants spoke about the typically caring nature of pharmacy staff, how they felt known and not judged. Being known by name was considered to be particularly important because it gave the customer a sense of value which could make all the difference if a person was in crisis.

*"I didn't feel judged by her, whereas when I spoke to my GP, as much as he was lovely and he was really sympathetic, I still felt like I was judged [...] They [pharmacy staff] actually genuinely care about you"* (Participant 7)

All participants considered that pharmacy staff are suitable for delivering this type of service, provided they had received appropriate training. It was considered important that staff had a free choice about whether to become a "Lifeguard" and that they needed to be a strong team so that they could cover for each other. One participant spoke of the importance of staff knowing their limits, and that it could be dangerous for both the staff member and the client if they acted beyond their area of competence. It was recommended that staff should be trained to empower clients, not be patronising, not minimise their concerns, and tailor the consultation to each client's unique needs:

*"You couldn't just approach that person reading off a page. You'd have to tackle each person differently."* (Participant 10).

Participants showed concern for the welfare of the pharmacy staff and were pleased to hear that the "Lifeguards" had access to a psychotherapist for debriefing, if required. One participant, who himself had previously been referred for crisis support by the pharmacist, spoke about how he thought that this service would reduce the burden on staff because it would give them procedures to follow and formal support.

### 3.2.5. Impact

Participants were not concerned about the Lifeguard Pharmacy service having any adverse impact on their experiences of using the pharmacy. This was because of its delivery being discreet and it not noticeably deflecting resources from other pharmacy services. Participants thought it was morally right and ethically appropriate to offer the service, and all stated that even if they personally had to wait longer for a medicine to be dispensed, it would be the right thing to do if somebody was in crisis. The delivery of the service in the participants' pharmacy improved the impression that the customers had of staff members. Other participants mentioned that they already had a very good impression of the staff members and therefore it was not affected by the service with Participant 5 noting

*"I have even more respect, if that's possible, for them than I did before. So, piloting this and making this something formal. I just think they're an amazing group of people".*

All participants said that they would recommend this service to others:

*"Absolutely 100%. It would be the first port of call, because the whole point of that is that somebody dealing with the Lifeguard service at a pharmacy is an accountable professional and not just somebody you'd see on the street, but it's somebody with more responsibility to do something about it."* (Participant 9)

Lastly, several participants spontaneously expressed their encouragement to the Lifeguards and the research team.

*"As I say, it's a very positive thing that you're doing. It's incredibly difficult to do, and so the admiration I've got is that it's great. I do admire what you're doing."* (Participant 12)

## 4. Discussion

Overall, the survey and supporting qualitative data indicate public acceptability towards the concept of the Lifeguard Pharmacy service, with the proviso that there needs to be assurances to provide comprehensive and effective staff training and ensuring that the pharmacies have adequate workload capacity. It is also evident that awareness of the service was low. The marketing and promotional strategy had not been sufficiently successful in reaching local residents.

Both the patients and the public were strongly supportive of the role of community pharmacy teams in helping people in danger, particularly SI and DA. People described pharmacies as accessible spaces and appropriate alternatives for people to seek help, if they are supported discreetly by appropriately trained staff. When people were specifically asked about Lifeguard Pharmacy this support for SI and DA continued, with wider scope even suggested, such as expanding the service to people experiencing other mental health problems. However, challenges in communicating the service to people in need and members of the general public, were identified.

#### 4.1. Pharmacy teams supporting people in danger

The favourable opinion from patients and the public on this extended role for the benefit of the 'greater good' aligns with pharmacy staff and other health and social care professionals' views.<sup>35</sup> This finding also corroborates research on pharmacy teams' views on their role in suicide prevention, where a 'responsibility to try' and support people was identified.<sup>16</sup> Participants felt that much of this support was already happening, and some specifically referred to the 'Ask for ANI' initiative as an example. In addition to being supportive of services to include both SI and DA there were suggestions about widening the scope, for example, other mental health problems and including children and young people. There is evidence from both the Bloom programme<sup>8</sup> and AMPLIPHY<sup>7</sup> that patients make disclosures beyond the original purpose of these consultations when given time with the pharmacist.

Patients and the public generally described community pharmacies as accessible places, where people can access services without the need for prior appointment and when other services, such as GPs, are unavailable. They recognised the pharmacy as an alternative for support or a mechanism to facilitate triage and referral, something that pharmacy teams themselves have described as a key, but challenging role, due to underdeveloped referral pathways.<sup>17,19</sup> Pharmacy teams in high-income countries have described challenges in balancing patient care with other workload demands<sup>18</sup> whilst recognising the accessible pharmacy environment as a useful feature of their role in suicide prevention.<sup>17,18</sup> Similarly, most examples refer to the long-term rapport and trust that pharmacy teams build with patients, which were seen as advantageous<sup>17-19</sup> and which were similarly described by the public in this interview and survey study.

Pharmacists were also cited as trusted healthcare professionals in the one published study of pharmacy consumers' views on domestic abuse support.<sup>27</sup> However, these consumers were concerned about space, privacy, time, and appropriateness of staff training. In contrast, participants in the current study described pharmacy as a 'neutral' environment which might mitigate any stigma associated with help-seeking. Some concerns were raised about maintenance of confidentiality in a busy, community-based environment. Participants were mostly confident in the ability of staff to help, although there were some reservations about adequacy of training. In England most pharmacy staff will have completed basic suicide awareness and domestic abuse awareness training, at least sufficient to meet pharmacy quality scheme requirements.<sup>25</sup> However, prior to this, low levels of training in suicide prevention were reported.<sup>16</sup>

#### 4.2. Lifeguard Pharmacy

The divergence of opinions about the competence of pharmacy staff suggested that customers do not perceive all pharmacies equally. The pharmacies selected to be in the Lifeguard study intervention arm met stringent quality criteria including minimum staffing levels and numbers of Lifeguard trained staff. Pharmacy staff themselves have previously indicated that not all colleagues might be able to deliver support to people in danger.<sup>17</sup> This could infer that Lifeguard should only be rolled out to certain pharmacies. There have been similar models in pharmacy in England, such as the Healthy Living Pharmacy initiative,

where there was a tiered approach, but this is now standardised.<sup>36</sup> Variation in service provision might validate participants' concerns about inequality across service access, including being turned away for help.

Many interviewees were not aware of the Lifeguard service, despite it being offered in either their usual pharmacy or pharmacies in their community. They advised that this could be improved through more explicit marketing. However, this would be at odds with the request of the people with lived experience who designed the promotional poster. This highlights a tension between discretion and advertising of SI and DA services. There was support for the discretion afforded by use a metaphor and symbol in the name and logo, but the brand would also need to become known to reach its potential as an effective service.

#### 4.3. Strengths

Pharmacy service users' perspectives have been explored about pharmacy-based suicide prevention and domestic abuse services for the first time in the UK. The study combines in-depth data from qualitative interview studies with a broader viewpoint ascertained from the survey study.

The demographics of the survey respondents were broadly similar to the overall demographics of [anonymised county]. Twenty-eight percent of the survey respondents identified as male, 44 % female, 2 % indicated a non-binary or other gender identity and 26 % did not disclose their gender. Only 64 % reported their ethnicity, of whom which 89 % self-identified as White British. If the respondents that did not state their gender are excluded, this makes 59.4 % female (compared to 51 % in the population), 37.8 % male (compared to 49 % in the population) and 2.7 % non-binary or other gender identity compared to none in the published demographic data of the population.<sup>37</sup> This means that there may potentially be a slight bias towards female respondents and the inclusion of non-binary (or other gender identity) respondents. Eighty-nine percent of the survey respondents self-defined as White British compared to 93.29 % in the population.<sup>38</sup> There may therefore be a slight bias towards a higher number of people who were not White British. However, statistical comparisons of demographics were not conducted due to the limited sample size.

#### 4.4. Limitations

The customer interview topic guide was developed specifically for this study and was not piloted. However, the interviews were effective at generating rich data and emerging themes and data saturation was achieved within the sample size. It is acknowledged that there was a potential bias in the interview sampling and recruitment process towards customers with a good existing relationship with pharmacy staff. However, the survey provided data from participants who were not necessarily known to the pharmacy thus providing triangulation.

The survey questionnaire was developed specifically for this study and is not a previously validated tool, which limits the potential for sample size calculation, in addition to the interpretation and generalisability of the results.

There were varying numbers of responses per question which may indicate that there were too many questions and that some questions were considered to be more relevant than others.

Some survey responses were self-completed by respondents online and others were completed in person by participants with a researcher on an iPad. This in-person option was offered as a means of addressing potential biases due to poor digital literacy and to target recruitment of participants in the immediate vicinity of each pharmacy. However, the use of in-person completion of the survey may have led to a bias in favour of the service.

A total of 501 responses were achieved which was less than the target sample size of 600. Challenges were experienced in the processes of conducting the survey, which included limitations about the extent to

which marketing was possible. A key paradox of the findings was that although the public were very supportive about the idea of the service and the customers that were interviewed favoured a clearer and more explicit poster, partner organisations were fearful that the revised marketing materials were potentially too triggering. Further implementation research is required to overcome this challenge. Furthermore, there was a limited time period in which the survey could be promoted as care was taken to withdraw the survey at least a month before the end of the 6-month service intervention time period so as not to inadvertently promote the service after the date that it had finished which could be detrimental to patient safety.

Given the limitations of the sample size there is less certainty of the findings. However, as mentioned above, the survey findings were similar to the interview findings. Sub-group analyses were not conducted and confidence intervals were not reported.

There was a lack of ethnic diversity, with participants for both the customer interviews and the public survey being predominantly White British which is representative of the area.<sup>36</sup>

This study explored the public acceptability of this novel service alongside a 6-month feasibility intervention of the service. Limitations in the survey method, together with the limited ethnic diversity and marketing challenges should be addressed as part of future research on the wider implementation and efficacy of the service as a complex intervention. A larger survey sample across a wider geographical area with greater ethnic diversity would be beneficial and would enable more extensive statistical analysis, including sub-group analysis.

## 5. Conclusion

This study provided evidence of public support for a defined, responsive service in community pharmacies that covers both suicidal ideation and domestic abuse. Pharmacies are perceived to be accessible due to their proximity to most of the population, the ability to visit opportunistically, being neutral environments and having friendly, supportive healthcare-trained staff. Provision of such a service requires appropriate training for staff, adequate staffing and the need for discretion and confidentiality. The use of a non-medicalised name for the service provides discretion and neutrality, but the name would need extensive marketing in a sensitive manner to raise its profile. The findings support a tiered approach in which only pharmacies that meet specified criteria are accredited to offer a response service. Further, more extensive research is required to evaluate acceptability over a more diverse and wider population.

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## Declarations of interest

None.

## Data access statement

Data was stored on a shared, password protected channel of a Teams site accessible to all authors until the end of the project.

## Data availability statement

Data cannot be shared for ethical/privacy reasons. The data underlying this article cannot be shared publicly due to the sensitive nature of the topic and the risk of identification of participants.

## CRedit authorship contribution statement

**Josie Solomon:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Hayley Gorton:** Writing – review & editing, Writing – original draft, Supervision. **Ana Maria Barcelos:** Writing – review & editing, Project administration, Investigation, Formal analysis. **Tracey Latham-Green:** Writing – review & editing, Project administration. **Samantha Williams:** Writing – review & editing, Investigation, Formal analysis, Data curation. **Elise Rowan:** Writing – review & editing, Data curation. **Peter Knapp:** Writing – review & editing, Methodology, Funding acquisition. **Claire Henderson:** Writing – review & editing, Methodology, Funding acquisition. **Mark Gussy:** Writing – review & editing, Supervision, Methodology, Funding acquisition, Conceptualization. **Rebecca Barnes:** Writing – review & editing, Methodology, Investigation, Formal analysis.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.sapharm.2024.07.002>.

## References

- Naidoo V, Suleman F, Bangalee V. Roles and reimbursement of pharmacists as South Africa transitions towards Universal Health Coverage (UHC): an online survey-based study. *PLoS One*. 2021;16(9), e0257348. <https://doi.org/10.1371/JOURNAL.PONE.0257348>.
- Gastelurrutia MA, Faus MJ, Martínez-Martínez F. Primary health care policy and vision for community pharmacy and pharmacists in Spain. *Pharm Pract (Granada)*. 2020;18(2):1–7. <https://doi.org/10.18549/PharmPract.2020.2.1999>.
- Dineen-Griffin S, Benrimoj SJ, Garcia-Cardenas V. Primary health care policy and vision for community pharmacy and pharmacists in Australia. *Pharm Pract*. 2020;18(2):1–12. <https://doi.org/10.18549/PharmPract.2020.2.1967>.
- McMillan SS, Wheeler AJ, Sav A, et al. Community pharmacy in Australia: a health hub destination of the future. *Res Soc Adm Pharm*. 2013;9(6):863–875. <https://doi.org/10.1016/J.SAPHARM.2012.11.003>.
- McCann J, Lau WM, Husband A, et al. 'Creating a culturally competent pharmacy profession': a qualitative exploration of pharmacy staff perspectives of cultural competence and its training in community pharmacy settings. *Health Expect*. 2023; 26(5):1941–1953. <https://doi.org/10.1111/HEX.13803>.
- Todd A, Copeland A, Husband A, Kasim A, Bamba C. The positive pharmacy care law: an area-level analysis of the relationship between community pharmacy distribution, urbanity and social deprivation in England. *BMJ Open*. 2014;4(8), e005764. <https://doi.org/10.1136/BMJOPEN-2014-005764>.
- Gorton HC, Riste L, Littlewood D, Pickering G, Armitage CJ, Ashcroft DM. Advancing Mental Health Provision in PHarmacy (AMPLIPHY): a feasibility study. *Res Soc Adm Pharm*. 2022;18(8):3414–3424. <https://doi.org/10.1016/J.SAPHARM.2021.11.001>.
- Haslam L, Gardner DM, Murphy AL. A retrospective analysis of patient care activities in a community pharmacy mental illness and addictions program. *Res Soc Adm Pharm*. 2020;16(4):522–528. <https://doi.org/10.1016/J.SAPHARM.2019.07.003>.
- Root G. *Pharmacy Playing a Pivotal Role in Prevention and Public Health - UK Health Security Agency*. UK Health Security Agency; 2019. <https://ukhsa.blog.gov.uk/2019/06/28/pharmacy-playing-a-pivotal-role-in-prevention-and-public-health/>. Accessed November 27, 2023.
- Strand MA, Mager NAD, Hall L, Martin SL, Sarpong DF. Pharmacy contributions to improved population health: expanding the public health roundtable. *Prev Chronic Dis*. 2020;17. <https://doi.org/10.5888/PCD17.200350>.
- World Health Organization. Live life: an implementation guide for suicide prevention in countries, 1-142 <https://www.who.int/publications/i/item/9789240026629>; 2021. Accessed November 27, 2023.



12. World Health Organization. Violence against women. <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>; 2021. Accessed January 22, 2024.
13. Office for National Statistics (ONS). Suicides in England and Wales: 2021 registrations. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2021registrations>; 2022. Accessed November 27, 2023.
14. Office for National Statistics (ONS). Domestic abuse prevalence and trends, England and Wales: year ending March 2022. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/domesticabuseprevalenceandtrendsenglandandwales/yearendingmarch2022>; 2022. Accessed November 27, 2023.
15. McManus S, Walby S, Barbosa EC, et al. Intimate partner violence, suicidality, and self-harm: a probability sample survey of the general population in England. *Lancet Psychiatr*. 2022;9(7):574–583. [https://doi.org/10.1016/S2215-0366\(22\)00151-1](https://doi.org/10.1016/S2215-0366(22)00151-1).
16. Gorton HC, Berry HJ, O'Reilly CL, Gardner D, Murphy AL. Experience and attitudes of pharmacy teams towards suicide prevention: a cross-sectional survey. *Res Soc Adm Pharm*. 2023;19(3):517–525. <https://doi.org/10.1016/j.sapharm.2022.09.011>.
17. Gorton HC, Littlewood D, Lotfallah C, et al. Current and potential contributions of community pharmacy teams to self-harm and suicide prevention: a qualitative interview study. *Vainganankar JA, ed. PLoS One*. 2019;14(9), e0222132. <https://doi.org/10.1371/journal.pone.0222132>.
18. Murphy AL, Ataya R, Himmelman D, et al. Community pharmacists' experiences and people at risk of suicide in Canada and Australia: a thematic analysis. *Soc Psychiatr Psychiatr Epidemiol*. 2018;53(11):1173–1184. <https://doi.org/10.1007/s00127-018-1553-7>.
19. O'Driscoll M, O'Mahony C, Keating E, O'Regan N, Sahn LJ. Interacting with patients at risk of self-harm or suicide - a qualitative study of community pharmacists and pharmacy staff. *Explor Res Clin Soc Pharm*. 2023;11, 100293. <https://doi.org/10.1016/J.RCSOP.2023.100293>.
20. Carpenter DM, Lavigne JE, Colmenares EW, Falbo K, Mosley SL. Community pharmacy staff interactions with patients who have risk factors or warning signs of suicide. *Res Soc Adm Pharm*. 2020;16(3):349–359. <https://doi.org/10.1016/j.sapharm.2019.05.024>.
21. Lewis NV, Stone T, Feder GS, Horwood J. Barriers and facilitators to pharmacists' engagement in response to domestic violence: a qualitative interview study informed by the capability-opportunity-motivation-behaviour model. *J Public Health*. 2023;45(1):e104–e113. <https://doi.org/10.1093/PUBMED/FDAB375>.
22. Barnard M, White A, Bouldin A. Preparing pharmacists to care for patients exposed to intimate partner violence. *Pharm Times*. 2020;8(2):100. <https://doi.org/10.3390/PHARMACY8020100>.
23. Stanley N, Foster HR, Barter C, et al. In: *Developing New Portals to Safety for Domestic Abuse Survivors in the Context of the Pandemic*. vol. 30. 2022:e6447–e6455. <https://doi.org/10.1111/hsc.14089>.
24. Gobierno de Canarias. Face Mask-19. Available at: Face Mask-19 (gobiernodecanarias.org), Accessed 10.07.24.
25. Community Pharmacy England. *Pharmacy Quality Scheme Outcomes*; 2021. <https://cpe.org.uk/quality-and-regulations/pharmacy-quality-scheme/pharmacy-quality-scheme-outcomes/>. Accessed November 27, 2023.
26. Carpenter DM, Lavigne JE, Roberts CA, Zacher J, Colmenares EW. A review of suicide prevention programs and training policies for pharmacists. *J Am Pharmaceut Assoc*. 2018;58(5):522–529. <https://doi.org/10.1016/j.japh.2018.05.004>.
27. Barnard M, West-Strum D, Holmes E, Yang Y, Fisher A. The potential for screening for intimate partner violence in community pharmacies: an exploratory study of female consumers' perspectives. *J Interpers Violence*. 2018;33(6):960–979. <https://doi.org/10.1177/0886260515614272>.
28. Barcelos, A, Latham-Green, T, Barnes, B, Gorton, H, Gussy, M, Henderson, C, Khatri, M, Knapp, P, Solomon, J. Lifeguard Pharmacy: the co-development of a new community pharmacy response service for people in danger from domestic abuse or suicidal ideation. *IJPP*. Submitted March 2024, under review.
29. Solomon, J, Barcelos, A, Barnes, R, et al. Lifeguard Pharmacy – a feasibility trial of a novel pharmacy-based intervention for people experiencing domestic abuse and/or suicidal ideation. *BMC Publ Health*. Accepted 09.07.24.
30. Solomon J, Barcelos A. Lifeguard Pharmacy – the co-development of a new suicide prevention response service in UK community pharmacies. In: *International Association for Suicide Prevention Abstract Book 19th - 23rd September 2023*; 2023:127. Piran, Slovenia <https://www.iasp.info/wp-content/uploads/IASP-32nd-World-Congress-Abstract-Book-2023.pdf>.
31. Sekhon M, Cartwright M, Francis JJ. Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Serv Res*. 2017;17(1):88. <https://doi.org/10.1186/s12913-017-2031-8>.
32. Castor. Castor electronic data capture. <https://www.castoredc.com/>; 2023. Accessed December 30, 2023.
33. Bartlett JE, Kotrlik JW, Higgins CC. Organizational research: determining appropriate sample size in survey research. *Inf Technol Learn Perform J ER*. 2001;19(1):43–50.
34. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*. 2013;13(1):117. <https://doi.org/10.1186/1471-2288-13-117>.
35. Gorton HC, Lavigne J, Carpenter D, Solomon J, Chike-Obuekwe S, Barcelos A. Symposium #34 'Dispensing support'-how pharmacists and their teams contribute to suicide prevention efforts. In: *International Association for Suicide Prevention Abstract Book 19th - 23rd September 2023*; 2023:126. Piran, Slovenia <https://www.iasp.info/wp-content/uploads/IASP-32nd-World-Congress-Abstract-Book-2023.pdf>.
36. Community Pharmacy England. *Healthy Living Pharmacy*; 2023. <https://cpe.org.uk/national-pharmacy-services/essential-services/healthy-living-pharmacies/hlp-introduction-and-background/>.
37. Varbes. *Demographics of Lincolnshire*; 2021. <https://www.varbes.com/demographics/lincolnshire-demographics>, 18.06.24.
38. Active Lincolnshire. Forward Trends in Population Growth and Demographics of Greater Lincolnshire. <https://www.activeincolnshire.com/uploads/Chapter-Two-Forward-trends-in-population-growth-and-demographics-of-Greater-Lincolnshire-and-Rutland-1.pdf>. Accessed 09.07.24.