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# A needs assessment for suicide prevention training within community pharmacies



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ARTICLE INFO	A B S T R A C T
Keywords: Suicide prevention Pharmacy Gatekeeper Mental health	<i>Background:</i> Suicide is a leading cause of deaths globally, with over 700,000 deaths by suicide reported annually. In Ireland, numbers of suicides increased by 5.4% from 2015 to 2019. Community pharmacists are one of the most access sible and trusted healthcare professionals, and together with their staff they are well placed to identify those who may be at risk of suicide and guide them towards care pathways. Furthermore, their role in medication management can limit vulnerable patient access to potentially harmful medications. This study aims to explore the experience of community pharmacists and their staff in dealing with patients at risk of suicide and to identify ways of increasing education and support in this area. <i>Methods:</i> Pharmacists registered with the Pharmaceutical Society of Ireland (PSI) were invited to complete an anony mous online survey via Google Forms in May 2020, and to circulate the online survey link to their community pharmacist; communication; training and resources. Free text responses to the following question were invited: "Withou any identifying information, please tell us briefly about a time when you interacted with a patient who you were con cerned may hurt himself or herself". Data were analysed using descriptive statistics and thematic analysis. <i>Results:</i> Of 219 eligible responses (67% female, 94% pharmacists, 6% other pharmacy staff), 61% percent ( $n = 134$ reported having a patient die by suicide. Forty percent ( $n = 87$ ) of participants reported feeling either very or moder ately uncomfortable communicating with patients that may be at risk of suicide or self-harm. Most respondent (88.5%, $n = 194$ ) had not completed any suicide training. Online/webinar style trainings (82.1%, $n = 180$ ), and local/regional in-person events (50%, $n = 111$ ) were the most preferred education mode. Qualitative themes tha emerged were: (i) accessibility; (ii) medication management; (iii) therapeutic relationship; (iv) knowledge and train ing; and (v) continuum of care pathways.

#### 1. Introduction

Every year over 700,000 people die by suicide, and there are many more people who attempt suicide. Suicide occurs throughout the lifespan and was the fourth leading cause of death amongst 15–29-year-olds globally in 2019 according to the World Health Organisation (WHO).<sup>1</sup> In Ireland, the Health Service Executive (HSE) National Office for Suicide Prevention (NOSP) reported in June 2022 that comparisons for 2019 show that in that year, Ireland's suicide rate was 24th highest for all ages (of 32 countries).<sup>2</sup> The OECD Health at a Glance 2021 report estimated that Ireland had 9.3 intentional self-harm deaths per 100,000 population (standardised rates).<sup>3</sup> The number of suicides in Ireland increased by 5.4% to 524 persons in 2019 compared with 497 such deaths in 2015.<sup>4</sup> While there are complex social and cultural factors that affect suicidal behaviours, suffering from a mental health problem also increases the risk of dying by suicide.<sup>5</sup> Given this high incidence of mental illness and increasing suicide rates in the Irish population, community pharmacists in Ireland may be interacting with an increased number of patients who are at risk of suicide.

Community pharmacists are recognized as an accessible healthcare professional in the Irish healthcare system and in healthcare systems worldwide.<sup>6,7</sup> In 2016, a survey conducted by the Irish Pharmacy

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Regulator, the Pharmaceutical Society of Ireland (PSI), found that a third of a million people visited a community pharmacy in Ireland weekly, and that almost 60% of the population aged 16 years and older visited their community pharmacy more than once a month.<sup>8</sup> In contrast, a survey conducted by Healthy Ireland in 2019 found there was an average of only 4.5 GP visits per person per annum in those aged 15 years and older.<sup>9</sup> Additionally the Ipsos Veracity poll 2022, placed community pharmacists as second highest most trusted profession with 93% of respondents stating that they trust pharmacists to tell the truth.<sup>10</sup> Community pharmacy staff are well placed to recognise and interact with patients who may be at potential risk of suicide, especially given that patients often present in crisis outside of GP hours but may have access to a community pharmacy given their typically longer opening hours.<sup>11</sup> Considering that over 20% of people who die by suicide had opiates and/or anti-depressants and/or alcohol in their systems, this also places pharmacies as a target location where potentially lethal combinations of medicines may be obtained.<sup>12</sup> Therefore, community pharmacists are in a unique position: firstly, to act as gatekeepers of medications which may be used for suicide attempts,<sup>13</sup> and secondly to recognise and communicate with patients displaying suicide risk factors and refer them on to the appropriate services.<sup>14</sup>

The training needed by and given to pharmacy staff is unclear. Pharmacists have general psychiatry dispensing competencies, but a recent review found that whilst there has been an increase in suicide training resources for pharmacy professionals, this is not ubiquitous and may not be tailored to cultural contexts.<sup>15</sup>

Currently there is a lack of research into the frequency with which Irish community pharmacy staff (CPS) and pharmacists encounter patients at risk of suicide, and whether there is a need and/or desire for staff to undergo suicide prevention training.

#### 1.1. Aim

This paper seeks to address the gap in understanding of staff and pharmacists' experiences with patients in the community at risk of suicide and their recommendations for suicide prevention training.

#### 2. Methods

#### 2.1. Ethical approval

Ethical approval for the study was granted by the University College Cork (UCC) Social Research Ethics Committee (SREC).

#### 2.2. Participant recruitment

The voluntary, anonymous online questionnaire was emailed to all community pharmacists registered with the Pharmaceutical Society of Ireland (PSI) on the 27th of May 2020. All pharmacists who are practising in Ireland must be registered with the PSI. The link to the survey could be forwarded to other members of staff within the pharmacy with the pharmacist acting as the gatekeeper for eligibility. The survey was closed two weeks later, and no reminder emails were sent. Participants were required to be over 18 years of age, and currently working in a community pharmacy setting in any of the following roles: pharmacist; pharmacy technician; pharmacy intern; over the counter assistant/sales assistant, pharmacy manager. Informed electronic consent was obtained at the outset, and eligibility to participate was confirmed. There was no incentive to participate.

#### 2.3. Measures

The survey comprised of a total of 29 questions, divided into the following components:

#### 2.3.1. Demographics and work setting

Data were gathered about: participant age; gender; location of pharmacy (rural, urban); type of pharmacy (independent, chain); pharmacy opening hours; position held in the pharmacy; and years worked in the pharmacy setting.

#### 2.3.2. Pharmacy Suicide Interaction Scale (PSIS)<sup>11</sup>

The PSIS was used to measure the frequency of respondents' interactions with patients at risk of suicide. This scale is a ten-item frequency scale which asks the respondent to rate how often they encountered a list of suicide risk factors on a scale of 1 to 4, (1 = Never, 2 = Rarely, 3 =Sometimes, 4 = Often). This scale was developed and validated by Carpenter et al.(9)(3) Permission was obtained from the authors to distribute this survey to an Irish population. The questionnaire was culturally adapted for use and tested for face and content validity with two pharmacists in Ireland. The online survey link was tested for cohesiveness by sending test links between the authors prior to distribution.

#### 2.3.3. Communication

Three questions addressed communicating with at-risk patients. Participants were asked to: rate how comfortable they were talking with a patient who may be at risk of suicide or self-harm; list what the potential barriers to these conversations might be, and state how often they counselled patients on the increased risk of suicide ideation when dispensing relevant medications.

#### 2.3.4. Training and resources

Respondents were asked if they had any specific training in dealing with risk of suicide or self-harm, and if so, where/how/when they had received this training. All participants selected topics which they were interested in receiving future training and their preferred delivery method(s). Participants were asked if their pharmacy had resources for patients who are at risk of suicide and what additional services their pharmacy offered.

#### 2.4. Interactions with patients

Participants were asked "Without any identifying information, please tell us briefly about a time when you interacted with a patient who you were concerned may hurt himself or herself". This question invited a free text response and was accompanied by a short example to illustrate the style of answer and level of detail requested.

#### 2.5. Data compiling, screening, and analysis

Responses to the survey were collated via Google Forms into Microsoft Excel (IBM Corp. USA), screened for duplicates, and cleaned by investigators. Quantitative findings were coded and imported into the IBM Statistical Packages for Social Sciences (SPSS) V26 for statistical analysis. Descriptive statistics were generated to characterize the data.

Qualitative data generated by the free-text responses were analysed using Braun and Clarke's Thematic Analysis.<sup>16</sup> All responses were read and re-read by two researchers several times to immerse them in the data and familiarise themselves with the findings. The six-step process was employed by both researchers who independently coded using paper methodology: (i) familiarisation of the data; (ii) generating initial codes; (iii) searching for themes; (iv) reviewing themes; (v) defining and naming themes; (vi) producing the report. Differences were resolved by discussion at each stage and 100% consensus was reached on coded text.

#### 3. Results

Participant recruitment is summarised in Fig. 1. The invitation email was sent to 3747 community pharmacists who were registered with the PSI as of 27/05/2020 in the Republic of Ireland. A total of 247 initiated the survey. After screening for duplicates and eligibility, a total of 219 responses were deemed to be suitable for inclusion. Because the survey link could be recirculated and used by multiple participants, it was not possible to calculate a sample size, nor is it possible to report an accurate response rate.



Fig. 1. Participant Recruitment Flow.

#### 3.1. Participant demographics and pharmacy characteristics

Participant demographics and pharmacy workplace characteristics are presented in Table 1. Sixty one percent of respondents (n = 134) reported having a patient die by suicide, while a further 24% (n = 53) did not know whether or not one of their patients had died by suicide.

#### 3.1.1. Pharmacy suicide interaction scale (PSIS)

Fig. 2 illustrates the most frequently encountered types of challenging interactions reported with patients. Patients most often presented having experienced a major life event such as job loss or appearing distressed or intoxicated. Interactions less frequently encountered included patients requesting a lethal amount of medication or asking how much of a medication would be required to kill themselves.

#### 3.1.2. Communication

A total of 40% (n = 87) of participants reported feeling either very or moderately uncomfortable about communicating with patients who may at risk of suicide or self-harm, while 19.6% (n = 43) felt neither comfortable nor uncomfortable about such situations. Table 2 presents the barriers to communication as identified by participants in this instance.

A minority of respondents reported not knowing what medicines could lead to suicidal ideation (4.5%, n = 10); however, only 10% (n = 22) always counselled, 15% (n = 33) often counselled, 30% (n = 66) sometimes counselled, 25% (n = 55) rarely counselled and 16% (n = 35) never counselled patients on this issue.

#### 3.1.3. Training and resources

Most respondents (88.5%, n = 194) had not completed suicide training. Of those who had, 50% (n = 12) of trainings had been completed at least three years ago. The types of trainings included continuing education or continuing professional development (n = 7), mental health first aid (n = 8), or another type of course (n = 14).

Online/webinar style trainings were the most requested format for future training (82.1%, n = 180), followed by local/regional in-person events (50%, n = 111). The topics most in demand were: communicating with patients who may be at risk of suicide (85.3%, n = 187); referring at-risk patients to appropriate resources (83%, n = 182); and identifying warning signs of suicide (76.7%, n = 168).

#### 3.2. Qualitative analysis

Of the 219 submissions received, 129 participants answered the freetext question where they described an interaction with a patient who they thought might hurt themselves. The major qualitative themes that emerged were: (i) accessibility; (ii) medication management; (iii) therapeutic relationship;(iv) knowledge and training; and (v) continuum of care pathways. These themes and the relationships between them are illustrated in Fig. 3 and described in more detail below.

#### (i) Accessibility

The accessibility of community pharmacy outside of the regular GP hours emerged as a strong theme, summarised by the quote:

## "Suicide doesn't usually occur in working hours ie 9-5." Pharmacist 116 (Pharm116)

Many respondents described how patients would present to them in distress, at times when other services were unavailable.

"Patient (who was) under the care of the mental health services came in threatening suicide. It was the weekend so I couldn't contact his nurse." (Pharm10)

"I had a patient present with self-harm on his neck. He had been turned away from Dr surgery as it was after 5pm." Technician 1 (Tech1)

An overall lack of adequate services for those in need of them were also identified by some participants.

"Inadequate psychiatric services especially for their children is a huge problem in the community, especially in deprived areas." (Pharm13)

Participants described instances of patients feeling let down by the services to which they did gain access, as shown in the quotes below. "Patient asked to talk to me privately, broke down in tears and said they just can't go on anymore and there isn't anyone around to help them or to talk to. She said doctor will just increase my dose and I just feel so numb." (Pharm24)

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#### Table 1

Participant demographics and pharmacy characteristics (N = 219).

Category	N (%)
Gender:	
Male	71 (32.4)
Female	148 (67.6)
Age in years:	
<25	6 (2.7)
25–34	57 (26)
35–44	67 (30.7)
45–54	51 (23.2)
55–64	28 (12.8)
≥65	10 (4.6)
Years worked in pharmacy setting: N = 217 (Mean, SD, Range 1–50)	19.4 (11.1)
Years practiced as a registered pharmacist: $N = 203$ (Mean, SD, Range 0.5–46)*	19.3 (11.4)
Role in pharmacy:	
Pharmacist	206 (94)
Technician	8 (3.6)
Sales assistant/ Counter assistant	4 (1.6)
Manager	1 (0.4)
Pharmacist Intern	1 (0.4)
Pharmacist highest level of pharmacy education $(N = 205)^*$	
BPharm	85 (41.5)
MPharm	96 (46.8)
PhD	6 (2.9)
Other	18 (8.8)
Average number of prescriptions filled daily $(N = 194)$	
100–250 prescriptions/day	100 (51.5)
251–500 prescriptions/day	56 (28.9)
<100 prescriptions/day	37 (19)
>1000 prescriptions/day	1 (0.6)
Number of hours pharmacy is open daily:	
8–10 h	193 (88.1)
>10 h	14 (6.4)
<8 h	12 (5.5)
Type of pharmacy: $(N = 218)$	(010)
Independent	131 (60)
National Chain	48 (22.1)
Local Chain	25 (11.5)
Regional Chain	10 (4.5)
Other	4 (1.9)
Services offered at pharmacy:	(1))
Health screenings (e.g., blood pressure, diabetes, cholesterol)	154 (70.3)
Medication Uses Review	59 (26.9)
Education/group classes (e.g., diabetes management, weight loss)	35 (15.9)
Needle Exchange	20 (9.1)
Other	6 (2.7)
Depression screening	0 (2.7)
Pharmacy setting: $(N = 218)$	
Urban	83 (38.1)
Suburban	70 (32.1)
Rural	63 (28.9)
Other Decourses quailable for patients at risk of quisider $(N = 210)$	2 (0.9)
Pharmacy resources available for patients at risk of suicide: $(N = 219)$	02 (42)
Yes	92 (42)
No	84 (38.6)
Not sure	42 (19.4)

\* Relevant only to registered pharmacists.

"The patient used to come into the pharmacy seemingly increasingly helpless and despondent about her moods. She was in touch with psychiatric services but didn't feel they helped." (Pharm109)

Patients attended the pharmacy for hands-on, practical, immediate care. Examples included patients presenting with injuries after self-harming, such as "*cuts*", "*slashes*", and "*unusual wounds*" on wrists that required dressing.

"I recently had a case where a patient requested dressings as she had selfharmed. Patient was quite upset and wanted help." (Pharm17)

#### (ii) Medication Management

Medication management emerged as a strong theme and included the role of the pharmacist in counselling and educating patients about their medicines. Patients at risk of suicide or self-harm were frequently "quite frail and on a lot of psychotropic medications." (Pharm72)

Pharmacists helped patients to understand that it may take time for their medication to take effect.

"Frequently concerned about patients who are distressed while counselling them that their new medication will not have a positive effect for approximately 2 weeks" (Pharm62)

"I reassured him and told him it would take a few weeks for him to feel better and to ask his GP for help." (Pharm100)

Pharmacists were often able to identify times when medication regimens may need to be altered. They would advise patients to seek further advice from their GP about required changes. Alternatively, the need for medication review would be flagged directly with HCP colleagues.

"Patient on multiple medications for psychosis and depression... Suggested she speak to her GP as her medication may need altering," (Pharm68)

"...she regularly spoke about dying. I contacted her doctor and made an appointment for her. Her medication was adjusted" (Pharm16)

"I spoke to her prescribing doctor to assess the appropriateness of the medication." (Pharm83)

Medication adherence was something that pharmacists played an active role in, and patients were often very forthcoming in discussing nonadherence with the pharmacy staff due to their trusted status.

"I explained the importance of taking the medication and that support was at hand no matter what." (Pharm42)

"told me he wasn't bothered taking meds prescribed by HSE (Health Service Executive, the Irish healthcare system)." (Pharm75)

"A patient with mental health issues presented to inform me that they would not require any further supplies of medication as were not taking any more tablets." (Pharm106)

Phased dispensing was identified as a means by which to address adherence issues, as well as a way to ensure patient safety. Pharmacists often acted as medication guardians and were uniquely positioned to identify issues of over or under-use of medicines. Phased dispensing was used to regulate supply and improve adherence.

"An old man, chronic alcoholic who infrequently collected his antidepressant, was started on weekly phases." (Pharm25)

"The patient is quite frail and on a lot of psychotropic medications. We provided her with a rosette [sic] box but her intervals were always short and with different stories about what had happened to her medication. After broaching the safety aspect of this with the patient to no avail, I contacted her GP to suggest weekly dispensing." (Pharm72)

Because of their position as gatekeepers of such medicines, pharmacists regularly received requests for emergency supplies of these drugs.

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■ Never ■ Rarely ■ Sometimes ■ Often

Fig. 2. Most frequently encountered types of interactions with patients (n = 219).

Patients sometimes threatened to kill themselves if were not provided with the medicines.

"If you don't give me my emergency supply, I feel like I could drive into the river." (Pharm14)

"Several times encountered psych patients requesting additional medication when not due or getting large amounts of medication and on 3 occasions in my career days after my interactions they have committed suicide." (Pharm91)

Intentional overdose was the outcome that pharmacists actively tried to avoid, but there were descriptions of this happening on the pharmacy premises, and of patients calling the pharmacy either in anticipation of or after the fact.

"The patient was a weekly phased patient. She had taken all of medication at once in store. We were very worried and rang GP straight away." (Tech3)

"Once a patient took the whole lot of her prescription in front of me, I was very concerned about her wellbeing so that I called an ambulance. The same patient was known to have tried to kill herself before." (Pharm47)

"Customer rang one day and said they had taken an overdose of painkillers, but it hadn't worked. By worked they meant hadn't resulted in a suicide. When I started to talk further, they hung up." (Pharm7)

"Patient in her 60s, depressed, and called the pharmacy to tell us she was intent on overdosing at that moment with paracetamol." (Pharm38)

#### Table 2

Barriers to communication making it difficult to talk to patients who may be at risk of hurting themselves (n = 216).

Communication barrier	n	%
Fear of making the situation worse	126	58
Not having enough time for a conversation	123	56
Not knowing what to say	113	52
Not knowing where to refer the patient	95	43
Fear of liability if patient hurts themselves	61	28
Fear of offending the patient	60	27
Not having support from my organisation	51	23
Not wanting to get involved in personal affairs	41	19
Not having a private area for a conversation	32	15

#### (iii) Therapeutic Relationship

Because of the accessibility of the pharmacist and of their expertise in medication management as described in previous themes, their therapeutic relationship with patients was evidently very strong. Pharmacy staff were repeatedly identified as a confidant for patients, who "respect our knowledge" (*Pharm2*), and "trust us with confidential matters." (*Pharm2*).

Patients came to pharmacists in times of crisis when they needed somebody who they could trust and rely upon. They would ask to speak privately and confide in them.

"The patient asked if I could contact their psychiatric nurse for them as they were feeling really low and didn't trust themselves to stay safe." (Pharm11)

"Patient asked to talk to me privately, broke down in tears and said they just can't go on anymore and there isn't anyone around to help them or to talk to." (Pharm24)

This therapeutic relationship was often further nurtured outside of the pharmacy setting. Pharmacists went above and beyond in their duty of care. Participants made follow-up phone calls and visits to the patient to make sure they were okay.

"A lady approximately 80 became very depressed and her only daughter refused to see or speak to her. She told me she hopes she passes away soon because she couldn't cope. I called to her maybe three evenings a week on my way home from work. She got pneumonia then and I visited her in hospital, I was her only visitor." (Pharm16)

"In one case an elderly lady told me she had had enough. We talked our way out of it and then conducted a two-way conversation every Sunday for 2 years." (Pharm23)

This therapeutic relationship was facilitated by consistently providing a safe environment and privacy when needed. "A patient stopped their antidepressant medication, continued with their methadone and started drinking heavily and buying benzodiazepines on the street, presented into the pharmacy as wanted to get help and didn't know where to go. Was in every evening for a week, we facilitated him by allowing him sit in the consultation room so had some privacy" (Pharm65). The importance of listening, empathy and of valuing the patient experience were further noted as important contributors to the therapeutic relationship.

"I showed empathy to the patient and ensured that the conversation occurred in private" (Intern1), "acted as a listening ear" (Pharm109)



Fig. 3. Major themes and relationships.

" (told the patient) the world needs more of your lovely kind personality, and you are important to your community even if you feel alone" (Pharm96)

#### (iv) Knowledge And Training

Lack of knowledge and training potentially led to an inability to take appropriate action with patients at risk of suicide or self-harm and negatively affected outcomes. Uncertainty regarding appropriate actions was evident due to lack of knowledge or training. Respondents reported not knowing what to say or how to deal with the situation.

"...it totally caught me off guard and I have no counselling or mental health training." (Pharm32)

"I did find myself totally ill-equipped to deal with his situation. I really didn't know what to say to him." (Pharm22)

"I comforted her but other than explaining the new regime did not feel adequately trained to offer continuous support." (Pharm23)

One respondent commented that after interacting with at-risk patients they considered furthering their training,

"It was an overwhelming experience and I definitely thought about doing specific training or even a counselling course afterwards." (Pharm83)

Several participants mentioned they were unsure if they took the appropriate actions or if they did the right thing when interacting with at-risk patients. "I wondered if I had said the right thing or if even listening and some encouragement was helpful, etc" (Pharm83)

"...this event left me very distressed and wondering if I had taken the right steps." (Pharm35)

One specifically mentioned that they were unsure of the ethical and legal concerns of contacting a patient's GP after the patient confided in them that they were intending on committing suicide.

"...this may have been a breach of patient confidentiality or ethical frameworks but in light of the gravity and urgency of the situation I felt it was best to proceed." (Pharm55)

(v) Continuum Of Care Pathways

The final theme that emerged was the importance of the continuum of care, made possible by that strong therapeutic relationship. Community pharmacy staff ensured that patients were signposted towards help wherever possible.

"I felt that the patient was not themselves, so I took them to the counselling room. Having talked to them I referred them to a local counselling agency." (Pharm85)

"advised about supports – GP, Samaritans, counselling etc." (Pharm119)

This sometimes included staff members contacting emergency services on the patient's behalf.

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"Patient was intoxicated. He said he'd taken 2 packs of Zimovane. I asked him how long ago, he responded with last 10 minutes I requested a staff member call an ambulance." (Pharm12)

"have felt the need to follow up with a call to GP or to family carer where I felt an intervention was necessary - or to Gardai if really needed for patient's own safety." (Pharm1)

"I got the number for the local mental health crisis team and patient rang the number from privacy of consultation area." (Pharm17)

Patient safety was prioritised through actions such as keeping the patient on the pharmacy premises until staff could make further arrangements, such as official help, or support from friends or family.

"The patient stayed with me in the consultation room until we had agreed a plan for the patient to stay safe." (Pharm11)

Support offered by pharmacy staff was either as a single interaction or extended over a longer period of time.

"I got I phone call from unknown person who told me they want to commit suicide" (Pharm66)

"We supported her for several months through hospitalisations and many ups and downs, continued to express support on future visits." (Pharm111)

#### "I reiterated that we were always here even for a chat." (Pharm26)

Deficits in the continuum of care were evident through the lack of subsequent follow-up with the pharmacy. Despite their input into the situation, pharmacists and their staff were often left not knowing what the outcome for the patient was. They were frequently left worried about the fate of the patient afterwards.

"I often think of her and how alone she must have felt. I don't know what the outcome was." (Pharm16)

"I haven't seen him in years, so I never actually knew what ever happened to him." (Pharm113)

"Many times, have dispensed psychiatric prescription to patients, where patient is quiet, withdrawn, and I was worried" (Pharm56)

#### 4. Discussion

This study demonstrates high frequencies of interactions of community pharmacists and CPS with patients at risk of suicide, but there is a selfreported lack of training, knowledge, and confidence in these communications. Respondents show a strong desire to leverage their position in the community as the most accessible healthcare profession and the gatekeeper of medicines. Evidence of strong therapeutic relationships with the patient is provided. Participants' potential ability and willingness to guide those at risk of suicide along the most appropriate care pathway is evident. Currently, participants are doing so without confidence that they are acting in accordance with best practice and would welcome appropriate education.

The findings of this study align with previous international studies; pharmacists frequently engage with people who are at risk of suicide, due to their accessibility within the community. Gillette et al. found that 57.78% of pharmacists knew of someone who had died by suicide (p = 0.002).<sup>17</sup> This in line with the findings of our study, which highlights a

significant percentage of respondents who did not know the outcome of those about whom they were worried.

The pharmacist's position as an accessible healthcare professional within the community setting is becoming more recognized. During Covid-19, community pharmacy accessibility was used in the swift rollout of Covid-19 vaccinations. Community pharmacists vaccinated over 250,000 people in the first four months of service provision, according to figures released by the Irish Pharmacy Union<sup>18</sup> demonstrating their reach within the community. More recently, a national Irish initiative "Safe Pharmacy" to provide a safe place for victims of domestic violence to make a call for help was implemented, with participating pharmacies displaying a logo in the window to discretely inform of the service.<sup>19</sup> These examples demonstrate the ability of community pharmacy to broadly reach community members and underscores the pharmacy being a place that is safe and can be trusted. Such accessibility needs to be mobilized further to best support those at risk of suicide and self-harm.

Recommendations regarding how best to prevent suicide can be summarised by the SAVES acronym for gatekeeper behaviours: Signs (of suicide risk); Ask (about suicide); Validate (feelings); Expedite (referral); and Set (a reminder to follow-up).<sup>20</sup> Interestingly, despite little or no formal training in such a protocol, respondents anecdotally reported implementing many of these steps intuitively. However, they often did so with uncertainty. The findings of this study highlight lack of knowledge and confidence ("Not knowing what to say", "Fear of saying the wrong thing") as key communication barriers when dealing with patients at risk of suicide. This is in line with the findings of Murphy et al., who reported lack of confidence (OR = 0.33, 95% CI = 0.16–0.69; p = 0.003) and lack of training (OR = 0.42, 95% CI = 0.18–0.97; p = 0.043) were negatively associated with preparedness to help someone in a suicidal crisis.<sup>21</sup> Similarly, Carpenter et al. reported fear of making the situation worse as a common issue amongst respondents.<sup>11</sup>

While it is reassuring that some of the correct processes are happening when patients present with signs of suicide risk, there are elements that seem counter-intuitive e.g. asking directly about suicide. Murphy et al. reported that just 14% of pharmacists asked directly about suicide intention.<sup>21</sup> Witry et al. reported higher levels of direct questioning, but still less than half of respondents (44%) would directly ask about suicide.<sup>22</sup>

The literature shows that suicide prevention training can be effective at improving interactions and increasing confidence. Shams et al. demonstrated that appropriate training can increase awareness of the necessity to ask direct questions.<sup>23</sup> Witry et al. reported high agreement to five confidence items after pharmacists in five states completed either: one eighthour or, two four-hour sessions, of Mental Health First Aid<sup>24</sup> training.<sup>22</sup> Painter et al. showed that after having completed suicide prevention training, respondents reported more confidence to make an intervention.<sup>25</sup> To ensure that pharmacists and CPS can navigate such conversations correctly and confidently, it is evident that appropriate training is required. This study shows that pharmacists and CPS would welcome training in this area and is in line with the international literature, with most pharmacists being open to such education<sup>11,26</sup>.

Internationally, there is little evidence of formal training requirements, although some universities, such as the University of Sydney, have a compulsory Mental Health First Aid module in the pharmacy curriculum, while the state of Washington in the US requires pre-registration completion of suicide prevention training.<sup>27</sup> In Ireland, there is currently no formal suicide prevention training incorporated into the MPharm programme, despite mental health being covered extensively from a pharmacological and clinical perspective. The implementation of suicide prevention training across all Irish third level healthcare courses is in the early design stages<sup>28</sup> However, this does not reach other CPS, or those pharmacists who are already registered.

Although there is currently no Continuing Professional Development (CPD) requirement specific to suicide prevention, The Irish Institute of Pharmacy (IIOP) as the national pharmacy profession development body, has in recent months begun to highlight the importance of suicide prevention training and the pharmacist's potential as a gatekeeper. Their November 2022 newsletter and winter webinar series signposted to the suite of suicide prevention training resources newly made available through the HSE's national strategy to prevent suicide Connecting for Life.<sup>29</sup> This initiative comprises seven strategic goals and 69 individual actions. A suite of trainings have been made available under Goal 2: "Supporting communities to prevent and respond to suicidal behaviour". All trainings delivered by the National Office for Suicide Prevention are free to attend and are accessible regionally or nationally. Uptake is unknown, however, but is important considering the low levels of training reported in this study. The high level of desire for training in this study is similar to that of Carpenter et al., who reported that 89.6% of participants wanted to receive suicide prevention training.<sup>11,30</sup>

A theme that emerged from this study was the role of the pharmacist in medication management; participants described frequent interactions with patients who attempted to gain access to harmful quantities of drugs, or voiced a desire to overdose. This mirrors the findings of Carpenter et al.,<sup>11</sup> who reported that >100 pharmacy staff had been asked about taking a fatal dose of medicine. Gorton et al. reported similar outcomes, with access to means of suicide emerging as a major theme.<sup>31,32</sup> Participants reported being aware of their ability to identify those who may be misusing or abusing prescription or over the counter medications. Pharmacists play a key role in Goal 7 of the Connecting for Life national suicide prevention strategy, "Reducing access to means." The importance of this role cannot be overestimated, given the high instance of suicide by overdose. In Ireland, *the risk of mortality due to suicide is increased amongst those who have engaged in intentional drug overdose. Intentional overdoses resulted in 7792 hospital presentations in 2018.*<sup>32</sup>

An important consideration in light of the above findings is the role of the pharmacist in the clinical management of mental health. Clinical pharmacist intervention has the potential for long term positive impact on mental health outcomes due to improved psychiatric prescribing and pharmacotherapy. Stuhec et al. demonstrated clinical pharmacists' ability to reduce the total number of medications and Potentially Inappropriate Medications (PIMs), including psychotropics.<sup>33</sup> Improved adherence to treatment guidelines for mental health conditions can be driven by pharmacist expertise, leading to reduced rates of relapse and improved overall outcomes.<sup>34</sup> Therefore, education in mental health prescribing is another key factor in suicide prevention that pharmacists can play an active role in.

This study is not without its limitations. Firstly, a true response rate and sample size cannot be determined; the survey link had the potential to be circulated to all eligible pharmacy staff, but whether it was circulated, and to how many, was not recordable. The number of responses received are undeniably low, and therefore limited in their conclusions. Secondly, because participation was optional, those who took the time to complete the survey may have had more interest in the research topic and introduced a self-selection bias. Finally, the survey was administered in May 2020, when the mental health effects of Covid-19 were not yet fully apparent. Therefore, the frequency of pharmacist interactions with patients at risk of suicide has potentially since changed.

#### 5. Conclusions

This study provides novel and important information regarding the frequency of Irish community pharmacy interactions with those at risk of suicide. The study findings offer key insights into community pharmacist and CPS's experiences of dealing with this vulnerable group and the need for appropriate training. While recent progress has been made in addressing this education gap via national multidisciplinary channels, more must be done to harness the potential and scope of community pharmacists and CPS in suicide prevention. Targeted education of pharmacists and CPS in suicide prevention is key to facilitate navigation of such interactions with knowledge and confidence. Further research is required to determine the appropriate actions to be taken at individual, institutional and national level.

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#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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