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Understanding the factors influencing community pharmacist retention – A qualitative study

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ABSTRACT

Background: Shortages in healthcare workers affects the overall delivery and effectiveness of the provision of healthcare. There are currently insufficient pharmacists working in the community sector in Ireland. While several studies have reported on the factors leading to retention in the medical and nursing profession, there is an absence of robust research examining retention within the pharmacist workforce in Ireland.
Objective: To identify and understand the range of factors currently at play in the community pharmacy sector in Ireland which influence the decision-making process for pharmacists deciding whether or not to continue to practice as a community pharmacist.
Method: A cross-sectional qualitative descriptive study was used to investigate the factors influencing community pharmacist retention as elicited from the lived experiences of 23 pharmacists. Study recruitment was undertaken using both convenience and purposive sampling. Qualitative content analysis was used to analyze the interview data to identify and explore themes.
Results: A broad and diverse range of factors were identified as affecting community pharmacist retention including working conditions, career fulfilment and progression, regulatory and administrative burden, the commercial focus within community practice, lack of representation and their overall health and well-being.
Conclusion: The findings show that there are a number of factors which either individually or cumulatively influence a pharmacist's decision to stay in or leave community practice. Various areas for change were identified, which if addressed are considered likely to improve retention in the sector. These include enhanced terms and working conditions, better acknowledgement and resourcing of professional activities, improved opportunities for career progression, reforms to the regulatory model including the personal accountability of a supervising pharmacist for all of the pharmacy's professional activities, a more streamlined model of reimbursement and more effective collective representation.

1. Introduction

Health systems can only function with health workers.[1] However, countries at all levels of socioeconomic development face, to varying degrees, difficulties in the education, employment, deployment, retention, and performance of their workforce.[1] Shortages in healthcare workforce has implications for the implementation of the expansion of health services globally and nationally, and universal access to healthcare.[2–4] In Ireland, several studies have reported on the factors leading to retention in the medical and nursing profession, but there is a dearth of robust research on retention within the pharmacist workforce.[5–9]

Recommendations in the late 1990s to address the shortfall in qualified pharmacists in Ireland resulted in an increased number of graduates entering the workforce which resulted in the number of pharmacists increasing by over 90% between 2002 and 2017.[10] Notwithstanding this, a shortage of pharmacists available to practice in patient-facing roles, including community pharmacy, remains problematic. Data from the Pharmaceutical Society of Ireland (PSI) which regulates pharmacy practice in Ireland, shows that of the >7000 registered pharmacists in 2022, 64% were in patient-facing roles, while 13% did not indicate where they practice.[11] In 2019, the Irish Pharmacy Union (IPU), the representative body for community pharmacy,

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expressed significant concerns over the "burgeoning manpower crisis in community pharmacy".[12] An IPU workforce survey conducted in 2022 to determine factors leading to resource pressures among practicing community pharmacists strongly recommended the need to educate more pharmacists in Ireland.[13] However, it also pointed to the need for employers to address important issues around working conditions experienced in community pharmacy.[13] Arising from the unavailability of pharmacists in patient-facing sectors, the PSI commenced a process to assess emerging risks to the continued availability of a professional workforce within community and hospital pharmacy in Ireland, which is still on-going.[14] Ireland has a ratio of 14 pharmacists per 10,000 population which compares favorably with the European average of 8.48 pharmacists per 10,000 inhabitants and to New Zealand with 8.04 pharmacists per 10,000 population.[15,16] Both Ireland and New Zealand have populations of *circa* 5 million inhabitants. This suggests that any difficulty in filling positions in the community pharmacy sector is not primarily due to a shortage of pharmacists *per se,* but rather a difficulty in retaining pharmacists in community practice or attracting them in the first instance.

As academic staff of a School of Pharmacy in Ireland, we have observed a developing trend of former students, who are now registered pharmacists, contacting us regarding them leaving community practice to continue their careers elsewhere. There is evidence from several jurisdictions, principally other Anglosphere countries (UK, USA, Canada, Australia and New Zealand) describing the factors affecting retention in the pharmacy workforce including the working conditions under which community pharmacists must practice while tasked with a considerable duty of care to the patients that seek their advice and assistance on a daily basis.[17–26] This study aimed to understand the factors pertinent to the current Irish community pharmacy workforce influencing retention in the sector.

2. Methods

A cross-sectional qualitative descriptive study was used to investigate the factors influencing community pharmacist retention as elicited from the lived experiences of community pharmacists. The Consolidated Criteria for Reporting Qualitative Research (COREQ) were used to guide the reporting of the study findings.[27]

Ethical approval for the study was obtained from the Research Ethics Committee, Royal College of Surgeons in Ireland.

One-to-one semi-structured interviews were conducted using a topic guide addressing various issues considered relevant to pharmacist retention in community practice, which was informed by a review of the relevant literature and the IPU workforce study from 2022 and approved by the Research Ethics Committee. Pharmacists currently practicing in community pharmacy or had recent community pharmacy experience were eligible to self-select to participate in this study. Two pilot interviews were conducted by both authors with pharmacists eligible to participate.

Study recruitment was undertaken using both convenience and purposive sampling. Convenience sampling was facilitated through an invitation to participate in the study posted on PharmaBuddy, an online pharmacist resource forum open to all pharmacists working in Ireland on November 20th 2022. Purposive sampling was subsequently undertaken when study participants identified additional pharmacists to participate in the study, who then contacted the research group by email directly to be interviewed.

Pharmacists who expressed an interest in participating in the study were provided with a Participant Information Leaflet and a Participant Consent Form to be completed in advance of being interviewed. Participants were interviewed online using Microsoft Teams®, and an audio recording of the interview was obtained. Verbatim transcripts were generated from the audio recordings and then checked against the original recordings prior to providing each participant with their individual transcription for verification and approval.

The sample size for this study was determined by a process of informational redundancy or data saturation. The concept of "*data saturation*" is a key factor in determining sample size and it signifies the point at which no new themes or categories emerge during analysis with continued data collection. Guest *et al* (2006) describe it as the number of interviews "*needed to get a reliable sense of thematic exhaustion and variability within [their] data set*".[28] To balance the need to achieve data saturation with needing to achieve rich data based on in-depth interviews, data analysis was undertaken on an on-going basis. Published qualitative studies typically refer to sample sizes in the range of four to forty participants and Kaae and Traulsen (2015) note that for semi-structured interviews, between 15 and 25 interviews are often necessary in order to achieve saturation.[29] While data saturation was considered by both authors to have been achieved in advance of the completion of 23 interviews, interviews with all the pharmacists who agreed to participate in the study were proceeded with in order to assure the required confidence in the study's findings.

Qualitative content analysis was used to analyze the interview data to identify and explore categories that emerged from the data. A qualitative content analysis is normally represented as three main phases: preparing, organizing and reporting.[30] The preparing phase encompassed becoming thoroughly familiar with the data. For the organizing phase, the data was categorized according to a process of open coding in which notes and as many headings as necessary were identified from the interview transcripts to describe all aspects of the content.[30] Following this, a number of categories were created which were then grouped into a limited number of higher order categories. The process of open coding and subsequent categorization of data was completed by Author 1 in NVivo® (Version 12). This was then validated by Author 2 who was in agreement with both the coding and categorization processes.

3. Results

A total of 23 interviews were conducted. Demographic details of the interviewees are presented in Table 1. An even mix of gender was represented , and the mean number of years on the register was 15 years (2–42 years). Of those interviewed, 16 had left community pharmacy to pursue their careers in a variety of other pharmacist and non-pharmacist roles including two who had retired. Of the seven others, five had left full time positions in community to work as locum (relief) pharmacists. Two remain in full time permanent roles including one former owner who sold their pharmacy. A total of five former pharmacy owners were interviewed (Table 1).

The broad Higher Order Categories identified in the qualitative analysis affecting retention of community pharmacists included working conditions, career fulfilment and progression, administrative and regulatory concerns, commercial considerations, representation of interests and pharmacist health and well-being (Fig. 1). Illustrative participant quotes are provided in Table 2. Additional illustrative participant quotes are available in Appendix A Supplementary data.

3.1. High Order Category 1 Working conditions

All pharmacists interviewed referred to the working conditions as a significant factor in contributing to pharmacists either leaving community practice or wanting to leave. The nature and extent of the workload was highlighted as being excessive and not sustainable, either physically or mentally, by any pharmacist over the course of their career. This incorporates not only the range of professional services required to be delivered including dispensing prescriptions, pharmacist supply of non-prescription medicines or its supervision, provision of *ad hoc* advice and consultations, vaccinations and supply of emergency contraception, but the associated administrative and logistical activities including procurement associated with the delivery of such services. The workload appeared to be exacerbated by what a number of pharmacists considered to be insufficient human resources in place to effectively and

Table 1
Interviewee demographic details.

Gender	Years Registered as a Pharmacist (Range)	Current Position	Last Full-time Position in Community Pharmacy (where applicable)
M	5–10	Full-time student (IT)	Locum Pharmacist
F	5–10	Full-time – Hospital practice	Supervising pharmacist
F	10–20	Part-time – Community practice locum Part-time- Non-clinical pharmacist position	Supervising pharmacist
F	<5	Full-time - Pharmaceutical industry	Support pharmacist
F	<5	Full-time - Clinical pharmacist (non-community)	Support pharmacist
M	<5	Full-time - Pharmaceutical industry	Support pharmacist
M	<5	Full-time - Postgraduate research student	Support pharmacist
M	30–40	Retired	Superintendent pharmacist & Pharmacy owner
M	5–10	Full-time - Non-pharmacist role	Supervising pharmacist
F	40–50	Retired	Superintendent & Supervising pharmacist & Pharmacy owner
F	5–10	Full-time - Hospital practice	Support pharmacist
M	5–10	Full-time - Clinical pharmacist (non-community)	Supervising pharmacist
F	10–20	Full-time - Non-pharmacist role	Supervising pharmacist
F	30–40	Full-time - Community practice locum	Superintendent & Supervising pharmacist & Pharmacy owner
F	30–40	Full-time - Community practice locum	Support pharmacist
F	20–30	Full-time Community practice - Employee supervising pharmacist	Superintendent & Supervising pharmacist & Pharmacy owner
M	10–20	Full-time student (Medicine)	Supervising pharmacist
M	10–20	Full-time - Community practice locum	Supervising pharmacist
M	30–40	Full-time - Non-pharmacist position	Locum pharmacist Previously Superintendent & Supervising pharmacist & Pharmacy owner
M	5–10	Full-time - Pharmaceutical industry	Support pharmacist
M	20–30	Full-time Community practice – Employee support pharmacist	Previously Supervising pharmacist
F	5–10	Full-time - Medical practitioner	Locum pharmacist
F	5–10	Full-time - Community practice –Employee support pharmacist	Support pharmacist

safely discharge the role of community pharmacist. Some pharmacists contrasted their experience of optimal resourcing in pharmacist-owned pharmacies with pharmacy groups/chains where resourcing appeared to be more restricted. The absence of formally scheduled breaks over the course of the working day was highlighted by all pharmacists, resulting in pharmacists working up to twelve hours without the ability to take a scheduled uninterrupted break from their work for a defined period of time for meals, and difficulty taking comfort breaks. In accordance with the Pharmacy Act 2007, the sale and supply of medicinal products must be conducted under the personal supervision of a registered pharmacist. Accordingly, a pharmacist can only get an uninterrupted break away from supervising professional activities in the pharmacy if it closes for the duration of their break or there is another pharmacist to cover for them. Pharmacists referred to anti-social working hours experienced as a community pharmacist and the consequent adverse impact it had on quality of life, family time and health and well-being. The heavy workload combined with the absence of breaks and inadequate staffing gave rise to what pharmacists considered an unsafe working environment which in turn was considered to compromise safe dispensing practices and undermine patient well-being. Pharmacists also referred to concerns about their personal safety due to physical assaults, robberies, threats and other violent incidences in the pharmacy environment.

Regarding remuneration, there was general agreement that introductory salaries were favorable and exceeded what most other graduates command at the start of their careers. However, it appears to remain relatively static over the course of one's career with an apparent lack of any regular pay increases. This can be attributed to the apparent absence of any salary progression scales for pharmacists in community practice. The lack of any pay-related benefits such as pension contributions or paid maternity leave other than the social insurance payment from the State and the limited or absence of sick pay was highlighted and its contribution to significant financial insecurity. Problems in taking leave when sick were described and in obtaining approval from employers to take annual leave.

The perception of being undervalued by those with whom they interacted on a daily basis was identified. Pharmacists felt that patients did not appreciate the complexity of their work and the contribution that pharmacists made to their health and well-being. Patients often complained about wait times for prescriptions to be dispensed and why they could not always be supplied with certain over-the-counter (OTC) medicines by their pharmacist. The lack of recognition of their professional role was also experienced with doctors as pharmacists reported that their interventions were not always acknowledged or appreciated. Some pharmacists also reported feeling that they were not appreciated or supported by their employers, who did not value their experience or expertise. Instead, they perceived that they are often viewed as a significant albeit necessary cost to the business which needed to be contained.

3.2. Higher Order Category 2 Career fulfilment and progression

Pharmacists noted the satisfaction obtained from patient engagement and having a positive impact on the health and well-being of patients. However, this was not considered to be sufficient to sustain fulfilment over an entire career. Many referred to the limited scope of practice and to the repetitive nature of the job leading to lack of fulfilment. This was considered to be more acute given the significant academic requirements to gain entry to study pharmacy and the extensive degree programme undertaken to qualify as a pharmacist, where such high achieving students do not then have the opportunity to use their skills and develop their careers.

Another aspect of the community pharmacy career trajectory was the evident lack of career progression available to pharmacists. It was noted that career progress was perceived as being largely restricted to attaining either supervising or superintendent positions. There are currently no formal specialist roles within community pharmacy to develop a career as a clinical practitioner.

Previously, pharmacy ownership would have constituted a significant step in terms of career progression and fulfilment. However, the majority of those interviewed did not now consider pharmacy ownership as a viable career progression option. For some, the business side of pharmacy ownership did not appeal to them. For those interested in owning their own pharmacies, the opportunity to do so was perceived to be very limited. Principally, this is due to increasing competition from pharmacy groups making it very difficult for a pharmacist to either purchase or establish their own pharmacy business. A number of

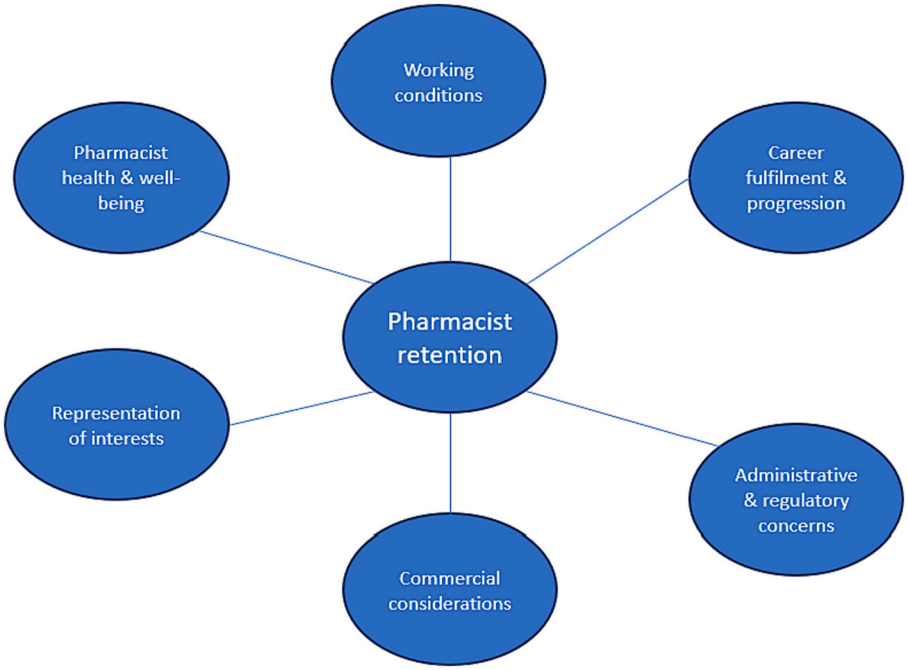

Fig. 1. Community pharmacist retention in Ireland – Higher Order Categories.

pharmacists, including former pharmacy owners, referred to the difficulties pharmacists encounter in raising the necessary finance to purchase a pharmacy with them having to have one third of the purchase price in order to secure a bank loan for the remainder. The introduction of the electronic transmission of prescriptions was identified as a possible impediment to pharmacists setting up a new pharmacy, as it was considered more difficult to get patients to have their prescriptions re-directed to a new pharmacy opening.

3.3. Higher Order Category 3 Administrative & regulatory concerns

3.3.1. Regulatory burden

The significant workload is potentiated by the regulatory requirements in place. While some interviewed found this supported their practice, others queried the extent of the regulatory requirements in the context of enhancing patient care. Some pharmacists considered the sector was overregulated beyond what was required to safely provide pharmacy services, adding considerably to their workload which diverted them away from patient care. Specifically, pharmacists highlighted in this regard the regulatory requirements introduced on foot of the European Union's Falsified Medicines Directive (FMD) and the PSI's biannual self-audit Pharmacy Assessment System. The extent of regulation contributed to pharmacists feeling constrained in their ability to exercise their professional discretion in the provision of optimal care to their patients.

3.3.2. Role of supervising pharmacist - accountability without authority

Pursuant to the Pharmacy Act, each pharmacy is legally required to have a supervising pharmacist in position. This pharmacist is in whole-time charge of the discharge of the business of the pharmacy and is held personally responsible for all of the operations in the pharmacy. This was highlighted by pharmacists including former pharmacy owners as an onerous responsibility in that many supervising pharmacists are legally accountable under the law but do not have the requisite authority as regards the financial or other management of the pharmacy to underpin that accountability. This was cited as a significant factor in pharmacists not willing to take on the role. Despite the legal requirement to have a supervising pharmacist in place, it seems to a number of pharmacists that this may not be enforced by the PSI as it should be in the public interest.

3.3.3. Complexity of reimbursement system

Pharmacies in Ireland are reimbursed for the supply of medicines by the publicly funded Primary Care Reimbursement Service (PCRS) under eight separate reimbursement schemes. The practical operation of these schemes is considered by those interviewed to be overly complicated with an accompanying significant administrative burden in terms of filing paper claims with supporting documentation. Pharmacists also cited difficulties with ensuring the pharmacy was reimbursed for medicines supplied and the substantial oversight of the system required to ensure this occurred. Pharmacists stated that the considerable administration associated with reimbursement diverted them away from frontline patient-care activities. They also referred to what they perceived to be a lack of trust in pharmacists by the PCRS to engage honestly with it regarding the reimbursement for medicines. However, incidences of fraudulent activity by pharmacies in relation to reimbursement was also highlighted in this regard.

3.4. Higher Order Category 4 Commercial considerations

A majority of those interviewed referred to what they considered was the predominance of retail and business concerns as opposed to the delivery of healthcare, making community pharmacy practice unattractive. They considered that the emphasis was often on product sales, targets and fast prescription turn-around times rather than the delivery of safe and optimal pharmaceutical care. This, in particular, was the experience of pharmacists who worked in chains, which appeared to have managers with backgrounds in retailing rather than healthcare.

3.5. Higher Order Category 5 Representation of interests

Notwithstanding the range of issues contributing to difficult working conditions for employee community pharmacists, there is a perception that there is no body or grouping in place to advocate on their behalf, to represent their interests or highlight their concerns. Both former owners and employees considered that while the IPU believes that it represents

Table 2
Illustrative quotes for qualitative categories (Further illustrative quotes are available in the Supplementary Table provided in Appendix 1).

Related Categories	Illustrative Quotes
Higher Order Category - Working conditions	
Workload burden	*"I just constantly felt overworked and underappreciated……the workload is just a massive issue* [P4] *"You're constantly trying to fix the issues…it is on one pharmacist in the dispensary and you're doing morning after pill consults in the middle of blood pressure checks, codeine product sales and general queries from the public"*. [P11]
Inadequate staffing	"*It just seems to be acceptable that you could have a pharmacy doing 400 items a day with one pharmacist in there…..there's no minimum staffing levels or guidelines there at all and a lot of businesses will just push it to the absolute max*" [P17] "*I used to work in [a pharmacy] for 14 years which had been owned by one owner, one pharmacy…. She understood how many staff are required ……to run a safe, kind of very personable service business… …..I saw things drastically change after the chain became owners. I felt it became unsafe…..they're expecting the pharmacy to do more and more and more services without any extra staff being employed*" [P15]
Absence of breaks	"*…you'd stand there from 8:00 o'clock in the morning till 7:00 o'clock at night. And you'd have no break because you have to be there all the time. And even if you did have a break, it was always interrupted"* [P4]
Anti-social hours	*"you finish up at 7 o'clock, it's 8 o'clock by the time you get home, you're tired. You don't want to go to the gym. You don't want to go for a walk. So you're not getting any exercise…..affects your health or mental health"*. [P7]
Unsafe working environment	"*Could not give the time you wanted to individuals patients as far too busy doing multiple different jobs. …… this was definitely a deterrent to practicing safely.*" [P5] "*….someone came in looking for anxiolytics or for Xanax… she tried to jump over the counter and actually physically attack me when I wouldn't give them to her*" [P4]
Difficulty taking leave	"*Quite often I would need to go down to like begging to try and get leave approved*" [P20] "*I fainted at work….and I had to work the rest of the day. I didn't get sent home"* [P12] "*the majority of annual leave….might have been 18 to 20 days* [a year]" [P2]
Static remuneration	*"when you qualify, you are earning an awful lot more money at that entry graduate level and then supervising level [*compared to] *a lot of other careers. However, you will probably be on that salary for a good many years too. So you're not progressing"*. [P22]
Limited pay related benefits	*"There's no pension….when you factor that into your wage, it really is not as much as you think it is because you're not getting any pension or additional benefits"* [P6] *"I was out of work for five months* [on sick leave] *unpaid…. There was absolutely no requirement for them to pay me and they didn't…*." [P11] *"There is only one place I've ever known of that paid maternity pay for a pharmacist ……. It was kind of unheard of at the time, still unheard of since"*. [P15]
Lack of support	"*when a major error occurred, they're not actually interested in supporting you trying to deal with the person at the other end who has gotten the wrong prescription….you could be absolutely literally worn to the bone and withered and everything is kind of put back on your own head at the end of the day*". [P15]
Feeling undervalued/ underappreciated	**By patients** "*Patients really have no appreciation of what we do –….. They seem to think it is more like a retail setting than a healthcare service. They never understand why they have to wait for prescriptions*." [P5] **By doctors** "*Often queries were perceived as nuisance calls and prescribers dismissive of the queries about patients' prescriptions*."[P5] **By employers** "*I work for a big chain of pharmacies and during COVID, I still had to go to work every day…..It was quite difficult. And, then you know, our employer organised to try to push a pay cut on us, like during the first lockdown and I just thought it was so indicative of the way pharmacists are valued by their employers."* [P6]
Higher Order Category - Career fulfilment & progression	
Restricted pathways	"*One of the big pros about working in community was the patient-facing role, the patient interaction*." [P4] *"young pharmacists ……after qualifying and working with big companies and they're just like robots putting labels on boxes and everything. They're leaving*." [P10] *"it just seems to be support pharmacists to supervising pharmacist and then I don't see much room for progression beyond that….."* [P6]
Limited opportunity to progress to pharmacy ownership	"*from personal experience the banks don't want to give someone who doesn't already own pharmacies the money. I definitely found it impossible to raise enough money to compete with what the groups were bidding on the pharmacy….. I definitely found when I contacted the accountants they had very little interest in me because they already had pharmacist clients on their books who owned pharmacies already that were looking to buy a pharmacy. "* [P21] "*it's automated* [Healthmail] *within the doctor's setup and software. That's wherever they sent it to before the default is to continue unless somebody goes out of their way*. [P16]
Higher Order Category - Administrative & regulatory concerns	
Regulatory burden	*"The burden of regulation was horrendous. The False Medicines Directive, all that kind of stuff. I remember that was coming in, and that was an impetus for leaving. This is just so onerous and felt unnecessary. I mean, surely that could have been done at a wholesaler level. It's just overkill. Overkill."* [P14] "*For the self-assessment I remember they said that we have to do a different [aspect of the shop] each month or 6 months for the self-audit…. What got me was that I thought it was a little bit OTT that you had to start the cycle every six months. You were constantly doing the same thing over and over again.*"[P18] *"It's always in the back of my mind because I know how over-regulated the profession actually is. So I feel it's always there - this sort of fear of the PSI that I have now. I'm not talking about breaking the law. I'm talking about using my autonomy to make a decision. You know, when the best interest of the patient and patient outcomes are concerned. But in the back of my mind, I'm thinking, God now, if I was pulled up would I have to explain this to the PSI or how would I explain it?* '[P4]
Role of Supervising Pharmacist –accountability without authority	"*It's really stressful. Like you're responsible for the pharmacy when you're not there…. ultimately, if there's a qualified pharmacist there making decisions that they are happy to stand*

(*continued on next page*)

Table 2 (*continued*)

Related Categories	Illustrative Quotes
	over, I don't think one pharmacist can be held responsible for the work of another pharmacist actions……. I think it's the main reason why there are so many unfilled supervising positions." [P11]
	"As an owner supervising pharmacist, it's very different to an employee supervising pharmacist…all of the complexities and responsibilities and potential outcomes become very different because you're not in control of all of the various components that could have very significant impacts and consequences for you professionally. So I guess as an employee supervising pharmacist now, it has crystallized it to an extent that I wouldn't appreciate it as an employer or as an owner……. all of the responsibilities of your role as supervising pharmacist are very much out of your control. …. [P16]
	"I think as of October [2022] *some 7% of Irish pharmacies had no supervising pharmacist in place. About 35-40% of* [name of pharmacy group] *pharmacies had no supervising pharmacist but the PSI didn't do a damn thing about that.* [P17]
Complexity of reimbursement system	*"There's way too many schemes like I mean. We have what is it? 8 different schemes…..You've so much going on and so much paperwork."* [P22]
	"*It's now fulfilling all of the HSE and PSI requirements as opposed to maybe looking after the patient in front of them sorting out possible mistakes that were made on discharge from a hospital or something like that. You know, they don't have the time to do that anymore*".[P11]
	"There was a thread on one of the pharmacy chat threads called slimy colleagues. It was kind of upsetting to find out about the level of fraud that was going on because obviously that's why I have found the HSE and the PCRS being so distrustful of me because they had reason to probably be." [P8]
Higher Order Category - Commercial considerations	
Dominant retail influence	"*I would get tonnes of e mails every day with different figures across the business …..* [name of cosmetic] *sales, OTC sales, dispensed items, number of prescriptions we kept on file and all that. It was all just numbers…….It's completely retail based. I wouldn't imagine it's any different from working in B & Q or working in Tesco or any sort of major supermarket…… a lot of the managers and in head office positions are recruited from those businesses."* [P17]
	"*I've worked for companies where it'd be like we want a 10-minute turn around on prescriptions….a new operations manager came into the dispensary and likened my working on a prescription to 'making a sandwich in a deli'. I was furious".* [P3]
Higher Order Category - Representation of interests	
Lack of effective advocacy	"*The Irish Pharmacy Union is the biggest misnomer. For starters they're not a statutory union in terms of collective bargaining……. There's an employee committee [in the IPU], which means nothing….the IPU is for business owners and companies who are in complete wilful ignorance, as they have their heads deliberately in the sand. It's all about suppression of wages.* [P17]
	"*I mean I think it* [IPU] *is a conflicted body. You cannot be a representative body of sectors within a workforce that are going to be if you like, pursuing conflicting goals.* [P19]
Higher Order Category - Pharmacist health and well-being	
Stress & strain	*"It is a stressful job. There's no two ways about it. You have it coming at you from every angle. You have patients who are annoyed with you because you can't give them something without a prescription and you have the admin, the ordering, etc. Nothing was ever truly finished at the end of the day."* [P13]
	"Dealing with the regulatory agencies is also extremely stressful and I think there's a genuine fear within pharmacy of the HSE or the PSI. Even pharmacies that are doing nothing wrong and are operating safely, effectively and legally feel terror when the HSE or a PSI inspector walks in the door – it is awful. " [P9]
COVID-19 Related	
	"my colleagues, the doctors - the GPs - they disappeared completely. They left us holding the can basically and we were the ones dealing with all the screaming customers or patients who were obviously panicking. It was like Armageddon. " [P18]
	"I just found the patient population just seems like a bit more agitated since COVID ….. definitely something that the patient population just seems a bit different since COVID like just more demanding or something" [P1]

all community pharmacists, the consensus view was that it largely only represented the interests of pharmacy owners. An employee pharmacist referred to the difficulties they experienced when trying to join a trade union and organise collectively to stop a proposed cut to their remuneration.

3.6. Higher Order Category 6 Pharmacist health and well-being

The stress and strain associated with working as a community pharmacist and its negative impact on health and well-being was consistently alluded to by participants. They acknowledged how the responsible nature of the job dealing with patients in itself can be stressful. However, this was exacerbated by the unsatisfactory working conditions and the high administrative burden. The approach of the PSI and the PCRS to enforcement also contributed to the stress experienced by pharmacists in the practice environment.

The circumstances of the COVID-19 pandemic also contributed to the stressful nature of the job. Some pharmacists felt that while other healthcare professionals in the primary care setting withdrew from seeing patients, they remained on the frontline dealing with patients under very stressful conditions for both patients and pharmacy staff. Since the pandemic, pharmacists have also perceived a change in patient behaviour, exhibiting less patience and becoming more demanding.

4. Discussion

This study aimed to understand the factors affecting the retention of pharmacists in community practice in Ireland and was conducted against a background of increasing difficulties in filling vacant pharmacist positions in the in Ireland. Overall, the "lived experience" portrayed among the 23 pharmacists interviewed was one of intensive, excessive and stressful work, with unsatisfactory working conditions and limited career opportunities. Various studies from Anglosphere countries highlight excessive workloads, the absence of breaks and antisocial hours as driving factors for community pharmacists leaving the profession, which are replicated in this study.[18,19,21–26] Our findings indicate that the collective working conditions of community pharmacists in Ireland are far from what might be expected for a professional role. Pharmacists reported working long daily shifts, late nights and weekends without having any scheduled breaks beyond those taken in sporadic lulls in patient activity, which were often unpredictable, if they occurred at all. The Organization of Working Time Act 1997 provides for

the legal entitlements of all employees including pharmacists to rest breaks during the working day.[31] The absence of scheduled breaks as described in this study does not appear to comply with this Act. In 2011, the Royal Pharmaceutical Society of Great Britain (RPS) recommended the need for adequate rest breaks for pharmacists,[32] but the findings from the recent health and wellbeing survey suggest that the absence of breaks remains an issue for pharmacists in the UK.[33]

The workload burden for many pharmacists interviewed was exacerbated by what they considered was the insufficient provision of pharmacist and support staff commensurate with the workload in the pharmacies. This further undermined their ability to deliver a safe and effective pharmacy service, a factor reported in other jurisdictions.[23,24,33,34] The Regulation of Retail Pharmacy Business Regulations 2008 as amended provides that a pharmacy owner *"shall provide and maintain such staff, premises, equipment and procedures for the storage, preparation, dispensing, compounding, sale and supply of medicinal products…. "*.[35] It also notes that the *"pharmacy owner…. In making provision for the staff…he or she has regard for the health, safety and convenience of the public"*. However, this provision does not legally oblige pharmacy owners *per se* to provide sufficient staff for the operation of the pharmacy. Furthermore, there is no regulatory guidance as to what constitutes sufficient staffing for any pharmacy, based on the extent of its professional services including medicines dispensed or supplied. Heavy workloads without proper breaks from that work creates a working environment not perceived as safe for patients as it increases the likelihood of dispensing errors and suboptimal patient care occurring.[23,24,36] This is exacerbated when pharmacists are threatened or subjected to assaults while working in the pharmacy, as reported in this study, and previously reported in the community pharmacy setting in Ireland[37] and in other jurisdictions.[38] Despite the difficult conditions under which pharmacists routinely practice, a number of those interviewed considered that there is a lack of acknowledgement of this by their employers or any tangible supports provided to alleviate the situation.

Salary levels are an important factor influencing retention in the sector.[17,20] Several interviewees highlighted the remuneration and associated benefits offered as making a career in community pharmacy unattractive. Low pay and underfunding has also been reported in the UK.[33] While starting salaries In Ireland compare favorably with other professions, there is a discernible absence of any salary progression scales for pharmacists in community practice. Therefore, they remain relatively static over the course of a career in community pharmacy with limited opportunity for even inflationary rises to be given. Furthermore, there is the notable absence of other financial benefits such as pension provision and only limited sick pay, both of which influence the decision to stay practicing as a community pharmacist or not. Pharmacy is a female dominated profession in Ireland with 63% of registrants in 2022 being female.[11] The absence of any pay other than the limited social insurance payment during periods of maternity leave is also a significant factor for female pharmacists planning to have children continuing in community practice.

Notwithstanding evidence of the positive impact that community pharmacists have on patient health and well-being and engendering a high level of trust from the public,[39–43] there was an overarching sense among those interviewed of being undervalued by patients, other healthcare professionals and employers, contributing to pharmacists leaving or wanting to leave community practice. Many patients did not seem to appreciate why their prescriptions could not be dispensed without a wait time or why the pharmacist might not be able to supply them with any OTC medicine they want. Pharmacists in Northern Ireland similarly reported how the public could be very demanding and unwilling to wait for short periods and expecting an instant service, which added to the pressure under which they worked.[21] More recently, the UK's RPS Workforce Wellbeing Survey reported that those working in community pharmacy where compared to other practice settings were more likely to experience verbal or physical abuse which had a negative impact on their mental health and wellbeing.[33] With medical practitioners, it was perceived that the interventions pharmacists made on behalf of their patients were not appropriately acknowledged or acted upon. This viewpoint is consistent with reports from other jurisdictions where pharmacists also perceived that their knowledge and skills are underutilized and unrecognized, and a sense that their professional identity was one of being 'shopkeepers'.[20,44] With employers, a lack of acknowledgement of their professional expertise together with the deficits in support, augmented the perception of being undervalued. Aspden *et al* (2021) reported similar viewpoints from New Zealand pharmacists who reported a lack of recognition of pharmacy from the public and other healthcare professionals in addition to lack of support from management within the profession itself.[17] Forsyth and Radley (2022) recently stated that pharmacy perceives itself as the quintessential professional example of untapped potential, underutilized skills and systemic under-appreciation which some describe as classic markers of an alienated profession.[45]

Career fulfilment and a progression pathway are important means of encouraging retention in any job. For those interviewed, career fulfilment can arise from engaging with patients and seeing how this positively impacts on their health outcomes. However, it suggests that over time, the routine and repetitive nature of the job leads to a lack of fulfilment, aligned with the perceived lack of career progression in the sector, which is echoed elsewhere.[18,20,33] The introduction of expanded professional services such as vaccinations and the provision of emergency contraception have extended the professional role of the pharmacist and might be expected to enhance levels of professional fulfilment. However, the layering of these positive, albeit additional functions, onto an already busy workload without the provision of additional resources means that many pharmacists view the introduction of an extended scope of practice less positively than might be expected. The Minister for Health has recently established an Expert Taskforce to support the expansion of pharmacist roles and pharmacist prescribing, and further extensions to their scope of practice. While this is to be welcomed, as part of its deliberations, this Taskforce should optimally factor in the current heavy workload of frontline community pharmacists and the resourcing implications of any expansion of pharmacist roles when drafting its recommendations.[46]

Following three years post-registration experience, pharmacists can progress to the role of supervising pharmacist as provided for under the Pharmacy Act 2007. There is also the potential to progress to the position of superintendent pharmacist but progression to this is rather limited. Therefore, once a community pharmacist becomes a supervising pharmacist, there is essentially no discernible career progression opportunities other than that of superintendent. Historically, becoming a pharmacy owner was the desired career progression for an employee pharmacist. While this may not be an option many pharmacists wish to pursue, for those that do, the goal of pharmacy ownership seems to be increasingly beyond their reach. This is due, in part, to the inability to raise the considerable finances required and being outbid by chains and other large scale purchasers including wholesalers. While there are no limitations on opening a new pharmacy in Ireland unlike other EU countries,[47] the opportunity to identify a viable location is very limited in a country with a population of just below 5.1 million, already served by nearly 2000 pharmacies. Other impediments to establishing a new pharmacy identified were cuts to the State reimbursements schemes[48] and the introduction, during the COVID-19 emergency, of the electronic transmission of prescriptions known as Healthmail.[49] The need to get patients to have their doctors re-direct prescriptions electronically from an existing pharmacy to a newly established one was considered to be an impediment when opening a new pharmacy.

Unique to the Irish setting is the Regulation of Retail Pharmacy Business Regulations 2008 that provides for the positions of both superintendent and supervising pharmacist.[35] While both require the holder to have three years post-registration experience, it is the position of supervising pharmacist that most pharmacists have the opportunity

for progression in their careers. The Pharmacy Act provides that a supervising pharmacist is *"in whole-time charge of the carrying on of the business there"*.[50] This is supplemented by detailed guidance issued by the PSI which provides *inter alia* that the supervising pharmacist "*be responsible for personally managing, controlling and supervising the pharmacy", "be accountable for all professional activities occurring there" and* should "*ensure on a day-to-day basis that the pharmacy premises are maintained to a standard that is safe for patients and staff*".[51] This means that the supervising pharmacist is legally accountable for all the professional services including all dispensings of medicines in the pharmacy, whether or not they are the dispensing pharmacist or even present in the pharmacy. This was confirmed by the High Court in Ireland in its decision in Lannon *vs* The Council of the PSI where it was noted "*Supervising pharmacists are responsible for all of the operations of the pharmacy even when absent*".[52] As a result, it appears the supervising pharmacist is held principally accountable for any alleged breach under the Pharmacy Act, in precedence to either the superintendent pharmacist, the owner or any individual pharmacist who may have committed the alleged wrongdoing. In circumstances where the supervising pharmacist is neither the owner of the pharmacy or its superintendent pharmacist, this is a particularly heavy burden, principally because, as identified by various interviewees, they frequently carry this accountability without any meaningful authority in terms of the pharmacy's financial management and resourcing to ensure it operates in a safe and effective manner. This calls into question the appropriateness of supervising pharmacists being held to account in this way when not having a commensurate responsibility in law for its financial management and resourcing. A number of interviewees stated this position of being accountable without authority as resulting in many pharmacists no longer being willing to take on a supervising pharmacist position. This seems to be borne out by a random check of the Register of Pharmacies in Ireland on 2nd May 2023 which showed that 113 of the 1990 pharmacies registered did not have a supervising pharmacist listed notwithstanding that a pharmacy must have a supervising pharmacist in order to lawfully operate.[53]

Henman (2020) notes that 'pharmacy is more highly regulated in Ireland than any other health profession and operates to a very high standard'.[54] Interviewees reported a significant administrative workload associated with regulatory obligations and reimbursement processes. While there was general acceptance of the need for regulation to ensure public protection, pharmacists were concerned about over-regulation citing whether requirements such as the Pharmacy Assessment System were necessary to ensure public safety. There was also concern that the regulatory demands imposed diverted pharmacists away from patient-facing activities. These findings reflect previous findings in both Lynch & Kodate (2020)[55] and Lynch *et al* (2022).[56] The requirement for pharmacies to verify and decommission medicinal products at the point of their supply to patients was introduced on foot of the European Union's Falsified Medicines Directive 2011/62/EU.[57] Several interviewees in this study highlighted this as contributing to an increase in their workload and felt it was an unnecessary duplication given that each medicinal product is already verified by the pharmaceutical wholesaler prior to it being delivered to the pharmacy. The complex model of reimbursement for medicines supplied under some eight different State-funded schemes in Ireland was reported as contributing significantly to the workload and administrative burden for pharmacists and diverted them away from patient-facing activities. While pharmacists highlighted the perceived lack of trust the PCRS has in pharmacists to engage honestly with the medicines reimbursement system, it was acknowledged that various cases involving false claims for payment may explain this. Lam *et al* recently reported that a large proportion of pharmacists in New Zealand had considered abandoning their pharmacy career due to the work impact on their health while even more were irritated by the bureaucratic micromanagement and the incessant amount of administrative paperwork they have to complete as part of their jobs, which was also reflected in this cohort of interviewees.[58]

In 2015, Sikka *et al* opined that the dysfunction in healthcare is the by-product of its shift from a public service to a business-driven model during the latter half of the 20th century, and this is pertinent in the context of retention in community pharmacy.[59] The increasing consumerism in healthcare leads to growing competition in community pharmacy sectors and places pharmacists under pressure to adapt to consumer demands to maintain market share.[60] There has also been an evident shift in corporatization of the sector in the UK where, as in Ireland, non-pharmacist controlled company ownership of pharmacies is permitted.[47,61] While community pharmacists identify as healthcare professionals, a significant number of those interviewed in this study highlighted the conflict they experienced in trying to deliver a patient-focused healthcare in what has increasingly become a 'retail' setting. This was particularly reported by those who had worked for pharmacy groups as they referred to their emphasis on the retail and business outputs/targets *i.e.* numbers of items dispensed, services provided, products sold as well as target times for dispensing prescriptions, rather than on the delivery of optimal and safe healthcare. This view is shared in recent reports from the US.[62,63] Tsao *et al* (2016) also reported that the changing pattern of pharmacy ownership in Canada with more corporate entities enforcing business-related demands on pharmacists led to reduced professional autonomy and resulted in significant stress.[24] Interviewees in this study also noted that the designation of a community pharmacy in law in Ireland as a *"retail pharmacy business"* was not conducive to pharmacy being acknowledged and operated for the provision of healthcare as opposed to the retailing of goods.[50]

Despite the range of factors identified in this study adversely impacting on them continuing to practice in community pharmacy in Ireland, many employee pharmacists consider that there is no entity to represent them or to lobby for their interests. The IPU considers that it represents all pharmacists but the prevailing view among those interviewed, both employees and former owners, was that it was largely concerned only with the interests of pharmacy owners. Given that many of the factors impacting on retention as highlighted in this study relate to the working conditions of employees, interviewees felt it difficult to see how the IPU could reasonably expect to equitably represent the interests of both employers and employees in such matters. Indeed, the difficulties encountered finding a trade union to represent the interests of employee community pharmacists trying to prevent a pay-cut was identified in this study.

Yong *et al* (2023) recently stated that high levels of stress and strain are endemic in community pharmacists and exacerbated by an increasing demand for the delivery of additional services.[64] Several pharmacists interviewed referred to their increasing workload with the provision of extra professional services in the absence of any additional pharmacist or other support staff being provided. This added to the already stressful nature of the job along with the undoubted strains placed on them by the COVID-19 pandemic.[65,66] These are consistent with physiological, psychological and social stressors reported by community pharmacists which impacts on their health and well-being, often accompanied by burnout.[64] The RPS Survey in 2022 found that community pharmacists were at higher risk of burnout and more likely to rate their mental health as poor compared to pharmacists in other sectors.[33] However, there are additional stressors pertinent to the Irish setting including the onerous professional responsibility of the supervising pharmacist role for employee pharmacists, as previously described. The ability to practice safe healthcare delivery is compromised in the presence of a workforce under stress, potentially forcing them to consider leaving. In 2008, Berwick *et al* set out the triple aim of high value healthcare on the key tenets of care, health and cost.[67] However, healthcare transformation cannot be achieved without improving the experience of those providing that care,[59] to avoid continued attrition from a workforce already under pressure from the perspective of retention.

4.1. Limitations

The use of qualitative methodology may limit the generalisability of the findings of the study to the wider community pharmacy workforce. However, the richness and volume of the data and the achievement of data saturation provides confidence of the study findings' insight into the factors influencing participants in leaving the sector or contemplating leaving it. This is supported by the triangulation of the findings with previously published literature on the topic both nationally and internationally.[13,33] The sample size of 23, albeit not large, is similar to that of other qualitative studies on the topic and interview-led qualitative studies generally.[28,29] The authors are also confident in the adequacy of the data derived from the interviews conducted as no new categories were identified well in advance of completion of the 23 interviews, underpinned by a rigorous data analysis process.[68] The participation of a range of both early and late career/retired pharmacists demonstrates that the reasons for leaving are comparable across the demographic of the participant cohort, as does the representation of both employee and owner pharmacists. Reflexivity is one of the pillars of qualitative research to ensure that researcher bias is avoided.[69] Impartiality throughout the conduct, analysis and reporting of the study was achieved through adherence to the topic guide, rigor in the coding processes and consensus agreement, participant review of transcripts and subsequent triangulation of the findings with published studies. Both researchers were attuned to the need to recognize and "*take responsibility for their own situatedness within the research*" at all stages.[69] It is recognized that the impact of qualitative research can be challenging in the current era of evidence-based medicine.[70] We assert that the richness and breadth of the data derived from this qualitative study gives readers an understanding of the complex factors that affect retention in community pharmacy in Ireland. Furthermore, it concurs with the 'evidence' accrued over decades on the topic as the profession evolves to widen its scope of practice but may face difficulties through a failure to provide the necessary additional resources required. The study findings will be a useful source of information for the PSI's pharmacist workforce which is on-going.[71]

5. Conclusion

There is an acknowledged shortage of pharmacists available to work in community practice in Ireland at present.[12–14] Therefore, the retention of the pharmacists currently working in the sector is essential to alleviate the current shortage. The findings from this study show that there are a range of factors at play, which either individually or cumulatively inform a pharmacist's decision to stay in or leave community practice and merit careful consideration to help halt attrition from the sector. Improvements to the working conditions for community pharmacists appear necessary including enhanced acknowledgement of the professional nature and demands of the role and better levels of resourcing. Both where or when additional professional services are introduced, they need to be matched by increased staffing to support their safe and effective delivery, rather than layered onto an individual pharmacist's existing significant professional workload. This has previously been recommended both in the UK and the United States to enhance the well-being of the pharmacy workforce and to ensure medication-safety is maximally enabled in community pharmacy.[32,33,62,63,72,73] In 2011 the RPS recommended tackling workplace pressure through professional empowerment but acknowledged that solutions are often interlinked and explored a number of areas including ensuring that pharmacists take breaks, matching resources to demands, balancing professionalism with commercial or financial pressure, ensuring physical working environments are fit for purpose among others.[32] The most recent survey in the UK in 2022 indicate that many of these issues have not been resolved in the intervening decade, thus contributing to on-going impacts on pharmacist health and well-being.[33]

The reported limited career progression in the community sector emerged as a significant concern for pharmacists in this study, together with the allied apparent limited capacity for those individual pharmacists who wish to progress to pharmacy ownership to either purchase or establish their own pharmacy. Perhaps because of its retail setting, community pharmacy, unlike other professions, does not have a tradition of long term employees being given the opportunity to invest in the pharmacy where they work, and potentially becoming a partner in it. While many pharmacists may not currently aspire to pharmacy ownership, it is an important avenue of career progression for those that do and tangible measures to support this warrant wider exploration.

Possible reforms to the regulatory model in place for pharmacy in Ireland and its implementation are relevant in the context of pharmacist retention. In particular, the continued appropriateness of holding a supervising pharmacist who is neither the pharmacy owner nor the superintendent pharmacist, personally accountable for all of the operations of the pharmacy in the absence of a commensurate legal responsibility for its financial management and resourcing, appears from the findings of this study as needing to be addressed as part of any review of the Pharmacy Act. The development of guidance on the level of resources required in a pharmacy to effectively and safely deliver services should also be given careful consideration. Gysel *et al* recently called for radical changes in workflow and staffing models within the pharmacy sector in Canada to optimize the scope of practice of the sector and this may be of relevance in the Irish context.[74]

The complex model of medicines reimbursement would appear to benefit from streamlining and integration into a single IT interface to allow valuable pharmacist time to return to delivering patient care as opposed to administering eight separate schemes. The perceived absence of effective independent representation for employee pharmacists is an important finding. Effective collective representation would provide a mechanism for employee pharmacists to raise their concerns and have them considered and addressed in a coherent and binding way, as so many other healthcare professionals are accustomed to.

Many of the findings of this study reflect those in published studies from other Anglosphere countries where pharmacy services are increasingly delivered by large non-pharmacist owned corporate entities with a strong retail focus on cost-containment and centralized control. The suggested areas for further examination and review emanating from the findings of this study would, if adopted, likely necessitate improved terms and conditions for community pharmacists, enhanced levels of resourcing commensurate with the level of pharmacy services provided, greater acknowledgment of the professional role of the pharmacist and positively impact on their overall health and well-being. However, the question arises as to whether the changes that appear necessary for enhanced retention in the sector are compatible with the existing perceived commercially-focused model of pharmacy service delivery. This may only be determined by the extent to which meaningful progress in addressing the range of issues highlighted in the study can be made to the satisfaction of the pharmacists working in the sector. Until this occurs, calls at this time for more pharmacists to be educated in Ireland, in the hope that this will address current and future shortfalls in the numbers of pharmacists choosing to work in the sector, may appear to be premature.

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Declaration of Competing Interest

None.

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Appendix A. Supplementary data

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