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Perceived role of pharmacists in managing home-based pharmaceutical services in Norway: an interview study with community pharmacists

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Abstract

Pharmacists have the potential to address gaps in primary healthcare by providing pharmaceutical services in home care settings, particularly in response to the challenges faced by the Norwegian healthcare system. Their integration into primary care teams could enhance care quality, reduce the burden on physicians, and improve treatment accessibility and efficiency, as demonstrated in other countries. This study explores pharmacists' perspectives on the challenges and opportunities associated with implementing pharmaceutical home care services in Norway, considering international experiences and trends. A qualitative study was conducted between July and August 2024, involving interviews with pharmacists from various Norwegian pharmacies. Transcripts were analysed to identify categories and themes. Ten pharmacists participated, and the data were structured into 19 categories grouped into six themes: (i) the concept and implementation of home pharmaceutical services, (ii) benefits, (iii) challenges, (iv) impact on daily practice and training needs, (v) evaluation and teamwork, and (vi) patient outcomes and the use of digital tools. Findings indicate that home-based pharmaceutical services could improve healthcare quality in Norway, but their implementation involves challenges such as resource limitations and training needs. Recommendations include developing targeted strategies and support mechanisms to overcome these barriers, in order to ensure optimal benefits while maintaining high standards in pharmaceutical home care services.

Key words: pharmaceutical services, pharmacy practice, home care, primary healthcare crisis, patient safety

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Introduction

Norway's ageing population presents growing healthcare challenges, with those over 65 set to exceed 20% by 2050 (1). The increasing number of over-80s requires more long-term care and complex medication management (2–4). Polypharmacy is common, with 43% of older adults using five or more medications, and 3.4% using ten or more (5). Notably, 54% experience potential drug interactions, often involving aspirin, simvastatin, or over the counter (OTC) analgesics like ibuprofen (5). These interactions heighten the risk of adverse drug events (ADEs), leading to hospitalisations and poor adherence, especially in cognitively impaired patients (6). Pharmacist-led medication monitoring is crucial to reducing risks (7). Home-based pharmaceutical services, including medication reviews and counselling, enhance patient safety and treatment outcomes (8). However, Norway's healthcare workforce shortage, especially in rural areas, limits access (9). An ageing workforce, low recruitment, and rising demand cause long wait times: 32% of patients wait over two days for urgent care, and 36% over a week for routine check-ups (10, 11).

Integrating pharmacists into primary care in the United Kingdom (UK) and the Netherlands has improved medication safety and reduced physician workload (8, 12–14). Home pharmacy services enhance safe medication use and adherence via continuous, patient-centred care. Models differ internationally: UK pharmacists perform home reviews (15), Canada targets polypharmacy prevention (16), and the Netherlands integrates pharmacists with general practitioners (GPs) for personalised care (17). Norway is developing similar services, though legal and financial barriers limit national rollout (18). Norwegian pharmacists primarily work in commercial settings, offering vaccinations, inhaler guidance, blood pressure monitoring, and medication counselling (19). Despite efforts to reduce medication errors, no national policy formally integrates them into home healthcare. Local initiatives exist but are limited by municipal management and staffing shortages in nursing and general practice (20–25). Effective interdisciplinary collaboration is crucial, yet communication barriers persist. Structural reforms are needed to optimise pharmacists' roles in home healthcare (8, 18, 26). Financial sustainability is a key challenge for pharmacist-led home services.

In Canada, fewer than 20% of pharmacists are reimbursed for such services, while in the United States (US) they are mostly limited to infusion therapy (27). Despite proven benefits, funding remains a major barrier (27). The UK is negotiating a National Health System (NHS) contract for home-based pharmaceutical care, while Australia has a reimbursed home medicines review programme (28). A Canadian study suggests no single optimal funding model, advocating for a tailored approach (27). Additionally, lack of reimbursement may undermine the profession's value, making future funding harder to secure (29). Telepharmacy is a promising solution for expanding pharmaceutical care, especially in rural areas with limited service access (30). It enables remote medication reviews, adherence monitoring, and chronic disease support. Evidence shows telepharmacy – particularly phone-based interventions – improves disease management, self-care, and adherence (30). Established in the US, Canada, Australia, and the UK, it

enhances data collection on adherence and medication safety, improving healthcare quality (30, 31). In Norway, initial implementation could focus on phone and video consultations via platforms like Skype or Zoom, supported by pharmacist training and standardised protocols.

This study aimed to explore pharmacists' perspectives on the challenges and opportunities associated with implementing home-based pharmaceutical services in Norway, considering international experiences and trends. The objectives include (i) reviewing the literature and analysing existing models of home-based pharmaceutical services globally, (ii) examining Norwegian pharmacists' perceptions of providing pharmaceutical care in home settings, and (iii) identifying key challenges and opportunities for implementation in Norway.

Methods

A qualitative study was conducted between July and September 2024 to explore Norwegian pharmacists' perspectives on implementing home-based pharmaceutical services. Semi-structured interviews served as the primary data collection method.

The literature review was conducted by two researchers, I.B. and V.M., from July to August 2024, involving searches in PubMed and Google Scholar, along with an examination of public Norwegian websites on pharmacy practice and healthcare policies. This review informed the questionnaire design (32) and contextualised the study findings.

Sample: The study included ten pharmacists from community and hospital pharmacies across Norway, selected based on the following inclusion criteria: (i) a minimum of three years' work experience in pharmacy practice, and (ii) formal education of at least a three-year bachelor's degree or a five-year master's degree in pharmacy. All participants were directly involved in the provision of pharmaceutical services within their respective pharmacies. Participants were recruited using a snowball sampling method (33), whereby they were recommended by colleagues who had already participated in the study. Sampling followed the principle of saturation, with data collection concluding after 10 interviews when no new themes emerged. Voluntary participation ensured diverse representation across pharmacy settings.

Data Collection: Interviews were conducted by lead researcher I.B., either in person or via telephone, lasting between 30 and 45 minutes and following established guidelines (34). A predefined questionnaire, developed by the researchers and validated by a group of three practising pharmacists according to Polit and Beck's guideline (35) through a comprehensive literature review, guided the discussions, focusing on pharmacists' experiences, attitudes, and perceived challenges and opportunities related to home-based pharmaceutical services (Appendix 1). The choice of interview mode was based on the geographical distance and availability of the participants. No significant differences were observed in the depth or quality of responses between the two formats. All interviews were conducted following the same standardised protocol and analysed using the same method to ensure consistency across data collection modes.

Transcription and Analysis: With participants' consent, all interviews were recorded and transcribed verbatim. Transcripts were independently reviewed by researchers to ensure accuracy, and analysed using thematic analysis to identify key themes and patterns (36).

Ethical Considerations: This study did not require formal approval from a Research Ethics Committee, as it did not involve the collection of sensitive personal health information or any interventions that could cause harm to participants. The research was conducted in accordance with the principles of the Declaration of Helsinki. Participants were fully informed about the purpose and process of the study, and their participation was entirely voluntary. Informed consent was obtained verbally before the start of each interview. Interviews were audio-recorded with participants' permission, and all data were anonymised during transcription and stored securely on a password-protected server to ensure confidentiality and data protection.

Results

The study included 10 pharmacists (60% female, 40% male) from various regions of Norway: Eastern Norway (40%), Southeastern Norway (40%), Northern Norway (10%), and Southern Norway (10%). The participants' ages ranged from 27 to 37 years, with a mean age of 32.2 years (SD = 3.12). Years of pharmacy practice experience ranged from 3 to 9 years, with a mean of 6.7 years (SD = 2.36). The analysis identified 19 categories grouped into six key themes, summarised in Table I for visual elucidation.

Table I Summary of themes and categories with participants' key quotations

Tabela I Sažetak tema i kategorija sa ključnim citatima učesnika

Theme	Number of categories	Categories	Participant Quotes
1. The concept and implementation of home-based pharmaceutical services	3	1.1 Definition, scope, and core clinical activities 1.2 Patient education, device support, and digital tools 1.3 Systemic, legal, and financial prerequisites	"A new opportunity for those who… require pharmaceutical services to be received at home." (Participant 7) "Preparing pill dispensers, delivering medications, educating patients, and checking for drug interactions." (Participant 6) "Public awareness, healthcare sector support, and government backing are essential." (Participant 1)
2. Advantages of home-based pharmaceutical services	3	2.1 Improved therapeutic outcomes and safety 2.2 Accessibility for vulnerable and remote populations 2.3 Reduced healthcare system burden	"Increased adherence to therapy, reduced hospitalisation risk, better management of chronic diseases." (Participant 9) "Particularly important for elderly and immobile individuals, who would not need to visit a pharmacy or doctor to receive healthcare support." (Participant 3) "This would lower healthcare costs and hospitalisation rates." (Participant 6)

3. Challenges and barriers to implementation	4	3.1 Workforce and workload limitations 3.2 Financial and sustainability challenges 3.3 Logistical and coordination difficulties 3.4 Data protection and privacy concerns	"More qualified staff would be needed to perform all tasks, both in the pharmacy and during home visits." (Participant 3) "Lack of resources in terms of both the time pharmacists would need to provide the service and the financial means required to implement such a demanding service." (Participant 4) "Collaborating with other healthcare professionals involved in patient treatment may be challenging in terms of ensuring consistent information is provided to patients." (Participant 2) "Accessing patients' private health information and maintaining documentation." (Participant 7)
4. Impact on daily practice and training needs	4	4.1 Workflow changes and task redistribution 4.2 Opportunities for professional development 4.3 Specialised training requirements 4.4 Need for clear guidelines and protocols	"The introduction of pharmaceutical services would lead to major changes in the work process." (Participant 3) "This would positively impact professional development and diversify daily tasks." (Participant 9) "Specialised training, including communication skills, technical expertise, and time management, is crucial for successful implementation." (Participant 6) "Establishing dedicated communication channels with physicians and other healthcare professionals would enable quick and effective responses in urgent situations." (Participant 2)
5. Perceived effectiveness and team collaboration	2	5.1 Outcome measurement and evaluation indicators 5.2 Integration into multidisciplinary teams	"Patient satisfaction, adherence, and adverse drug reactions should be monitored." (Participant 9) "Collaboration with doctors, nurses, and other professionals is key." (Respondent 9)
6. Improvement of patient outcomes and use of digital tools	3	6.1 Enhanced therapy management and adherence monitoring 6.2 Institutional and policy support 6.3 Development and application of eHealth solutions	"Monitoring whether patients take their medication at the right time and in the correct manner." (Participant 2) "Home-based pharmaceutical services are currently unfamiliar to the general public, and in order for the service to be established and sustained, it must be state-funded." (Participant 10) "Digital tools and eHealth solutions can significantly improve the provision of home-based pharmaceutical services." (Participant 9)

The concept and implementation of home-based pharmaceutical services

Participants generally agreed that home-based pharmaceutical services involve delivering comprehensive care to patients unable to visit a pharmacy due to health or geographic barriers. As Participant 7 stated, it offers “a new opportunity for those who... require pharmaceutical services to be received at home.” Key services include patient counselling, medication review, adherence monitoring, and education on medicine and device use. Participant 3 emphasised “providing equally high-quality pharmaceutical care to all patients who cannot visit a pharmacy but need better control over their medication.” The aim is to ensure pharmacy-level care at home, improving accessibility for vulnerable groups. As Participant 5 noted, “pharmaceutical services (primarily patient counselling on proper medication use, etc.) are provided to patients without requiring them to visit a pharmacy.” Participants agreed that essential services should include medication use monitoring, therapy review, drug interaction management, and adverse effect assessment. Participant 8 stressed the importance of “monitoring correct medication use, identifying interactions, and assessing adverse effects.” Many highlighted patient education and medical device assistance. Participant 6 suggested “preparing pill dispensers, delivering medications, educating patients, and checking for drug interactions.” Some also mentioned vaccinations and urgent medical care at home. Participant 2 noted the importance of “vaccinating patients who cannot visit a pharmacy due to health reasons.” Participants 5 and 10 highlighted “medicine-start,” supporting patients starting cardiovascular therapy.

For successful implementation, respondents emphasised pharmacist training, healthcare system support, financial backing, and collaboration with other professionals. Respondent 1 stressed the need for “public awareness, healthcare sector support, and government backing,” alongside clear legal and financial provisions. Adequate staffing and efficient organisation were also seen as critical. Respondent 5 pointed to the need to “train pharmacists, organise working hours effectively, and ensure sufficient staffing.” Some respondents highlighted technology as a key enabler. Respondent 9 noted the importance of “adopting digital tools, collaborating with healthcare professionals, and ensuring patient acceptance.”

Advantages of home-based pharmaceutical services

Most respondents viewed home-based pharmaceutical services as highly beneficial, particularly for patients with limited mobility or those in remote areas. They highlighted improved therapeutic outcomes, reduced adverse drug reactions, and lower hospitalisation rates. As Respondent 9 noted, benefits include “increased adherence to therapy, reduced hospitalisation risk, better management of chronic diseases, a personalised approach to treatment, and continuous care without frequent visits to healthcare facilities.” Many emphasised the convenience for elderly and immobile patients, who would no longer need frequent pharmacy or doctor visits. Instead, pharmacists could provide essential care at home. Respondent 3 described this as “particularly important for elderly and immobile individuals, who would not need to visit

a pharmacy or doctor to receive healthcare support." Respondents also stressed the potential to ease the burden on the healthcare system by reducing unnecessary doctor and hospital visits. As Respondent 6 stated, "this would lower healthcare costs and hospitalisation rates." Proper medication use and therapy monitoring would further minimise drug interactions and adverse effects, improving overall treatment outcomes.

Challenges and barriers to implementation

Respondents identified several key challenges to implementing home-based pharmaceutical services in Norway, including staffing shortages, financial constraints, logistical complexities, and data privacy concerns. A major barrier is the lack of qualified personnel. As Respondent 3 noted, "more qualified staff would be needed to perform all tasks, both in the pharmacy and during home visits." Without proper organisation and compensation, pharmacists risk becoming overburdened. Financial sustainability was another major concern. Respondents questioned funding sources and cost-effectiveness. Respondent 4 pointed out a "lack of resources in terms of both the time pharmacists would need to provide the service and the financial means required to implement such a demanding service." Similarly, Respondent 6 asked, "Who would bear the costs of implementation – the state, municipalities, or the patients themselves?" Logistical and coordination challenges were also highlighted. Effective integration with doctors, nurses, and other healthcare professionals is essential but difficult. Respondent 2 stressed that "collaborating with other healthcare professionals involved in patient treatment may be challenging in terms of ensuring consistent information is provided to patients." Finally, ensuring patient safety and privacy remains a critical issue. Providing services in home settings involves handling sensitive health data, requiring strict control and regulatory compliance. Respondent 7 noted that "accessing patients' private health information and maintaining documentation" is a significant challenge. Addressing these barriers requires careful planning, financial investment, and strong collaboration across the healthcare system.

Impact on daily practice and training needs

The study results indicate diverse perspectives on the implementation of home-based pharmaceutical services, particularly concerning workload, daily practice, training requirements, and resource allocation. While some respondents believe that proper planning and task distribution could facilitate integration without significantly increasing the workload, others express concerns about potential disruptions. Respondent 3 noted that "the introduction of pharmaceutical services would lead to major changes in the work process" and require "additional planning and task redistribution." Similarly, Respondent 6 highlighted that such services would "significantly impact the workload while increasing the need for resources, such as time and financial support." Despite these challenges, respondents also identified potential benefits, particularly in terms of professional development and enhanced patient interactions. Home-based services could enable a more personalised therapeutic approach and a better understanding of patient needs. As Respondent 9 stated, these services could "positively impact professional

development and diversify daily tasks." However, respondents stressed the importance of ensuring sufficient staffing to prevent in-pharmacy patients from being neglected. Regarding training and resources, most respondents emphasised the need for specialised education, covering both technical and communication skills necessary for home-based care. Respondent 6 noted that "specialised training, including communication skills, technical expertise, and time management, is crucial for successful implementation." Additionally, logistical support, such as transport and technical equipment, was seen as essential for efficient service delivery and record-keeping. Many respondents also underscored the necessity of clear guidelines and protocols to ensure service consistency and regulatory compliance. Respondent 2 suggested that "establishing dedicated communication channels with physicians and other healthcare professionals would enable quick and effective responses in urgent situations." Overall, the findings highlight the need for strategic planning, sufficient resources, and robust professional training to ensure the effective implementation of home-based pharmaceutical services.

Perceived effectiveness and team collaboration

Participants highlighted the need for systematic data collection to assess home-based pharmaceutical services. Respondent 1 proposed an "HPC (home pharmaceutical care) percentage" to compare adverse event rates. Respondent 9 suggested tracking "patient satisfaction, adherence, and adverse drug reactions," while Respondent 8 emphasised "monitoring clinical outcomes and patient feedback." Most expected positive patient responses. Respondent 6 noted that patients would "feel safer when taking their therapy," and Respondent 9 predicted a "higher level of satisfaction" due to personalised care. Regarding pharmacists' roles, participants stressed collaboration with healthcare professionals and IT system integration. Respondent 1 described pharmacists as an "extended arm of healthcare," while Respondent 9 emphasised that "collaboration with doctors, nurses, and other professionals is key." Respondent 4 suggested that "pharmacists handle professional aspects, while home care services manage medicine delivery." The findings highlight the importance of evaluation, integration, and pharmacists' central role in improving patient care.

Improvement of patient outcomes and use of digital tools

Respondents highlighted that home-based pharmaceutical services could improve therapy management, reduce adverse drug reactions, and enhance medication adherence. As Respondent 1 noted, "the quality of life of patients would be improved, and the very fact that someone cares for them and dedicates time to them would contribute to their satisfaction and better daily life." Personalised pharmacist–patient relationships and real-time monitoring were seen as key to improving adherence. Respondent 2 stated that "monitoring whether patients take their medication at the right time and in the correct manner" would enable timely interventions. Institutional support was deemed essential, including clear guidelines, professional education, and digital tools. Respondent 5 stressed that "IT support and the development of a platform/application to be used during consultations" would enhance service delivery. Public funding was widely supported,

with Respondent 10 noting that “home-based pharmaceutical services are currently unfamiliar to the general public, and in order for the service to be established and sustained, it must be state-funded.” Digital tools and eHealth solutions were seen as crucial for efficiency and patient monitoring. Respondent 9 stated that “digital tools and eHealth solutions can significantly improve the provision of home-based pharmaceutical services,” contributing to better health outcomes.

Disscusion

This study offers important insights into the concept, implementation, and perceived impact of home-based pharmaceutical services from the perspective of key stakeholders. The findings reveal a comprehensive understanding of these services, which include core clinical activities such as medication preparation and delivery, patient education, device support, and the use of digital tools. Home-based services are seen as an innovative approach to expanding access to pharmaceutical care. The benefits identified align with broader healthcare objectives, including improved therapeutic outcomes, enhanced patient safety, and better accessibility for vulnerable populations, especially the elderly and those with mobility limitations. These services are also recognised for their potential to reduce hospitalisation rates and healthcare costs, highlighting their systemic importance.

However, several challenges and barriers to successful implementation were noted. These include workforce shortages, financial limitations, logistical complexities, and concerns related to data protection and patient privacy. The importance of having adequately trained staff and sufficient resources was strongly emphasised, alongside the difficulties of ensuring effective collaboration and communication within multidisciplinary teams. The study also highlights the significant impact that home-based pharmaceutical services may have on daily professional practice, requiring workflow changes and task redistribution. There is a clear need for specialised training in communication, technical skills, and time management, as well as the development of clear guidelines and protocols to support service delivery.

Measuring outcomes such as patient satisfaction, adherence, and adverse drug reactions is seen as crucial for assessing effectiveness. Integration into multidisciplinary teams is essential for delivering comprehensive and coordinated care. The role of digital tools and eHealth solutions in improving patient outcomes is widely acknowledged. Digital monitoring can enhance correct medication use, while institutional and governmental support, including state funding and public awareness, are critical for establishing and sustaining these services in the long term.

Our findings underscore the critical importance of interdisciplinary collaboration in optimising patient care and medication management, aligning with existing international literature (37). The observed impact of home-based pharmaceutical services on professional practice – particularly in patient education, identification of drug interactions, and comprehensive medication reviews – resonates with the Canadian study by MacKeigan and Nissen, which highlighted pharmacists’ pivotal role in post-

hospitalisation care and home healthcare services. Similarly, Flanagan and Barns' (2018) research in the United Kingdom reinforced the significance of pharmaceutical interventions for improving medication adherence and health outcomes, while emphasising key evaluation criteria such as staff competence, safety, and collaborative practice with other healthcare professionals (38, 39).

Concordant with these studies, our research reveals that successful implementation hinges on multiple factors, including pharmacist education, systemic healthcare support, and government policy frameworks. This concurs with Hunter et al.'s study in the United States, which identified the essential role of pharmacists in recognising medication-related risks among older adults living at home, thus preventing hospitalisation, loss of independence, or mortality. Likewise, Woodend and Lawrence's Canadian investigation highlighted the necessity of appropriate remuneration and support structures to facilitate effective pharmacist integration into multidisciplinary teams (27, 40).

The benefits we identified, such as reduced adverse drug events, improved adherence, decreased hospital admissions, and enhanced patient quality of life, are consistent with findings by Zhang et al. in China, which demonstrated significant economic advantages of home-based pharmaceutical care, including notable cost savings and a 16% reduction in hospitalisations (8). Moreover, Villanueva-Bueno et al.'s 2022 Spanish study confirmed that personalised pharmaceutical services delivered in home settings improve therapeutic outcomes and patient well-being (41).

Despite these shared benefits, our study also highlights several challenges, notably workforce shortages, financial limitations, and logistical complexities. These are similarly reported in research from Switzerland by Locca et al. and in the United States by Sebaaly et al., both emphasising the need for pharmacist training, enhanced coordination with healthcare teams, and active involvement in medication reviews to improve safety, reduce costs, and lower rates of hospital readmission (42, 43).

A notable similarity across studies is the identification of education and interdisciplinary collaboration as essential enablers for effective service implementation. Our findings support McKeirnan et al.'s (2020) research in the United States, which demonstrated the efficacy of pharmacist home visits in detecting and resolving medication-related problems in chronic disease patients. However, both studies also highlight persistent challenges related to the limited involvement of other healthcare professionals, particularly physicians, which ongoing initiatives such as BeWell and BetterCare aim to address (44, 45).

At the time of conducting our research, the only directly relevant empirical study on pharmacist integration into multidisciplinary home care teams was a Norwegian qualitative study based on the Normalisation Process Theory (18). Due to limited research, we relied heavily on its findings to understand key challenges and facilitators. Our results closely align with this study regarding unclear pharmacist roles, limited understanding of their competencies by other team members, staff shortages, and insufficient management engagement, all underscoring the need for formal guidelines and

team education. However, while the Norwegian study participants were generally positive despite limited experience, our findings reveal greater concerns about role ambiguity, daily collaboration difficulties, and tensions related to professional identity and power dynamics within teams. Unlike the Norwegian study's focus on procedural and organisational barriers, we also identify significant interpersonal and cultural challenges affecting team cohesion and effectiveness.

These findings emphasise the urgent need to reform pharmacist education in Norway, both at undergraduate and continuing professional development levels. Incorporating specialised training on managing adverse events in home care and preventing the second victim phenomenon among pharmacists could better prepare them for the evolving demands of home-based care, ultimately enhancing patient safety and professional well-being (48).

Strengths and limitations: This study provides deep qualitative insights, with semi-structured interviews capturing diverse pharmacist perspectives. A varied sample from different Norwegian regions enhances data representativeness, while methodological rigour is ensured through a literature-based questionnaire and thematic analysis. However, limitations include a small sample size affecting generalisability, potential selection bias, subjective interpretation of interviews, and logistical constraints in data collection and analysis. Future research should evaluate specific service models, cost-benefit analyses, and the role of technological solutions in improving service quality and efficiency.

Conclusion

While home-based pharmaceutical services offer potential benefits, their successful implementation in Norway depends on addressing organisational and financial challenges. Targeted strategies and structural support are essential to enhance therapy effectiveness, accessibility, and personalised care.

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Declaration of Competing Interests

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.

Author contribution

IB: Conceptualization; Investigation; Writing – original draft; Writing – review & editing. VM: Investigation; Methodology; Conceptualization; Supervision; IZ: Conceptualization; Writing – review & editing.

Appendix

Appendix I Semi-structured interview questionnaire used in this study

Prilog I Polustrukturirani upitnik za intervjue korišćen u ovoj studiji

	Gender: **Male** □ **Female** □ **Years of work experience in a community pharmacy: _____**
Question 1	How would you describe the concept of providing pharmaceutical services in home settings?
Question 1.1	Which pharmaceutical services do you consider to be the most important to include in this provision?
Question 1.2	What are the key factors for the successful implementation of pharmaceutical services in home settings in Norway?
Question 2	What benefits do you see in providing pharmaceutical services in home settings for patients in Norway?
Question 3	What challenges and barriers do you anticipate in the implementation of pharmaceutical services in home settings in Norway?
Question 4	How do you think the provision of pharmaceutical services in home settings could impact your daily practice and workload?
Question 5	What type of training or additional resources do you consider necessary for pharmacists to effectively provide services in home settings?
Question 6	In your opinion, how could the effectiveness of pharmaceutical services provided in home settings be monitored and assessed?
Question 6.1	What kind of feedback do you expect from patients using this service?
Question 7	How do you perceive your role within the team providing pharmaceutical services in home settings in collaboration with other healthcare professionals?
Question 8	How could pharmaceutical services provided in home settings improve treatment outcomes for patients?
Question 8.1	Do you think this service would contribute to improving medication adherence?
Question 9	What additional information or support do you consider necessary from health authorities and regulatory bodies for the successful implementation of these services?
Question 9.1	How do you think the funding of this service should be structured?
Question 10	How do you think digital tools and eHealth solutions could support the provision of pharmaceutical services in home settings, and how open would you be to using them?

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Percepcija uloge farmaceuta u pružanju farmaceutske usluge u kućnim uslovima u Norveškoj: studija intervjua sa farmaceutima u javnim apotekama

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Kratak sadržaj

Farmaceuti imaju potencijal da upotpune primarnu zdravstvenu zaštitu kroz pružanje farmaceutskih usluga u kućnim uslovima, odgovarajući time na izazove sa kojima se suočava norveški zdravstveni sistem. Njihova integracija u timove mogla bi poboljšati kvalitet nege, smanjiti opterećenje lekara i unaprediti dostupnost i efikasnost terapije, što je već potvrđeno u drugim zemljama. Ovo istraživanje ispituje stavove farmaceuta o mogućnostima implementacije farmaceutskih usluga u kućnim uslovima u Norveškoj, uzimajući u obzir međunarodna iskustva i trendove. Kvalitativna studija sprovedena je od jula do avgusta 2024. godine, putem intervjua sa farmaceutima iz različitih norveških apoteka. Transkripti su analizirani radi identifikacije kategorija i tema. U istraživanju je učestvovalo deset farmaceuta, a podaci su grupisani u 19 kategorija svrstanih u šest tematskih celina: (i) koncept i implementacija farmaceutskih usluga u kućnim uslovima, (ii) koristi, (iii) izazovi, (iv) uticaj na praksu i potrebu za obukom, (v) evaluacija i timska saradnja, kao i (vi) ishodi lečenja i upotreba digitalnih alata. Rezultati pokazuju da farmaceutske usluge u kućnim uslovima mogu poboljšati kvalitet zdravstvene zaštite u Norveškoj, ali da je njihova primena otežana zbog nedostatka resursa i potrebe za dodatnom obukom. Ključne preporuke uključuju razvoj strategija i podrške za prevazilaženje izazova, kako bi se obezbedili benefiti uz visok standard farmaceutskih usluga.

Ključne reči: farmaceutske usluge, farmaceutska praksa, kućna nega, kriza primarne zdravstvene zaštite, bezbednost pacijenata