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The art of making the right exception to the "rule": Nurses' experiences with drug dispensing in nursing homes

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ABSTRACT

Nurses are key professionals in ensuring safe drug management in nursing homes, and their practice is regulated by a number of guidelines. The present study aimed to explore nurses' experiences of dispensing drugs to older people in nursing homes by using an exploratory qualitative design. Focus group interviews were conducted in three nursing homes in central Norway; the data were analyzed using qualitative content analysis. The results indicated that drug dispensing was perceived as a complicated process during which both anticipated and unforeseen challenges arose that influenced the nurses' abilities to follow professional standards. In these situations, the nurses had to apply their knowledge and make various adjustments based on conditions in the organization and the needs of individual patients. The findings have implications for facilitating nurses' working conditions and resources to avoid drug administration that limit the discretion of nurses and threaten patient safety in nursing homes.

Introduction

Medication errors and unsafe medication practices are a leading cause of avoidable harm in health care systems worldwide;[1] their consequences can be costly to both the individual and society.[1,2] Patient safety is particularly relevant to nursing home patients who may be exposed to adverse events and injuries in connection with the health care they receive, especially drug treatment[3] This risk is associated with the vulnerability of nursing home patients due to their older age, cognitive impairments, and complex comorbidities and treatment regimens.[4,5] Drug administration is among nurses' core activities and is vulnerable to medication errors that threaten patient safety.[6] Medication errors in nursing practice have been linked to lack of skills, poor interprofessional cooperation, busy working environments, and disturbances.[4,6–8] In Norwegian nursing homes, nurses (Registered Nurses) and social workers (both of whom have three-year bachelor's degree) are authorized to administer drugs. However, there are also other nurses working in nursing homes with lower health degrees (e.g., enrolled nurses) or with no formal health education (e.g., assistants) who in some cases may be given the authority to distribute prepared drug doses.[9] This delegated authority is available based on theoretical and practical training, following approval from the nursing home's management.[9] This delegation is not unique to Norway but takes place also internationally.[10,11] The manager of the nursing home has the overall responsibility for ensuring that all health professionals who administer medicines have the necessary competence to carry out the task properly.

Medication management is a standardized process, which includes handling prescriptions, dispensing and administrating drugs, and monitoring their effects.[12] Indeed, a widely used set of guidelines for standardizing the process is *The Rights (Rs) of medication administration*.[13,14] The Rs include ensuring the right patient, drug, route, time, dosage, dose, and form, as well as the right documentation and responses. Additionally, drug dispensing is also regulated by law,[15] which stipulates the responsibilities of nurses and their colleagues.

Guidelines and regulations for drug administration aim to standardize nurses' assessments and thus increase their reliability. These procedures ensure safe drug administration and reduce irregular practices by restricting the ability of nurses to make discretionary assessments. However, standardization has certain limitations,

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because universal rules can neither always be followed nor determine the best action to take in a particular case.[16] For example, in a survey of Finnish nurses working in long-term elderly care, almost half of the respondents reported that they deviated from the medication administration guidelines when necessary.[17] The most serious reported deviations included crushing tablets despite this being contraindicated, mixing crushed tablets, and deviating from recommendations relating to timing or giving the medication with food. Although the consequences of these deviations were not investigated in this study, crushing pills may affect the effect of drugs because the uptake or dose changes.[18,19] The same applies to changes in timing that affect intervals between doses and whether medicines are given with or without food.[18] These changes can determine whether the patient gets an effect or a side effect from the medicine. The reasons behind the deviations were also not investigated in the Finnish study, but the nurses who rated their pharmacological knowledge as "good" reported high compliance with administration guidelines.[17] Knowledge of pharmacology is essential in drug administration; however, several other factors exist that can affect compliance. For instance, drug administration often takes place in busy environments and is a process that is deeply integrated with other nursing activities. As a result, disruptions that can lead to administration errors are common.[20,21] Furthermore, time constraints, poor communication, lack of management, and the normalization of risky behaviors are also factors that increase the likelihood of deviations from the guidelines and adverse drug events.[7,12,21,22]

The role of nurses in drug administration in nursing homes is described as compensatory, flexible, and adaptable.[23] Odberg et al. reported a dynamic interplay among several organizational factors in the nurse's role, including shifting responsibility, the need for competence, invisible leadership, the varying availability of competence, staff stability, and vulnerable shifts.[23] However, there remains a lack of knowledge regarding nurses' assessments of their practices in relation to following guidelines and their thoughts and behaviors during medication administration,[17] especially in the nursing home context.[24] Thus, to obtain more in-depth knowledge of the administration process, this study aimed to explore nurses' experiences of dispensing drugs to older people in nursing homes.

Material and methods

The study utilized an exploratory qualitative design with focus group interviews for the data collection.[25] Focus group interviews were employed as they promote interaction and discussion between participants, which can reveal both common knowledge and novel perspectives that may not otherwise emerge.[26] The COREQ checklist was used as a guide to ensure the reporting of this study was both comprehensive and explicit.[27]

Study setting and participants

The study was conducted in three nursing homes across two municipalities in Mid-Norway, including one urban and one rural municipality. The location of the nursing homes was strategically chosen to ensure demographic variety in the sample. A purposive sampling technique was used, and the managers of the participating nursing homes forwarded the study invitations to the eligible nurses and facilitated contact with them. The inclusion criteria were being an authorized RN involved in medication administration at the nursing home and being willing to participate in the study. The sample included ten women and one man, aged from 29 - 61 years. The demographic data and an overview of the participants are presented in Table 1.

Data collection

The first author conducted three focus group interviews at the workplaces of the nurses between June and October, 2020. A semi-structured interview guide with open–ended questions was developed based on the study aims, results from previous research, and the authors' experiences of medication administration in nursing homes. The interview guide included questions such as "Can you describe the practical medication administration in your unit?", "Can you describe a successful medication distribution?", and "Can you describe what may be challenging when administrating medications in nursing homes?" Using the developed interview guide, the first author (moderator) facilitated discussions in the focus groups and encouraged the participants to elaborate on their experiences. Concurrently, a co–moderator observed the focus groups, took notes regarding key responses of the participants, and supplemented the interview with follow–up questions. The focus group interviews lasted between 65 and 80 minutes and were audio-recorded and transcribed verbatim.

Analysis

The transcriptions from the focus group interviews were examined using qualitative content analysis with an inductive approach.[28,29] Firstly, all authors read the interview text to obtain a comprehensive understanding of the interview as a whole. Following this, the authors reviewed and reflected on the descriptions of the nurses' experiences of drug dispensing to identify unique statements. Meaning units that each represent a single unit of content were then identified and condensed into comprehensive units. Moreover, these condensed meaning units were compared with each other and organized into subcategories and categories based on their differences and similarities. Through this process, the underlying meanings of the subcategories and categories were interpreted to formulate the main theme. Throughout the analytical process, the authors shifted between all levels of analysis and collaboratively reflected on and discussed the manifest and latent content of the data. Ultimately, a shared understanding between the authors was achieved, resulting in one main theme, three categories, and seven subcategories that represented the meaning of the nurses' experiences.

Study rigor

To ensure the rigor and trustworthiness of the study, the authors employed Lincoln and Guba's evaluation criteria of credibility, transferability, dependability, and confirmability.[30] The dependability and confirmability of the study were enhanced by using both a moderator and co-moderator during the focus group interviews, as well as audio-recording and transcribing all the interviews verbatim to allow multiple authors to examine the interview reports and themes. Additionally, introductory discussions of the interpretations and underlying meaning of the data were conducted by the three nurses (first, second and last author), and, when the pharmacist (third author) was also included in the process, all the authors discussed the interpretations collaboratively to reach a consensus. In order to enable individual readers to judge the transferability of the study findings to other contexts, descriptions of the participants, data collection, analysis, as well as quotes from the focus group interviews, have been provided. Finally, credibility was ensured by including an adequate number of participants, thus promoting dialogue between the nurses during the focus groups. In addition, four informants chose to participate in the quality assurance of the results through member checking, involving the participants assessing the accuracy of the results in comparison with their personal experiences.

Table 1
Overview of informants.

Focus Group	Informant	Age	Type of ward	Advanced education	Experience at the nursing home (years)
1	1	42	Long term		10
	2	49	Long term		20
	3	61	Long term		10
	4	33	Long term		10
2	5	60	Acute care		22
	6	41	Long term		3
	7	49	Psychiatric/long term		8
	8	58	Psychiatric/long term	Psychiatric nursing	24
3	9	29	Long term	Psychiatric nursing	3
	10	56	Long term		18
	11	39	Acute care	Geriatric nursing	14

Ethical considerations

The health administration of each municipality gave permission for the data collection to be performed, and the Norwegian Centre for Research Data approved the study (Project number: 209812). Written, informed, voluntary consent was obtained from each of the participants prior to all the focus group interviews. Furthermore, no patients in the nursing homes were involved in this project.

Findings

One main, overarching theme arose from the analysis: *The art of making the right exception to the rule*. This main theme comprised three categories and seven sub- categories. These categories are shown in Table 2, and presented below along with significant quotations from the interview text.

Main theme: the art of making the right exception to the rule

The nurses' descriptions of the drug administration process corresponded to the steps outlined in the Norwegian regulations regarding medication management, including ordering, dispensing, and administering the medication, and evaluating and documenting the effects. However, the interpretation of the focus group interviews indicated that this process is often complicated. The nurses have to comply with several rules for drug dispensing in order to achieve the best outcomes for the patient. Specifically, these rules can be formal, such as quality routines and the drug manufacturer`s prescriptions in Felleskatalogen,[31] which is an encyclopedia with structured and updated information about pharmaceutical products on the Norwegian market, or these rules can also be more informal, such as the 7 R's of medication administration.

All participants presented reflections regarding the characteristics of a "perfect medication administration episode" when the rules for administration are followed correctly and everyone is satisfied. These reflections can be summarized by the following quote from one of the nurses:

I have plenty of time, with only a few patients waiting for me. I have brought the medicine trolley with me, and it contains everything I need. In each room, the patients are awake, they have a glass of juice available, and are ready to take the medicine. They swallow the medicine at once, without being bothered, without losing some of the pills on the floor. (. . .) In addition, I know the patients well, do not need to ask for their names, the multidose packages are labeled correctly with names and times to be taken, so I make no mistakes, there are no negative consequences afterward, and no one has forgotten that they have been given their pills. (focus group [FG] 1)

However, the participants reported that the "perfect medication administration episode" was a rarity, because both anticipated and unforeseen challenges usually arise that influence the nurses' abilities to follow the optimal routine. On some occasions, it may be practically impossible to follow the routines or the routines may not provide the best or safest outcomes for the patient. The categories and sub-categories described in their corresponding sections provide insight and nuance regarding the nurses' perceptions of the art of making the right exceptions to the rule.

Category: coping with obstacles and opportunities in the organization

This category of coping with obstacles and opportunities in the organization is based on three sub-categories: *struggling with the information flow, coping with limited professional resources,* and *juggling complex dispensing regimes.* The sub-categories revealed that nurses have to find an appropriate balance between different organizational considerations during the medication administration process.

Struggling with the information flow

In the focus group interviews, the nurses emphasized the importance of having the correct drug list for the patient for appropriate drug management. This issue of drug lists represented a particular challenge for the nurses when receiving patients discharged from the hospital. The epicrisis for the patient, including their revised drug list, should arrive concurrently with the patient at the earliest time following discharge. If the revised drug list is delayed or the patient is not given an initial supply of drugs after discharge, the nurses expressed that they must spend time and effort to ensure that the patient receives the correct drug and dose. In rural areas far from the nearest pharmacy, the nurses have to be creative to access the drugs

Table 2
Overview of the main theme, categories, and sub-categories.

Main theme	*The art of making the right exception to the rule*		
Category	Coping with obstacles and opportunities in the organization	Adapting to the patient and the context	Possessing own competence to ensure patient safety
Subcategory	Struggling with the information flow Coping with limited professional resources Juggling complex dispensing regimes	Paying attention to the patients' individual needs Keeping pace with the daily rhythm in the unit	Having the necessary knowledge of pharmacology Using own experience and clinical judgment

initiated at the hospital and use colleagues or family and friends of the patient as couriers when they are near pharmacies.

We cannot trust the old medicine chart, because probably there have been changes during hospitalization. Then we have to call the hospital and demand information. If we are unlucky, the patient has been prescribed a new medicine that we do not have in our storage. If this happens on the weekend, when the pharmacy is closed, the patient must manage without that medicine until Monday. (FG 3)

Another significant component of drug dispensing involves documenting the effect of the drugs in the patient's medical records (EHR). During the focus groups, the nurses admitted that they often failed to carry out this documentation. For example, some of the participants explained that, on occasion, they only write a plus or minus sign on the paper-based medication administration sheet to report an "effect" or "no effect", respectively. Furthermore, during busy periods in the nursing home, this information is not always transferred to the EHR. Since the paper-based sheets are replaced after some time, there is also the risk of patient health information being lost. In the case of Pro Re Nata (PRN) medications, the nurses expressed that a lack of documentation can lead to uncertainty regarding whether the medication should be given or not. This issue may also affect changes made to the patient's medicine prescription by physicians, as stated by one participant:

If we do not document in the patient record, for instance during a week, and the patient's medication is to be reviewed during the physician's visit, any changes to the medication chart can be made on an inadequate assessment basis. In fact, only the observations and interpretations of the particular nurse attending the physician's visit are taken into account. (FG 2)

Coping with limited professional resources

The informants perceived that having access to colleague registered nurses or social workers during the day and night shifts positively influences both drug dispensing and the performance of double-checking routines. However, the nurses admitted that a lack of competent staff and rapid changes in the condition of a patient have occasionally forced them to delegate drug dispensing responsibilities to other, non-certificated staff. For example, this could occur during meal times, during which nurses may ask assistants to give medications to the patient while supporting them with their meal. During night shifts, staffing levels may be particularly low, and this can lead to nurses having to adjust treatment regimens for intravenous antibiotics.

Antibiotics should be evenly distributed throughout the day, for example at 6, 12, 18 and 24 o'clock, but we cannot follow that regime, it is practically impossible with few nurses available (FG 1).

Additionally, a lack of competent staff can also lead to medicines being dispensed without being double-checked by another staff member. Two of the participants gave examples of this situation:

- *If you are the only registered nurse on the shift, and a new patient is admitted who needs to have his drugs filled up in the pill organizer, then you have no one who can double-check.*
- *That's right, nor do you have anyone to check the medicine chart.*
- *Yeah, it has to be done the next day. And maybe you are the only nurse on that shift too. It does not feel good, but you don't have any choice.* (FG 1)

Despite the challenges of double-checking medications and the lack of formal skill competence in the staff team, the nurses expressed great appreciation for the cooperation with the other nursing staff. For example, the nurses reported that they try to obtain a wide set of observations, including those of the enrolled nurses and the assistants, to form a comprehensive picture of the patient's drug treatment, especially when preparing for physician visits.

Juggling complex dispensing regimens

The nurses reported that solid oral drugs are mainly dispensed using two administration aids, including multidose-packaging, which they perceived as the most reliable and easy to use, and pill organizers, which they perceived as more time-consuming in terms of preparation. Although multidose-packaging should be the main drug administration method, a combination of administration aids is often used in cases when patients are prescribed medications that cannot be prepacked for various reasons. In addition, the nurses expressed that a separate system is used for PRN medication, for which drugs are taken directly from the manufacturer's packaging. The nurses perceived that shifting between the two different dispensing systems is demanding and that there is a risk that medicines, either in multidose-packaging or weekly pill organizers, may be forgotten during the dispensing process. Furthermore, it is challenging for nurses when drugs requiring unique administration methods are stored together with other drugs in the pill organizer, as exemplified by two of the informants:

- *It is challenging to follow which administration methods apply to the various drugs.*
- *We must always have control over which drugs are to be given, when, and how.*
- *It is especially difficult when the tablet is not stored separately but is with the others in the dosage.* (FG 1)

Category: adapting to the patient and the context

The category of adapting to the patient and the context is based on the two sub-categories of *paying attention to the patients' individual needs* and *keeping pace with the daily rhythm in the unit*. These sub-categories revealed that the nurses perceived the individual needs of patients as being more important than following medication routines. Additionally, the nurses reported sharing the responsibilities for drug dispensing routines with enrolled nurses and nurse assistants in order to maintain the ongoing daily rhythm of the unit.

Paying attention to the patients' individual needs

The participants emphasized the importance of adapting drug dispensing to suit each individual patient and their circadian rhythm. For example, on occasion, respect for the patients' autonomy and participation in their care have to be prioritized over the principles of dispensing the right medication at the right time. Therefore, as an example, it may happen that nurses avoid waking a patient for their morning dose at 8 AM.

- *Of course it's good to have the routines, but we do work with people.*
- *Mmm*
- *Neither the patients, nor how the shift will turn, is predictable. Patients wake up at different times, right? Then you give them medicine, you may do other tasks, then there is a new patient who is awake and ready for his medicine. So, yes, there is a little to and from, to adapt to the individual needs.*
- *Yeah, we do not go around waking them up in order to give them their drugs.*
- *It is so important that the patients can do as much as possible by themselves so that they experience mastering. And taking your own tablets is also a mastery. But of course it takes time... when grandma is used to eating half a slice of bread first, then she takes one of her tablets, whereupon she takes a little more slice of bread, and then a new tablet again . . .* (FG 1)

The nurses indicated that their patients have varying chronic diseases, which requires nurses to utilize different drug dispensing approaches. Two conditions that were frequently mentioned in the

focus group interviews included swallowing difficulties and cognitive impairments. Indeed, one of the participants discussed the challenges of dispensing drugs to patients with dementia:

When I give tablets crushed in jam to a patient with dementia, I am used to saying: "Here is your medicine together with some rosehip jam", and then it's the word "jam" they notice, and they forget the beginning of the sentence. . . . I feel that I'm fooling them, of course, that I am doing something unethical (. . .), but of course we use such methods, because we must have our backs free, or follow the "book" (. . .) But, of course, it's a kind of manipulation. (FG 2)

The nurses also emphasized the importance of not forcing patients to take their medication, while also expressing their feelings of worry about the patients' health when they do not take their medication. One of the informants reported an example demonstrating this issue:

We have a cognitively impaired patient who refuses to use a nebulizer for respiratory medicine, and we cannot force him. Then we just have to hope that the person does not get sick, that he does not get a COPD deterioration. It's difficult ... when we, the physician and the relatives try to convince him, but then he does not understand what we are saying. We know that he should have the medicine four times a day, but we cannot force him. (FG 3)

Keeping pace with the daily rhythm in the unit

The nurses in the focus groups described that most of the medication administration occurs during the busiest times of the day. The morning shifts were reported to be particularly busy, as dispensing is carried out alongside morning personal care routines, wound care, delivering food and drinks, and administrative tasks, such as preparing for the physician visits. The nurses also primarily dispense drugs in connection with meal times, but they admitted that it is impossible to manage medication administration for all the patients at one time, especially when there are only a few nurses able to share the responsibility. Therefore, to enhance the efficiency of the task, they reported not following the dispensing schedule rigidly but, instead, linking medication dispensing to other tasks and adjusting dispensing based on patient availability. Two of the participants used the morning medication routine as an example of this issue:

- *We dispense the medicine continuously as the patients enter the breakfast room, without following a fixed plan*
- *It's a kind of ad hoc*
- *Yeah, as they arrive from their rooms and have finished their morning care.*
- *But we try to avoid giving eye drops at the breakfast table*
- *Yeah, they get eye drops either before or after the meal* (FG 1)

Category: possessing own competence to ensure safety

The category of possessing their own competence to ensure safety comprises two sub-categories, including *having the necessary knowledge of pharmacology* and *using own experience and clinical judgment*. Patient safety was a central topic in all the focus groups. However, it was also clear that the aim of good and safe drug use requires professional knowledge, experience, and discretion. Additionally, appropriate assessments and confidence in making the right decisions are influenced by the opinions and experiences of colleagues, and the nurses reported utilizing the various competencies of the staff team.

Having the necessary knowledge of pharmacology

The nurses emphasized the importance of knowing the indications and effects of the drugs in order to ensure correct and safe use for the patients. However, it was also highlighted that appropriate drug use does not mean indiscriminately obeying the physician's written instructions. One of the nurses exemplified her use of pharmacological knowledge to adjust the times for dispensing medications.

Some patients receive depot preparations before going to bed and the time is usually set to 21. . . but by that time the patient may have already fallen asleep, so I assess the patient's condition throughout the afternoon, and then it happens that I give the tablet an hour earlier. I do it because this is a prolonged-release tablet that does not work immediately but has a long release time. . . The prerequisite is that I know the preparation. I see that enrolled nurses with dispensation do not make such considerations but adhere strictly to what is written. (FG 2)

The nurses' knowledge of medications was a factor that they believed distinguishes them from social workers or enrolled nurses who also dispense drugs. Indeed, the nurses highlighted the importance of pharmacological knowledge in situations where they must prioritize the dispensing of certain drugs due to time constraints, as some drugs take priority and should be given according to the physician's instructions. For example, the nurses reported giving Insulin before dispensing oral drugs. However, the nurses experienced that such prioritizing may be more difficult for enrolled nurses or assistants, who generally adhere strictly to the prescribed dosing time as they lack knowledge about the priority order of medications.

During staff shortages or the occurrence of emergency situations, the nurses expressed that they had to consider whether to stop or postpone medication administration. The nurses felt confident in conducting these pharmacological trade-offs, but they were aware that they could not expect enrolled nurses or nurse assistants to carry out such reflections and actions. Therefore, in busy wards where drug dispensing is mainly performed by others rather than the RNs, the nurses had concerns about patient safety due to no one making these trade-offs.

Sufficient pharmacological knowledge to be able to detect side effects was another issue that was often discussed by the nurses in the focus groups. The nurses were concerned that, rather than simply following the prescription, individuals must have sufficient knowledge and experience to adequately observe the responses of the patients. Indeed, they expressed that patients respond very differently to medications, and their responses are not always in line with the expected side effects.

Using own experience and clinical judgment

Along with pharmacological knowledge, the nurses reported that they often employ their experience and clinical judgment to ensure appropriate drug use, particularly in relation to dispensing PRN medication, such as sedatives. Sedatives are often prescribed in the case of patients experiencing anxiety or unrest and, in such situations, the nurses expressed that the assessment is not always simple. One nurse explained:

Patient anxiety can be difficult to interpret ... what does it express? We see and interpret very differently, is the patient anxious? Is he in pain or perhaps constipated? It is especially difficult when it comes to patients with dementia, so we must use discretion and the experience we have with this particular patient. If not, we risk sedating a person who may really need painkillers. (FG 2)

The assessments conducted prior to dispensing were perceived as a type of detective work by the nurses. Despite having the physicians' prescriptions, the nurses expressed that they have to assess each situation individually before deciding whether to dispense certain drugs, such as laxatives, sleeping medications, or painkillers. Three of the participants discussed this issue:

- *Often, we provide medications that are meant to be used when needed regularly, and vice versa – regular medications that we provide as needed.*
- *Yeah*

- *For instance, Movicol ® is prescribed regularly seven days a week. The patient gets diarrhea if he takes it every day, so I give it now and then*
- *Yeah, we can give it regularly twice a week, and adjust with a couple more if he needs it*
- *But then we have to remember to update the medication chart, that's not always easy . . . (FG 2)*

The nurses felt that they had a significant responsibility to conduct broad assessments prior to dispensing. The specific examples they gave indicate that they make comprehensive assessments of the patients' daily form, habits, physical and mental symptoms, and existential challenges. However, they also felt that, on occasion, their colleagues hold different views and that they should collaboratively exchange experiences and discuss their perspectives. Finally, the nurses stated that it is important to become confident in one's own clinical judgment and to ensure that assessments are not conducted in a random or irregular manner.

Discussion

This study aimed to explore nurses' experiences of dispensing drugs to older people in nursing homes. The overarching main theme, the art of making the right exception to the "rule"—indicated that the nurses perceived drug dispensing as a complicated process during which both anticipated and unforeseen challenges arise that influence the ability to follow optimal drug dispensing routines. Our findings also indicated that nurses must apply various forms of knowledge and carry out numerous adjustments due to conditions in the organization and the needs of individual patients. Although drug dispensing is a well-regulated nursing practice, the nurses reported that it was rare for them to be able to follow the optimal routine as suggested by the guidelines. This finding confirms previous research suggesting that nurses do not always comply with drug administration procedures.[17,21] Although a significant part of the literature highlights the consequences of this practice (e.g., medication errors,[8,32]), the present study enhances our understanding of why deviations occur and how nurses use their discretion and justify these deviations.

In general, the use of discretion is a key characteristic of professional work,[33] particularly in relation to nursing practice.[34] Discretion is a multidimensional concept, and Molander and Grimen distinguished between the structural and epistemic dimensions of discretion.[16] Firstly, epistemic discretion is a form of practical reasoning with the purpose of deciding the action that should be taken in a specific case when clues are weak.[35] Conversely, structural discretion refers to the amount of freedom that an individual has relative to the standards set by an authority.[36] In this way, structural discretion means that individuals must be able to account for and justify their use of discretion to the authority that stipulates the standards.

Several obstacles in the organization forced the nurses to circumvent standards set by authorities, including those for adequate documentation and the exchange of information. Importantly, a lack of available and accurate information is a well-known issue affecting safe medication management.[4,37-39] In this study, there were contradictions in the nurses' relationships with information flow. The nurses felt significant responsibility for drug dispensing and reported investing much effort to ensure that their practices were based on correct information. Equally, they admitted that they often failed to document the effects of the medicines they dispensed. Similar findings were reported by Karttunen et al., who found that less than half of the nurses in their sample documented drug effects.[17] Some studies have suggested that incomplete documentation results from nurses thinking they know their patients so well that documentation is unnecessary.[40] However, the nurses in our study did not give this kind of explanation. They justified their adaptation of the regulations by referring to a lack of resources in terms of both time and competence and to the need to ensure that the drugs were dispensed. As they collaborated with other staff members who had varying professional competence, the nurses had to exercise discretion both in the delegation of drug dispensing and in determining when they required decision support. The challenge with delegating to non-certificated personnel[41] and dispensing medicines without double-checking has previously been reported in the literature.[17] According to Norwegian law, enrolled nurses and assistants do not have the authority to perform double checks.[15] This provides an example of a standard that limits nurses' freedom of discretion (i.e., structural discretion[16]) but that may be circumvented in practice when there is a lack of nurses on duty.

The nurses also said that they adjusted drug distribution based on the individual patients' needs, situation, and the context in which they were located. Two conditions that were problematized by our informants were swallowing difficulties and cognitive impairment, which are well-known factors complicating nurses' medication administration.[42-44] Chen et al.[42] reported that dispensing drugs to patients with cognitive impairment took at least a minute longer per patient. A qualitative study of the user perspective of dysphagia suggested that an individualized medication regimen should be followed.[45] This confirms our findings, as many of our informants made a lot of considerations related to situations when patients were unwilling to take medication. Informed consent to treatment and the right to refuse medicines are legal requirements that nurses are well familiar with. At the same time, nurses know that not taking medicines can have serious consequences for patients. For the nurses in our study, the solution was to crush the tablets and give them hidden in jam, which has been frequently reported in other studies.[46,47] In an attempt to downplay coercive use, information about giving the medicine was hidden in the way the nurse informed the patient. Guidry-Grimes et al.[48] discussed the ethical issues related to unauthorized, covert medication and argued that health care personnel should continually reevaluate the reasons for this practice. According to the Norwegian Health Care Act,[15] all instances of compulsion should be documented.

A prerequisite for the nurses' judgments in the drug dispensing process is professional knowledge, especially pharmacological knowledge. However, experiential knowledge is also important, including knowing the patient's situation, wishes, and habits. This use of discretion, which is within the nurse's areas of responsibility and limits of freedom (i.e., structural discretion), provides an example of exercising one's reasoning in epistemic discretion.[16] This epistemic form of discretion corresponds to what Tanner refers to as clinical reasoning in nursing, which is the use of theoretical knowledge, evidence-based practice skills, and experience in terms of observations and intuition to assess and interpret patient information in order to identify and fulfill the patients' needs.[34] Furthermore, our findings indicate that moral discretion also plays a role in both user involvement and patient dignity. This is the case, for instance, when facing difficult choices regarding the use of coercion and covert medication.

As found also by Karttunen et al.,[17] in this study deviations from the guidelines appeared to be conscious choices, as the nurses presented strong arguments for making the right deviations. Although many deviations could be justified professionally as being in the patient's best interests, there were also ones that involved no alternatives or sound arguments. In some cases, for example, the nurses felt compelled to delegate to colleagues who were not authorized or failed to double-check when they were alone as a nurse on duty. In the latter case, it appears that the nurses exercised discretion that exceeded the room for acceptable maneuver—they disregarded the guidelines *and* potentially threatened patients' safety. The nurse's professional room for maneuver holds both opportunities and obligations for exercising independence and discretion. Because discretion

is not boundless, it is vital to question how great it can be when dealing with drug dispensing Understanding nonconformities is important not only for the individual and their professional reflections but also for managers and stakeholders, who need insight into the exceptions to the rules to identify unsustainable or problematic practices. The findings in this study stress the importance of making management and organization in nursing homes responsible so that nurses avoid ending up in situations where they do not have the opportunity to exercise discretion. Overall, the findings have implications for facilitating the working conditions and resources of nurses to avoid drug dispensing procedures that limit their structural discretion and threaten patient safety. Further reflection is necessary regarding the use of and allowance for nurses' discretion in practices such as drug administration.

Strengths and limitations

Our sample included predominantly women. Including more men, therefore, could have enriched the data. However, the gender distribution of the sample is in line with the situation in Norwegian nursing homes, which are staffed mainly by women. The focus group sessions were characterized by a trusting atmosphere, and it appeared that all the informants shared honest reflections about the challenges they face. Still, it is conceivable that individual interviews could have facilitated more openness from some of the participants. Finally, the study's qualitative design limits generalizability, though the findings are of relevance to other nursing homes in similar contexts.

Conclusion

The findings of this study showed that nurses in nursing homes perceive drug dispensing as a continuous exercise of discretion, often at the limits of what could be interpreted as safe practice. Nurses have to apply various forms of knowledge and make several adjustments due to conditions in the organization and the needs of individual patients. The findings are useful for informing practice regarding the working conditions and available resources for nurses and ensuring that drug administration allows for appropriate discretion while also guaranteeing patient safety. Further research investigating nurses' use of discretion during medication administration is warranted. One avenue would be to observe nurses during clinical practice.

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