

## Original Research

## Complementing or conflicting? How pharmacists and physicians position the community pharmacist

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**Abstract****Background:** Interprofessional collaboration between pharmacists and physicians in primary care has been linked to improved patient outcomes. How professionals position themselves and each other can shed light upon their relationship, and positioning theory can be used as a tool to better understand intergroup relations.**Objectives:** 1) To identify how community pharmacists position themselves, and how they are positioned by general practitioners. 2) To assess how well these positions correspond, how the positions align with a proactive position for the pharmacists, and discuss how the positions could potentially impact collaboration.**Methods:** In this qualitative study, data were collected through six focus group interviews held between June and October 2019, three with pharmacists and three with physicians. The focus group interviews were conducted using a semi-structured interview guide. Data were audio recorded, transcribed verbatim, and analyzed using the Systematic text condensation method. Positioning theory was used as a theoretical framework to identify the positions assigned to community pharmacists by the pharmacists themselves and by the physicians.**Results:** Twelve pharmacists and ten physicians participated. The pharmacists positioned themselves as the “last line of defense”, “bridge-builders”, “outsiders” – with responsibility, but with a lack of information and authority – and “practical problem solvers”. The physicians positioned pharmacists as “a useful checkpoint”, “non-clinicians” and “unknown”.**Conclusions:** The study revealed both commonalities and disagreements in how community pharmacists position themselves and are positioned by general practitioners. Few of the positions assigned to pharmacists by the physicians support an active role for the pharmacists, while the pharmacists’ positioning of themselves is more diverse. The physicians’ positioning of pharmacists as an unknown group represents a major challenge for collaboration. Increasing the two professions’ knowledge of each other may help produce new positions that are more coordinated, and thus more supportive towards collaboration.**Keywords**

Interprofessional Relations; Intersectoral Collaboration; Primary Health Care; Physicians; Pharmacists; Attitude of Health Personnel; Social Behavior; Focus Groups; Qualitative Research; Norway

**INTRODUCTION**

Interprofessional collaboration is now globally being recognized as a significant measure to improve health care.<sup>1</sup> The World Health Organization (WHO) states that interprofessional collaborative practices strengthens health systems and improves health outcomes, and declares it as an innovative strategy that will play an important role in mitigating the global health workforce crisis.<sup>2</sup> Still, there are many hindrances on the way to successful collaborations.

Community pharmacists and general practitioners (GPs) are two professional groups whose collaboration is becoming increasingly important in a time when more and more complex patients are being treated in primary care.<sup>3</sup> Collaboration between these two groups is shown to benefit patients.<sup>4,5</sup> Previous research has investigated the collaboration between community pharmacists and GPs,

with a focus on identifying and understanding the factors influencing this collaboration.<sup>3,6</sup> Though a significant portion of the published papers are built on qualitative studies, the majority of these are descriptive studies, and few have incorporated a more advanced level of theory informed interpretation.<sup>7-9</sup>

We have identified research from multiple countries, including the United States (US), the United Kingdom (UK), several European countries, Australia and the Middle East, but to our knowledge, no studies focusing on the collaboration between community pharmacists and GPs have been conducted in a Scandinavian setting. This represents a gap in the research base, as differences in the organization of the health care systems within different countries, as well as different cultures, may affect collaborative practice. We conducted this study with pharmacists and physicians in Norway. Here, community pharmacists and GPs most often work isolated from each other. Both community pharmacies and most GPs’ practices are privately owned. Pharmacies are mostly owned by pharmacy chains, while GPs’ practices are most often organized either as a sole proprietorship or as corporations.

**Theoretical framework**

Positioning theory is focused on how people position themselves and each other in storylines through their speech acts. Positioning can be either reflexive, meaning the positioning of oneself, or interactive, meaning the

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positioning of each other.<sup>10</sup> The three concepts “speech act”, “position” and “storyline” are central in positioning theory. A speech act is the act of making an utterance. A position comprises a cluster of personal attributes, rights, duties and obligations that limits the possible social acts that are available to a person or group as so positioned. A position is negotiable and the result of a dynamic relation between the participants in a social episode. The participants in a social episode co-construct a storyline where each participant claim for themselves or is given by others, a position. A storyline can be defined as the conversational history according to which a social episode evolves and positions arise.<sup>10</sup>

Positioning does not only happen at an individual level, but also at group level, where a person’s history includes his or her story both as an isolated individual and as a member of various groups. Positioning theory can therefore be used as a tool to better understand social phenomena such as intergroup relations.<sup>11</sup> The stories we tell about ourselves and “the others” may show where there are divergences that may impact collaboration. How we position ourselves and each other can shed light upon the relationship.

In a previous metasynthesis, where we explored the interpersonal aspects of the collaboration between community pharmacists and GPs through the use of positioning theory, we found positioning theory to be a useful lens through which to understand the dynamics between these two professional groups.<sup>12</sup> In the metasynthesis, which included primary studies from seven countries, we found that in the less common, successful collaborations, the pharmacists had taken a more proactive role, and thus claimed a new position for themselves. We concluded that if the collaboration was to move forward, the pharmacist needed to be the more active part.

In this study our aim is to investigate this finding further within a Scandinavian context through focusing on the positioning of community pharmacists, by the community pharmacists themselves and by GPs. We will address the following research questions:

- How do community pharmacists position themselves?
- How do GPs position community pharmacists?

This will be done using positioning theory to identify the different reflexive positions described by the pharmacists, and the interactive positions described by the GPs. We will discuss how well the positions assigned to pharmacists by themselves and by the GPs correspond, how the positions align with a proactive position for the pharmacists, and how the positions could potentially impact the collaboration between the two professions, seen in the light of previous knowledge about the collaboration between pharmacists and physicians.

## METHODS

In this qualitative study we performed focus group interviews with Norwegian pharmacists and physicians.

### Recruitment of participants and data collection

We recruited pharmacists and physicians in one of the major cities of Norway and the surrounding areas. We used

purposive sampling, as the inclusion criteria for participants were experience from community pharmacy (pharmacists) or general practice (physicians). There were no exclusion criteria. Most pharmacists were recruited through advertisement on a closed Facebook group for pharmacists in Norway. The advertisement was also shared openly in other social media channels, and colleagues and friends were asked to spread the word. The physicians were recruited through contacting small continuing education networks of general practitioners. Four networks were invited to participate in the study, and two of these accepted the invitation. One of the networks was big enough to be divided into two focus groups. A gift card of 400 NOK (37 EUR) was promised in the invitations to all participants as a compensation for their time and travel expenses.

Data were collected through six focus group interviews held between June and October 2019, three with pharmacists and three with physicians. The meetings were located at the university, and each session lasted for approximately two hours. All authors were involved in carrying out the interviews, either as moderators or secretaries. The group dynamics were good in all focus groups.

We used semi-structured interview guides with open-ended questions (see Online appendix), which were prepared for this study based on the study aim as well as on the results of a previous metasynthesis reviewing international research on the collaboration between community pharmacists and GPs.<sup>12</sup> The group discussions were audio recorded, and transcribed verbatim by the first author.

This study was approved by the Norwegian Centre for Research Data (NSD). All participants gave written informed consent after having received written and oral information about the project. The participants were informed about their right to withdraw from the project at any time, without having to provide any reason.

### Analysis

Data from the pharmacists and physicians were analyzed separately using the Systematic text condensation method developed by Malterud.<sup>13</sup> This is a systematic method for thematic cross-case analysis inspired by the analytical procedures in Giorgi's psychological phenomenological analysis. During the analysis we supplemented Malterud's analytical approach with positioning theory.<sup>10</sup> This allowed us to identify the different reflexive positions described by the pharmacists, and the interactive positions described by the physicians in the interviews.

Systematic text condensation consists of the following four steps: Step 1) Total impression – from chaos to themes: during this initial step, the aim is to get an overview of the data.<sup>13</sup> The first and the last author each read the transcripts independently to get a general impression of the whole. During this first reading we noted down five to eight preliminary themes related to our study aim. We then discussed and negotiated the individually derived preliminary themes to agree on those that should be prioritized for further analysis.



Step 2) Identifying and sorting meaning units – from themes to codes: in this second step, the focus is on organizing the data through coding the text. The themes from step 1 serve as a basis for the identification and sorting of meaning units into code groups.<sup>13</sup> In this second step of the analysis the first and the last author systematically reviewed half of the transcripts each, line by line, to identify meaning units. A meaning unit is a text fragment; it could be a quote, a sentence or a longer text element, that contains information with relevance to the research question.<sup>13</sup> The identified meaning units were then collaboratively sorted into different code groups. During the coding process we used an iterative approach, going back and forth, reconfiguring the codes and code groups as the analysis progressed. In the process of developing the code groups, positioning theory was used to guide the development of the codes. Some code groups were split, while other code groups were merged. Finally, we had sorted all our meaning units into four code groups for the pharmacists, and three code groups for the physicians.

Step 3) Condensation – from code to meaning: this step is about the systematic abstraction of the meaning units within each of the code groups.<sup>13</sup> One code group at a time, the first and the last author collaboratively sorted the meaning units of the group into two or three subgroups, each subgroup representing a different aspect of the code group. The first author then focused on one subgroup at

the time, condensing all the meaning units within each individual subgroup. This process resulted in a text describing the essence of meaning in each subgroup. In this text we tried to conserve the original terminology used by the participants. We still had an iterative and flexible approach. This meant that meaning units that were judged not to fit into the condensate were discussed, and either moved to another more suitable subgroup or code group or – if not suitable anywhere – removed from the analysis.

Step 4) Synthesizing – from condensation to descriptions and concepts: in this last step, we synthesized the contents of the condensates in each of the code groups, developing descriptions and concepts. In this process of constructing the concepts, we applied positioning theory. Each concept thus represented one of the identified positions pharmacists or GPs assigned community pharmacists in the interviews. The descriptions under each concept were written in the form of an analytical text. Selected genuine participant quotes were presented in the descriptions of the different positions to serve as illustrations to our findings, and to preserve the participants voices. In this final analytical step the text was also translated from Norwegian into English. The final interpretations were checked against the transcripts, and discussed among all authors. Table 1 shows an example of how the analysis progressed.

Highlighted and extracted meaning units from the interview transcripts (step 2)	Subgroup condensates (step 3)	Analytical text (excerpt from the position “They are unknown”) (step 4)
<p>“They are strangers to me – pharmacists”</p> <p>“I don’t know much about pharmacists”</p> <p>“...it is a professional group that I know little about. I know little about what they stand for”</p> <p>“It [the pharmacy] is an unknown world, you know”</p> <p>“I don’t know if I know anyone [pharmacists] well enough to be able to say what is typical [for pharmacists].”</p> <p>“Pharmacists are a resource that is not that easy to get hold of, and there are no natural points of collaboration, as far as I know... It is only these occasional phone calls, that’s when we meet”</p> <p>“Our contact is quite minimal. I can probably count on one hand the number of times that I have been contacted on the phone [by a pharmacist]”</p> <p>“They [pharmacists] are much more distant than for example the homecare nurses. The contact we have is maybe once a month, or it might be even less frequent”</p>	<p><i>Subgroup</i></p> <p>The pharmacy is a somewhat unknown world. And pharmacists are a professional group that I know little about – they are strangers to me. I don’t know any pharmacists well enough to be able to describe what is a typical pharmacist.</p> <p><i>Subgroup</i></p> <p>Pharmacists are a resource that is not that easy to get hold of, and there are no natural points of collaboration, as far as I know. It is only these occasional phone calls, that’s when we meet. Pharmacists are much more distant than for example the homecare nurses, and our contact is quite minimal.</p>	<p>A common response from the GPs concerning pharmacists is that they have very few opinions about them. The GPs describe having few natural meeting arenas or collaboration opportunities with pharmacists, other than the occasional phone calls. Most of the GPs depict pharmacies as an unknown world, and pharmacists as an occupational group they know little about...</p>

Variable	Pharmacists (n =12)	Physicians (n =10)
Gender		
Female	9	4
Male	3	6
Age (years)		
Mean	35	45
Range	25-58	36-66
Work experience (years)		
Mean	8	17
Range	0.6-30	8-38
Level of education		
Bachelor's degree	0	N/A
Master's degree	12	N/A
Current workplace		
Community pharmacy	10	N/A
Hospital pharmacy	2	N/A
Experience as GP (years)		
Mean	N/A	11
Range	N/A	1-37
Currently working as a GP		
Yes	N/A	7
No	N/A	3

N/A: not applicable

## RESULTS

Twelve pharmacists and ten physicians participated (characteristics presented in Table 2).

All pharmacists had experience working in community pharmacies. The few who currently worked in a hospital pharmacy were instructed to speak on the basis of their previous experience from community pharmacy. The community pharmacies that the pharmacists had their experience from varied in size, location (urban/rural), chain affiliation, and closeness to the nearest GPs' office. All of the pharmacies were situated at shopping malls. Eight of the pharmacists reported being in contact with physicians approximately zero to five times per week, while four had more frequent contact. They stated that the majority of these physicians were GPs. None reported being in contact with physicians more than ten times per week. Usually the pharmacists initiated the contact.

All physicians had experience working as GPs. The minority who currently worked in other positions were instructed to speak on the basis of their previous experience as GPs. The GP practices that the physicians had their experience from were diverse regarding type and location (urban/rural). The majority of the physicians had their main experience from working in practice communities together with other GPs. All of the physicians, except for one, reported being in contact with pharmacists approximately zero to five times per week, and reported the pharmacists as the ones who usually initiated the contact. One physician reported being in contact with pharmacists between five to twenty times per week, and that he usually was the one who initiated contact.

### Pharmacists' positioning of themselves

Position: We are the last line of defense

The pharmacists position themselves as a final checkpoint before the medications are handed over to patients. The pharmacy is narrated as society's last line of defense against medication errors. One of the pharmacists said:

"We are the last person who can correct any potential errors before the patient uses the medication" (pharmacist 1, group 3). The pharmacists therefore consider their profession unique in the sense that there is zero tolerance for making mistakes. Aware of the seriousness of this responsibility, the pharmacists describe "the typical pharmacist" as dedicated to following rules and doing things by the book and they frequently use words like detail oriented, accurate and perfectionistic.

Despite their understanding that it is important to appear assertive and provide clear and concise answers to patients, and that the use of individual judgement is also necessary to do the job well, the pharmacists acknowledge that they sometimes may be too bound to rules, and admit that they often double-check their conclusions before and after giving advice to patients. In the interviews, many of the pharmacists explicitly reflected over the irony of having solid professional knowledge, yet not being confident enough to avoid double-checking.

Position: We are bridge-builders

The pharmacists position themselves as a link between different types of health personnel. They describe groups of health personnel as living in their own bubbles, each having their unique area of expertise that they focus on. As a contrast, the pharmacists perceive themselves as having a more interdisciplinary education, which enables them to get a fuller picture of the situation. The interview-participants see it as the pharmacist's job "...to promote trust between the patient and the health care system..." (pharmacist 1, group 3) through building bridges between the different actors.

Most importantly, the pharmacists position themselves as filling gaps in the communication between the patient and the GP. They consider it their task to uncover and try to clarify misunderstandings and mistakes that might arise in the communication between GPs and patients. The pharmacists perceive the GPs as sometimes talking over the patients' heads, having neither the time nor interest to explain things properly. As the pharmacists emphasize the importance of patients understanding their treatment, knowing why they take their medication and how to take it, they see it as vital to give patients necessary guidance to reassure and motivate them to take their medication as prescribed. They also translate complicated medical terminology and the text on the medicine label into a language that the patient can understand. This strengthening of patient compliance is something the pharmacists clearly feel they can contribute. They thereby support and continue the GP's work by consolidating the GP's instructions towards the patient. In sum, the pharmacists feel that they and the GPs complement and complete each other.

Position: We are practical problem solvers

The pharmacists see themselves as someone who solves practical issues, big and small, from major medicine shortages to minor formal mistakes on the prescriptions. The pharmacists experience that the GPs rarely consider such practical issues, and one pharmacist exemplified this in the interview with the following story:



“There was this GP that frequently prescribed medications that were not marketed in Norway, which often implies long delivery times. Although we informed him that we had good marketed alternatives available, he refused to listen. So, then you stand there with a patient with pneumonia, thinking: great, the medication arrives in three weeks...” (pharmacist 4, group 2)

In this kind of situation, the pharmacists consider it their responsibility to ensure that the patients receive their medications and a proper treatment.

Compared to most other health care personnel, the pharmacists perceive themselves as very accessible to the public. They are often the first point of contact for people, and have the impression that people in general have a high level of trust in pharmacists. This makes them feel a responsibility and a duty to help people with a wide range of issues. They describe how they educate the public about medications and their effect and use, give general health-related advice, and help people with minor ailments and practical issues. Consequently, the pharmacists place themselves as having an important societal role and socioeconomic responsibility, as their services help reserve other health care services for those who really need them. Finally, the good pharmacist is therefore also described as a professional with the capacity to view things from a societal perspective.

Position: We are outsiders – with responsibility, but with a lack of information and authority

The pharmacists describe their responsibility for patients as different from that of the GPs. GPs are responsible for patients over time, while the pharmacists are responsible for their, sometimes brief, interactions with patients at the pharmacy. The pharmacists still feel a sense of general responsibility, especially for the patients who visit their pharmacy on a regular basis. For instance, the pharmacists are very clear that it is the GPs’ job to diagnose patients, but perceive it as their responsibility to assess the choice of medications in relation to the different diagnoses, and to respond if they believe something should be altered.

Yet, the pharmacists consider their responsibility for patients as challenging to follow up, mainly for two reasons. Firstly, pharmacists deal with patients who can drop in at any pharmacy at any given time. Pharmacists do not have access to patients’ clinical background or medical records. They therefore often help patients based on little and incomplete information, often limited to what the patient tells them. This lack of information makes their job difficult.

Secondly, the pharmacists refer to what could be described as a lack of authority, as the Norwegian prescribing legislation underscores that GPs have the final say. One pharmacist explains how this puts pharmacists in frustrating situations:

“The GP always has the final say. So, you can tell them that something is not correct, but if they do not want to alter it, then there is not much you can do. Of course, you must intervene if you believe the patient could die, but you have to have very

strong reasons to withhold the medication.”  
(pharmacist 1, group 1)

Despite this perceived lack of authority, some of the pharmacists do not accept this more passive position, and see it as their responsibility to pursue the problem until it is resolved.

### GPs’ positioning of pharmacists

Position: They are a useful checkpoint

The GPs describe a good pharmacist as someone who checks that the patients receive the correct medication with correct dosage and instructions. This includes checking the GPs’ prescriptions for errors. The GPs express that while they rarely make fatal mistakes, this can happen, and knowing that there is a pharmacist double-checking their prescriptions and performing a quality control gives them a sense of security. The GPs all agree that they are grateful when pharmacists notify them about prescription errors, as one GP expresses: “I never think that it is a bad thing that the pharmacists call me, never. I am just very, very happy whenever they do.” (GP 2, group 3). Although most GPs perceive pharmacists’ double-check as a safety net, some GPs say that they consider it more of an additional service than something they rely on.

The GPs do not appreciate pharmacists directly consulting the patients without involving them, but underscore that they are very open for all types of discussions and feedback from the pharmacists as long as it is discussed directly with them. The following quote is a typical example of how the GPs explicate the boundaries between themselves and the pharmacists:

“It is my responsibility. I do not expect anyone else to take part of the blame if something goes wrong. And in that respect, I must say that I feel that I should be the one in charge. So, if the pharmacist advises the patient very differently than what I have decided, I can get a little insulted.” (GP 2, group 3)

Position: They are non-clinicians

The GPs describe pharmacists as a prestigious occupation and a profession –with a high level of professional knowledge that they respect and trust. Yet, they point to what they believe is an important difference between themselves and pharmacists, namely the pharmacists’ lack of clinical knowledge and insight. One GP puts it this way: “I definitely trust pharmacists, and I know that they have a long education, and that their level of knowledge is high, but then there is this factor of the clinical context, and this is where we do not meet.” (GP 4, group 2). The lack of clinical insight entails both that the pharmacists do not have the same knowledge about the patient, as the GPs, and that the pharmacists tend to focus on purely pharmacological aspects. Although the GPs acknowledge that it might be difficult for pharmacists to do their job when they only have access to the medication lists, they emphasize that GPs are the ones who know the patients best, and that this is the way it should be. Clinical insight is not something the GPs consider to be part of a pharmacist’s job in the first place.

Some GPs describe the pharmacists as having supplementary knowledge beyond their own in certain areas. Examples of such areas are knowledge about new medications that GPs do not have much experience with yet, and alternatives in cases of medication shortage. Others are knowledge about which medications can be physically mixed, and the correct use of medications in relation to food intake or dosage times. One GP also praises the pharmacists' skills in making checklists and systems for logistics, describing the pharmacists as very thorough and accurate.

However, the pharmacists are depicted as non-autonomous, as the GPs do not consider pharmacists as having any real responsibilities beyond performing their job correctly, which mostly means delivering what the physician has ordered and dispensing the correct boxes. The pharmacists are further described as being very bound to rules, regulations, systems, and procedures. The GPs describe their collaboration with pharmacists as mainly concerned with practical issues. In contrast to themselves, the GPs perceive the pharmacists as having both a poor ability and possibility to exercise discretion, as their job mainly consists of concrete, technical and practical tasks. For the same reason, some of the GPs state that they do not consider pharmacists to be health care personnel.

Position: They are unknown

A common response from the GPs concerning pharmacists is that they have very few opinions about them. The GPs describe having few natural meeting arenas or collaboration opportunities with pharmacists, other than the occasional phone calls. Most of the GPs depict pharmacies as an unknown world, and pharmacists as an occupational group they know little about, expect little from, and have not really thought much about. The GPs are unsure both about what kind of knowledge the pharmacists have, what their formal responsibilities are, and what their workday consists of, other than performing what the GPs have ordered.

However, one of the GPs describes recently having had a moment of realization after receiving a useful phone call from a pharmacist. She was extremely impressed by the professional knowledge of that pharmacist. After having worked as a GP for many years, thinking about pharmacists mainly as shopkeepers, she is now embarrassed that she has ignored this profession and their competence for so many years. Based on her experience she suggests the following:

"Maybe the pharmacists should market themselves more towards the GPs, to make it more visible what kind of professional knowledge they actually possess. I think that the wrong image of pharmacists as shopkeepers does not only apply to me, but also to other GPs." (GP 3, group 3)

## DISCUSSION

The positions assigned to the pharmacists influence their possibilities to act in various situations, through the attribution of rights, duties and obligations.<sup>14</sup> The positions can tell us something about pharmacists' scope of action

and which norms that apply to them, as perceived by pharmacists themselves and by GPs. When the storylines adopted by different groups are incompatible, this may give rise to group conflicts.<sup>11</sup> Thus, differences in the two professions' positioning of pharmacists, resulting in different storylines, can reveal possible challenges to their collaboration.

The positioning of the pharmacists in this work reveals that the perceived roles and responsibilities of pharmacists only correspond to a certain degree between the two professions. Another major finding is that the GPs view pharmacists as a group of professionals they know little about. Few of the positions promote a clear active role for the pharmacists.

### Disagreement regarding pharmacists' roles and responsibilities

The two professions both position pharmacists as a final security checkpoint and as practical problem solvers. Yet, there are several differences in the pharmacists' and GPs' perceptions of pharmacists' roles and responsibilities. Some of the disagreements revolve around issues such as the pharmacists' level of responsibility, their professional autonomy and their place in the counseling of patients.

Differing views about pharmacists' level of responsibility are found both between the professions, and between professionals within each profession. Overall, the pharmacists perceive their level of responsibility as higher than what the GPs do, and the pharmacists in this study seem eager to take responsibility. Still, the pharmacists perceive different obstacles as hindering them, such as lack of information and lack of authority. Similar findings are reported in previous studies.<sup>15</sup>

Although the GPs and the pharmacists agree that pharmacists lack authority, the pharmacists still position themselves as having professional autonomy, while the GPs position them as non-autonomous. This positioning by the GPs corresponds with previous findings.<sup>12</sup> However, in contrast to these previous findings, where the pharmacists seemed to accept this position, the pharmacists in this study do not accept a position as non-autonomous. Here the pharmacists assign certain rights and duties to themselves that go beyond what the GPs assign to them, something which creates a potential for intergroup conflict. While the pharmacists position themselves as bridge-builders, aiming at supporting the GPs through informing patients about their medications, and seeing this as an important responsibility, the majority of the GPs do not appreciate clinical information given to patients by pharmacists, and prefer all information going through them.

These findings are supported by a quantitative study from the US about physicians' perceptions of communication with, and responsibilities of, pharmacists.<sup>16</sup> Almost 90 percent of the physician respondents were most comfortable with pharmacists' responsibilities of catching prescription errors, while the most common negative experiences with pharmacists involved pharmacists scaring the patient and making inappropriate comments in front of patients. Similarly, a qualitative study from Canada, exploring the collaboration between community

pharmacists and family physicians, found that physicians appreciated the information they received from pharmacists about their patients' adherence and use of nonprescription medications, but they did not want pharmacists to directly counsel their patients.<sup>17</sup> A more recent study from Germany found that there was general disagreement between the general practitioners in the study about the following statement: "The pharmacist actively addresses patients' medical concerns". The authors propose a possible reason for this to be that physicians believe that addressing medical concerns is outside the scope of a community pharmacist's practice.<sup>18</sup>

This conflicting positioning of pharmacists represents a challenge for the collaboration between the two professions. A successful interprofessional collaboration requires that each party shares an understanding of each other's roles and responsibilities.<sup>19</sup> An understanding of each other's roles is also found to be of special importance in the collaboration between pharmacists and physicians, and "role specification" is highlighted as the most influential relationship driver in this specific collaboration.<sup>3,20,21</sup>

The contradicting views between pharmacists and GPs regarding pharmacists' roles and responsibilities may be partly explained by a lack of insight into each other's workday. Whereas the pharmacists often lack information about the patients, and which clinical considerations the GPs have made, the GPs may not be aware of the patients' needs and requests for information when at the pharmacy. A qualitative study by Svensberg *et al.* found that Norwegian community pharmacists experienced that patients often did not remember if the doctor had given them any information about their medications.<sup>22</sup> This may lead to questions that the pharmacists need to answer. Pharmacists also need to make certain decisions and instruct patients directly at times where the GP cannot be reached, but the pharmacists' limited background information about the patients, and often limited clinical experience, could sometimes lead to advice being given that is not in line with the GP's recommendations. Different advice could also arise from different priorities between pharmacists and physicians, for example regarding how much risk one is willing to take on behalf of the patient.

#### Pharmacists: an unknown group

In our study, one of the clearest positions that emerged was that the GPs saw pharmacists as a group of professionals with unknown competencies and responsibilities. This unawareness is a threat to collaboration. While the pharmacists in the interviews often positioned themselves with reference to GPs, the GPs generally had few thoughts about pharmacists, and expressed that they knew little about pharmacists' tasks, skills and knowledge. This corresponds with findings by Smith *et al.*, who investigated American physicians' expectations of pharmacists, and concluded that physicians do not know what to expect of pharmacists.<sup>23</sup> We also found similar results in our previous meta-synthesis, where increasing GPs' awareness of pharmacists' competencies and possible contributions was found to be important for collaboration.<sup>12</sup>

"Knowing each other", both in terms of knowing the individual professional and in terms of having knowledge about the other profession, is one of the factors previously identified as important for collaboration between pharmacists and physicians.<sup>3,24-26</sup> Increased knowledge of each other helps align the perceptions of roles and responsibilities, and builds trust.<sup>24</sup> While clinical pharmacists working in hospitals have the advantage of being in close proximity to, and interacting regularly with, physicians, there are few arenas where GPs and community pharmacists meet. It is therefore even more critical for these groups to have a certain knowledge of each other.

In a recent report on the collaboration between pharmacists and physicians in primary care, ordered by the Norwegian Directorate of Health, several factors are described as important for collaboration.<sup>27</sup> The report highlights two factors as beneficial: personal relations and more formalized collaboration. In Norway, the current situation mostly involves sporadic ad-hoc communication. A possible first step could be that pharmacists employed at community pharmacies were hired to work at a GP's practice a couple of hours per week to perform specific tasks, such as medication reviews, as has been done in the UK. This would create a physical meeting place where the two groups could get to know each other. A third measure mentioned in the report is interprofessional education (IPE). IPE is defined as "occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care", and can involve students or practicing professionals.<sup>28</sup> This will mainly affect the future generation of pharmacists and GPs, but could also involve practicing professionals from both professions participating at evening courses or meetings. Young, newly educated pharmacists and GPs could also potentially influence older colleagues to alter their view on collaboration with the other profession.

An intervention study from Croatia, aiming at improving pharmacy and medical students' and practicing professionals' attitudes towards collaboration between physicians and pharmacists through participation in an interprofessional workshop, found significantly improved attitudes. Both pharmacists and physicians improved their attitudes, but the physicians, having a less positive attitude to begin with, showed the greatest increase.<sup>29</sup> A study from the US by Kucukarslan *et al.* concludes that physicians' beliefs and attitudes play an important role in their intentions to collaborate with community pharmacists.<sup>30</sup>

Finally, one cannot overlook the importance of establishing good IT solutions, and introducing a system ensuring remuneration for extended pharmacy services.<sup>27</sup>

#### A proactive position for pharmacists

When we speak about a proactive position for the pharmacists, we see this as including two different aspects: 1) being proactive in embracing new roles and responsibilities, and 2) being proactive towards the GPs to market pharmacists' competences and possible contributions as collaborators.

While we find that the GPs in this study assign quite passive positions to the pharmacists, as checkers of what others have decided, unknown, and with limited responsibility and

autonomy, our previous research suggests that it might be even more important how the pharmacists position themselves.<sup>12</sup> The pharmacists in this study assign more diverse positions to themselves compared to those assigned by the GPs, from the position as bridge-builders being described as a quite active position with independent counselling of patients, to the position as the last line of defense being described by most pharmacists as a quite passive position of following rules and double-checking what the GPs have decided.

Sometimes the definition of what each position entails varies between the individual pharmacists, such as in their positioning of themselves as outsiders with responsibility but without authority. Here, some pharmacists describe a more active role for themselves than others, taking clear responsibility for patient outcomes. Still, even the pharmacists that describe a more passive role for themselves, leaving more responsibility to the GPs, do not seem content with the position as outsiders, something which implies that all pharmacists wish for a more active role and a change in this position. This finding is supported by a scoping review, examining the attitudes of pharmacists in relation to practice change, which found that pharmacists are generally positive towards extending their professional roles, yet are hindered by factors such as systemic and organizational structures and a lack of mandate from others.<sup>15</sup>

The position as practical problem solvers, although currently not entailing much proactiveness towards the GPs, might be a possible way into more collaboration. Several of the GPs speak about how they appreciate practical help from the pharmacists, such as performing medication reviews or organizing and checking medication storages, and how this has opened their eyes for the competence the pharmacists possess. Thus, pharmacists offering this kind of help more actively to the GPs could be a way to make the GPs more aware of them as pharmacists.

Other measures could be joint evening meetings, pharmacists inviting GPs to visit the pharmacy, or pharmacists visiting GPs' offices during lunch break to introduce themselves, deliver information about what the pharmacy could offer, or to hold short professional lectures about topics of interest to the GPs.

### Strengths and limitations

When assessing qualitative research, relevance, transparency and reflexivity are three relevant criteria.<sup>31</sup>

Transferability is an important aspect of a study's relevance, and refers to the degree to which the results may be applicable to others than purely the study participants. In our study, we have strengthened the transferability of our findings by adhering to two factors. Firstly, we have ensured a varied and adequate study sample with a heterogeneous group of participants in terms of gender, age, and years of experience. The information power of this sample is adequate to address the aim of our study.<sup>32</sup> Secondly, we have ensured readers the possibility to assess whom and what the findings concern, by a transparent reporting of the study context and participant demographics (see Table 2).<sup>31</sup>

We have further ensured transparency by using the Systematic text condensation approach and by giving a thorough and detailed description of the data collection and analysis.<sup>13</sup> This will allow readers to assess if findings and interpretations are reasonable and in accordance with the material as well as the theoretical and analytical approach.<sup>33</sup>

Reflexivity entails researchers' awareness of how their positions and experiences possibly may affect the study.<sup>31</sup> To ensure a solid material and a sound interpretation of the data, all authors (one educational researcher, one GP and two pharmacists) were involved throughout the research process, from collecting the data to analyzing it and reporting the results.

### Implications of findings

An ideal collaboration between pharmacists and GPs entails exploiting the differences between the two professions through a trusting relationship. Our findings show that it is important to increase the GPs' knowledge about pharmacists in order to foster collaboration. Still, we would suggest a focus on interventions aiming at increasing GPs' and pharmacists' knowledge about each other. Increasing the knowledge of each other may help produce new positions and storylines that are more coordinated, and thus more supportive towards collaboration. To increase GPs' knowledge about pharmacists and their competence will likely increase trust, and have the potential to alter some of the positions assigned by the GPs into new positions that enables and supports a more active role for the pharmacists, with more autonomy. Increased knowledge about how a pharmacist works, and how much information the patients actually expects from the pharmacy, may also change the GPs' perceptions of how much autonomy a pharmacist should have in their meeting with patients.

Increasing pharmacists' knowledge about GPs will hopefully make them better equipped to recognize how GPs work and what matters to the GPs, and thus to channel their contributions into areas where they are appreciated. It may also help them to be more aware of their clinical limitations, so that they could better identify the situations where they should adjust their counseling of the patients to ensure that they do not undermine the GPs. Appreciation and positive feedback from the GPs may then contribute to alter the pharmacists' positioning of themselves into more active positions, which will further increase the GPs' awareness of them and their competence, and foster successful collaboration.

### CONCLUSIONS

The study reveals both commonalities and disagreements in how pharmacists position themselves and are positioned by GPs. While few of the positions assigned to pharmacists by the GPs support an active role for the pharmacists, the pharmacists' positioning of themselves is more diverse, with certain positions aligning with a more active role.

The GPs' positioning of pharmacists as an unknown group represents a major challenge for collaboration. Increasing the two professions' knowledge of each other may help





produce new positions and storylines that are more coordinated, and thus more supportive towards collaboration. This may pave the way for a practice where the two professions complement each other in the efforts of promoting patients' health and safety.

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## CONFLICT OF INTEREST

None.

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## References

1. World Health Professions Alliance. WHPA Statement on Interprofessional Collaborative Practice 2019. Available at: <https://www.whpa.org/news-resources/statements/whpa-statement-interprofessional-collaborative-practice> (accessed May 4, 2020).
2. World Health Organization. Framework for Action on Interprofessional Education & Collaborative Practice 2010. Available at: [https://apps.who.int/iris/bitstream/handle/10665/70185/WHO\\_HRH\\_HPN\\_10.3\\_eng.pdf;jsessionid=A91531F604460DD8ADE66A2CD42AF7B4?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/70185/WHO_HRH_HPN_10.3_eng.pdf;jsessionid=A91531F604460DD8ADE66A2CD42AF7B4?sequence=1) (accessed Aug 19, 2020).
3. Bollen A, Harrison R, Aslani P, Haastregt JCMv. Factors influencing interprofessional collaboration between community pharmacists and general practitioners—A systematic review. *Health Soc Care Community*. 2018;1-24. <https://doi.org/10.1111/hsc.12705>
4. Michot P, Catala O, Supper I, Boulieu R, Zerbib Y, Colin C, Letrilliart L. [Cooperation between general practitioners and pharmacists: a systematic review]. *Sante Publique*. 2013;25(3):331-41. <https://doi.org/10.3917/spub.253.0331>
5. Hwang AY, Gums TH, Gums JG. The benefits of physician-pharmacist collaboration. *J Fam Pract*. 2017;66(12):E1-E8.
6. Bardet JD, Vo TH, Bedouch P, Allenet B. Physicians and community pharmacists collaboration in primary care: A review of specific models. *Res Social Adm Pharm*. 2015;11(5):602-22. <https://doi.org/10.1016/j.sapharm.2014.12.003>
7. Rubio-Valera M, Jove AM, Hughes CM, Guillen-Sola M, Rovira M, Fernandez A. Factors affecting collaboration between general practitioners and community pharmacists: a qualitative study. *BMC Health Serv Res*. 2012;12:188. <https://doi.org/10.1186/1472-6963-12-188>
8. Löffler C, Koudmani C, Bohmer F, Paschka SD, Hock J, Drewelow E, Stremme M, Stahlhacke B, Altner A. Perceptions of interprofessional collaboration of general practitioners and community pharmacists - a qualitative study. *BMC Health Serv Res*. 2017;17:224. <https://doi.org/10.1186/s12913-017-2157-8>
9. Weissenborn M, Haefeli WE, Peters-Klimm F, Seidling HM. Interprofessional communication between community pharmacists and general practitioners: a qualitative study. *Int J Clin Pharm*. 2017;39(3):495-506. <https://doi.org/10.1007/s11096-017-0450-6>
10. Harré R, Langenhove Lv. *Introducing positioning theory*. In: Harré R, Langenhove Lv, eds. *Positioning theory : moral contexts of intentional action*. Oxford: Blackwell; 1999.
11. Tan S, Moghaddam FM. *Positioning in intergroup relations*. In: Harré R, Langenhove Lv, eds. *Positioning theory : moral contexts of intentional action*. Oxford: Blackwell; 1999.
12. Rakvaag H, Søreide GE, Kjome RLS. Positioning Each Other: A metasynthesis of pharmacist-physician collaboration. *Professions and Professionalism*. 2020; 10(1):3326. <https://doi.org/10.7577/pp.3326>
13. Malterud K. Systematic text condensation: A strategy for qualitative analysis. *Scand J Public Health*. 2012;40(8):795-805. <https://doi.org/10.1177/1403494812465030>
14. Harré R, Langenhove Lv. *The dynamics of social episodes*. In: Harré R, Langenhove Lv, eds. *Positioning theory : moral contexts of intentional action*. Oxford: Blackwell; 1999.
15. Luetsch K. Attitudes and attributes of pharmacists in relation to practice change - A scoping review and discussion. *Res Social Adm Pharm*. 2017;13(3):440-455. <https://doi.org/10.1016/j.sapharm.2016.06.010>
16. Ranelli PL, Biss J. Physicians' perceptions of communication with and responsibilities of pharmacists. *J Am Pharm Assoc (Wash)*. 2000;40(5):625-630. [https://doi.org/10.1016/s1086-5802\(16\)31102-0](https://doi.org/10.1016/s1086-5802(16)31102-0)
17. Howard M, Trim K, Woodward C, Dolovich L, Sellors C, Kaczorowski J, Sellors J. Collaboration Between Community Pharmacists and Family Physicians: Lessons Learned from the Seniors Medication Assessment Research Trial. *J Am Pharm Assoc (Wash)*. 2003;43(5):566-572. <https://dx.doi.org/10.1331/154434503322452193>
18. Dähne A, Costa D, Krass I, Ritter CA. General practitioner-pharmacist collaboration in Germany: an explanatory model. *Int J Clin Pharm*. 2019;41(4):939-949. <https://doi.org/10.1007/s11096-019-00851-1>
19. Suter E, Arndt J, Arthur N, Parboosingh J, Taylor E, Deutschlander S. Role understanding and effective communication as core competencies for collaborative practice. *J Interprof Care*. 2009;23(1):41-51. <https://doi.org/10.1080/13561820802338579>
20. Van C, Mitchell B, Krass I. General practitioner-pharmacist interactions in professional pharmacy services. *J Interprof Care*. 2011;25(5):366-372. <https://doi.org/10.3109/13561820.2011.585725>
21. Zillich AJ, McDonough RP, Carter BL, Doucette WR. Influential Characteristics of Physician/Pharmacist Collaborative Relationships. *Ann Pharmacother*. 2004;38(5):764-770. <https://doi.org/10.1345/aph.1D419>



22. Svensberg K, Källemark Sporrang S, Håkonsen H, Toverud E-L. 'Because of the circumstances, we cannot develop our role': Norwegian community pharmacists' perceived responsibility in role development. *Int J Pharm Pract*. 2015;23(4):256-265. <https://doi.org/10.1111/ijpp.12154>
23. Smith WE, Ray MD, Shannon DM. Physicians' expectations of pharmacists. *Am J Health Syst Pharm*. 2002;59(1):50-57. <https://doi.org/10.1093/ajhp/59.1.50>
24. Bradley F, Ashcroft DM, Noyce PR. Integration and differentiation: a conceptual model of general practitioner and community pharmacist collaboration. *Res Social Adm Pharm*. 2012;8(1):36-46. <https://doi.org/10.1016/j.sapharm.2010.12.005>
25. Gregory PA, Austin Z. Trust in interprofessional collaboration: Perspectives of pharmacists and physicians. *Can Pharm J (Ott)*. 2016;149(4):236-245. <https://doi.org/10.1177/1715163516647749>
26. Rieck AM. Exploring the nature of power distance on general practitioner and community pharmacist relations in a chronic disease management context. *J Interprof Care*. 2014;28(5):440-446. <https://doi.org/10.3109/13561820.2014.906390>
27. Oslo Economics. [Mapping of forms of collaboration between the medical service in the municipality and pharmacists 2020]. Available at: [https://www.helsedirektoratet.no/rapporter/kartlegging-av-samarbeidsformer-mellom-legetjenesten-i-kommunen-og-farmasøyter.pdf/\\_attachment/inline/a1ff7208-ed1f-4501-bdfa-1815e796fa67:74fb9cd1708a62ddfe46cdc67210c56244b00e8/Kartlegging%20av%20samarbeidsformer%20mellom%20legetjenesten%20i%20kommunen%20og%20farmasøyter.pdf](https://www.helsedirektoratet.no/rapporter/kartlegging-av-samarbeidsformer-mellom-legetjenesten-i-kommunen-og-farmasøyter/Kartlegging%20av%20samarbeidsformer%20mellom%20legetjenesten%20i%20kommunen%20og%20farmasøyter.pdf/_attachment/inline/a1ff7208-ed1f-4501-bdfa-1815e796fa67:74fb9cd1708a62ddfe46cdc67210c56244b00e8/Kartlegging%20av%20samarbeidsformer%20mellom%20legetjenesten%20i%20kommunen%20og%20farmasøyter.pdf) (accessed Aug 19, 2020).
28. Barr H, Hammick M, Freeth D, Koppel I, Reeves S. Evaluating interprofessional education: a UK review for health and social care. Available at: <https://www.caip.e.org/resources/publications/barr-h-freethd-hammick-m-koppel-i-reeves-s-2000-evaluations-of-interprofessional-education> (accessed Aug 19, 2020).
29. Seselja Perisin A, Mestrovic A, Bozic J, Kacic J, Bukic J, Leskur D, Rusic D, Zekan L, Stipic M, Modun D. Interprofessional pharmacotherapy workshop: intervention to improve health professionals' and students' attitudes towards collaboration between physicians and pharmacists. *J Interprof Care*. 2019;33(5):456-463. <https://doi.org/10.1080/13561820.2018.1541875>
30. Kucukarslan S, Lai S, Dong Y, Al-Bassam N, Kim K. Physician beliefs and attitudes toward collaboration with community pharmacists. *Res Social Adm Pharm*. 2011;7(3):224-232. <https://doi.org/10.1016/j.sapharm.2010.07.003>
31. Malterud K. Qualitative research: standards, challenges, and guidelines. *Lancet*. 2001;358(9280):483-8. [https://doi.org/10.1016/S0140-6736\(01\)05627-6](https://doi.org/10.1016/S0140-6736(01)05627-6)
32. Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qual Health Res*. 2016; 26(13), 1753-1760. <https://doi.org/10.1177/1049732315617444>
33. Hiles DR. Transparency. In: Given LM, ed. *The SAGE encyclopedia of qualitative research methods*. Thousand Oaks: SAGE; 2012.