The Long Way Toward Cooperation: Nurses and Family Physicians in Northern Germany

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Abstract

To better understand why cooperation between health care professionals is still often problematic, we carried out 25 semistructured face-to-face expert interviews with physicians and nurses in different rural and urban areas in northern Germany. Using Mayring's qualitative content analysis method to analyze the data collected, we found that doctors and nurses interpreted interprofessional conflicts differently. Nursing seems to be caught in a paradoxical situation: An increasing emphasis is placed on achieving interprofessional cooperation but the core areas of nursing practice are subject to increasing rationalization in the current climate of health care marketization. The subsequent and systematic devaluation of nursing work makes it difficult for physicians to acknowledge nurses' expertise. We suggest that to ameliorate interprofessional cooperation, nursing must insist on its own logic of action thereby promoting its professionalization; interprofessional cooperation cannot take place until nursing work is valued by all members of the health care system.

Keywords

nursing; health care, interprofessional; health care, economics of, interviews, semistructured; health care, teamwork; health care professionals

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Introduction

The quality of interprofessional cooperation in health care, particularly the cooperation between nurses and physicians, is a major international concern given its direct impact on patient outcomes (Muller-Juge et al., 2014; Posthumus et al., 2013; Zwarenstein & Reeves, 2002). Research demonstrates that effective nurse–physician collaboration can increase the quality of patient care, decrease patient morbidity and mortality, and increase patient satisfaction and, for health care personnel, can increase job satisfaction and retention (Price, Doucet, & Hall, 2014; Schneider, 2012, 51).

Those involved in current transformations in health care systems in many countries are pushing for greater collaboration among health care professionals and therefore the requirements for communicative competencies in health care provision are increasing. Green (2000) mentioned several "colliding forces" in this regard: the increasing significance of managed care models, a growing power of consumerism, the movement away from hospital care toward ambulatory care settings, and the growing impact of information technology. Health care services, which are also currently more oriented toward prevention, require the integration of social and medical services (Trivedi et al., 2013). Patients' right to selfdetermination, self-realization, and quality of life are emphasized as important desired outcomes of the restructuring of health care systems (Friesacher, 2008), which envisions patients becoming overall more responsible for their own well-being. Helping patients achieve these goals is part of the professional self-image of nursing.

Against the backdrop of these transformations, politicians and health management experts have focused on innovative ways to break down traditional professional boundaries. In Germany, the focus of this article, the federal government over the past two decades began as well to look for ways to develop new models of cooperation (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen,

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2009). It believed that upgrading nursing's professional status would facilitate cooperation between nurses and physicians (Sander, 2009; Schmacke, 2010), and thus, like most other Western countries, it tried to shift former medical tasks to nurses, with the resulting emergence of new professional profiles like Advanced Nurse Practitioners (ANPs). This move was also motivated by the alleged impending shortage of physicians (and more specifically, rural family physicians). Simultaneously, however, much of the economic restructuring in health care aimed to reduce the costs by targeting particularly the area of nursing care because nurses as the largest workforce are allegedly the most cost-intensive personnel.

Despite these efforts, interprofessional collaboration in the country remains a persistent problem (Schmacke, 2010). Most nurses in Germany are still trained in an apprenticeship-based system—the profession is not self-regulated and graduate programs have been in place only since the mid-1990s (Kreutzer, 2010b)—and thus they are in a lower hierarchical position when compared with physicians (Kreutzer, 2010a, 2010b; Krüger, 2003). Furthermore, German nurses do not have a recognized professional association comparable with that for physicians, and the physicians' professional association has firmly resisted delegating tasks that it considers to be part of medical expertise.

One precondition for overcoming barriers to cooperation between physicians and nurses is to understand the root causes of why change is so difficult to achieve. Even though we focus on the German situation in this study, we believe that our findings may have wider implications. That health care systems with different historical backgrounds and different levels of professionalization are still struggling with similar problems in interprofessional cooperation suggests that the reasons for these problems must be searched for on a more systemic level. Our analysis of the German situation may therefore provide a useful way to rethink why realizing interprofessional cooperation is so challenging.

Background

Problematic power dynamics, poor communication patterns, lack of understanding of roles and responsibilities, and conflicts due to varied approaches to patient care are key barriers to interprofessional cooperation (Bailey, Jones, & Way, 2006; Carney, West, Neily, Mills, & Bagian, 2011; Clark & Greenawald, 2013; Marrone, 2003; Miller, 2008; Vogwill & Reeves, 2008; Zwarenstein, Goldman, & Reeves, 2009; Zwarenstein, Rice, Gotlib-Conn, Kenaszchuk, & Reeves, 2013). Despite burgeoning interest in analyzing interprofessional team approaches to promote effective collaboration (Berkowitz, Schreiber, & Paasche-Orlow, 2012; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; Reeves et al., 2007; Zwarenstein et al., 2009; Zwarenstein & Reeves, 2006; Zwarenstein et al., 2007), "the precise nature, methodology, and outcomes of team functioning are unknown" (Jansen, 2008, p. 204). Who should lead interprofessional teams is barely studied even though this question is of crucial significance (Rose, 2011). The few studies that have been undertaken on "the team approach" have resulted in the conclusion that "supervision implies [that] the physician is ultimately responsible for the overall care of the patient" (Crecelius, 2011, p. 8; see also, Martin et al., 2004).

True interprofessional collaboration, necessary to meet challenges in modern health care systems, results from valuing the expertise and contributions various health care professionals bring to patient care (Casanova et al., 2007; Leever et al., 2010; Schmacke, 2010; Schneider, 2012; Zwarenstein et al., 2009). But analysis of nursing in the United Kingdom shows that even after 10 years of university undergraduate and graduate nursing programs, nursing there continues to struggle for recognition as a "full" profession (Meerabeau, 2001, p. 427; Gillett, 2012). The low esteem of nurses thus provides another obstacle to effective collaboration (see, for example, Manojilovich, 2013). Our study results suggest that the devaluation of nurses and their work is a root cause of the persistent problems in interprofessional cooperation. We agree with the recent claim of the leading research team in this field that this devaluation might be found in the way health care systems are currently being transformed and in the way the professionalization of nursing is being undertaken. (Reeves, Van Soeren, Macmillan, & Zwarenstein, 2013).

Methodology and Data Analysis

Aim of the Study

The purpose of our interviews was to try to understand how nurses and physicians perceived the concept of cooperation, what they saw as the main obstacles to obtaining it, and what their respective expectations and visions for successful interprofessional cooperation might be.

Method and Analysis

We considered an explorative approach in the form of semistructured interviews as an appropriate method for our research. The interviews were based on the recognized method of expert interviews in which all participants are considered to have expertise (Meuser & Nagel, 2005, 2009). Experts are persons who possess specific knowledge in a particular field that is clearly distinguishable from everyday knowledge, not easily available, and considered advanced. The expert interview aims to uncover this advanced knowledge; experts are seen as actors in a particular area of action and their construction of reality is foregrounded (Meuser & Nagel, 2009).

The interprofessional relationship between nurses and physicians has primarily been studied in the context of hospitals in which they, as actors, must work closely together daily. We wanted to broaden this perspective to include doctors and nurses working in home care and long-term care homes. Although physicians in Germany still have legal responsibility for patient care and nurses must follow doctors' orders, we assumed that nurses working in home care and in nursing homes would have greater authority and autonomy as these nurse-dominated settings allow them to work closely and, in some cases, exclusively, with patients in relative privacy. Furthermore, physicians are physically absent because they rarely make house calls, an assumption supported by international studies (Carlson, Ramgard, Bolmsjo, & Bengtsson, 2014; Marrone, 2003; Walshe, Caress, Chew-Graham, & Todd, 2010).

Constructing the interview guide. After a literature search, we conducted pilot interviews with four physicians and three nurses whom we considered stakeholders not directly involved in client care but in leadership positions in professional associations or regulatory bodies. The pilot interviews of open-ended questions probed themes that we had predetermined based on the literature review: definitions and organization of cooperation, regular opportunities for exchange of information, perspectives on patients, ideas for successful cooperation, and assessment of current political conditions and requirements of the health care system. In the study's second phase, we used the results of these interviews and the literature search to develop an interview guide. According to Gläser and Laudel (2009), the interview guide allows interviewers to adapt questions easily, enabling relatively unconstrained interviews. Then pretests of the guide were performed with both physicians and nurses in the field and the guide was modified accordingly.

Description of the sample. We developed an initial sample (or presample) of participants to include a broad and diversified spectrum of perspectives (Flick, 2002, 2007; Patton, 2002); this is a selective or criterion sampling strategy aimed at phenomenal variation. Criteria for the purposeful or selective sampling for our study were nurses working in urban and rural regions both in home care and in nursing homes and family physicians in single and group practice, again in both urban and rural regions. Furthermore, both nurses and physicians had to have worked in home care and/or nursing homes for at least a minimum of 3 years. We also tried to recruit both men and women (the composition of the sample reflects the actual gendered composition of the two professional groups). The chosen criteria promised maximal heterogeneity of perspectives, experiences, and appraisals.

Based on the experiences we gained during the initial interviews, we modified our sample of nurses, which is a proceeding consistent with the aim of Mayring's content analysis to achieve a maximum variation of diverse perspectives. This proceeding was only necessary with regard to the nurses because we realized that the interviewed experts (physicians and nurses) had widely ignored educational changes in nursing. Most of both groups considered the development of university education, for example, irrelevant to their everyday experiences in interprofessional cooperation. We thus decided to add the category "nurses with academic education" to our sampling strategy because we anticipated that they would see themselves as having more equitable status with physicians.

Our analysis is based on 25 semistructured face-to-face interviews with 14 nurses (4 men, 10 women) and 11 family physicians (6 men, 5 women), carried out between November 2010 and July 2011 in different rural and urban areas in northern Germany. All of the interviewed physicians work both in home care and in nursing homes; 7 practice in urban areas and 4 in rural areas. Eight of the 14 nurses work in urban areas and the rest are in rural areas, 6 are in nursing homes, and 8 are in home care. Only 3 of the interviewed nurses hold a university degree. The nurses and family physicians, all between 30 and 65 years of age, had all practiced in ambulatory health care for many years, some of them for more than 10 years. We considered that 25 participants was an adequate sample for this study (about how to determine an adequate sample size in qualitative research, see, for example, Sandelowski, 1995; Van Kaam, 1959) and other qualitative studies on interprofessional cooperation used similar sample sizes (see, for example, Weinberg, Miner, & Rivlin, 2009).

Recruitment of participants. An Internet search identified agencies in each chosen area providing health care for home care or for nursing homes. Nurses, both staff nurses with an apprenticeship diploma and university graduates, were recruited from these agencies and the interviews took place at convenient times for them. Finding physicians was more difficult. The web-based search engine of the Association of Statutory Health Insurance Physicians located medical practitioners in the study's geographic areas, and we sent letters to and called physicians' offices. However, receptionists often intervened, and rural physicians especially complained about overwork or general research fatigue. To broaden the search, we published advertisements in local editions of medical journals but they did not provoke much response. Those physicians who did indicate a willingness to participate were interviewed during their lunch break or after business hours. Ethics approval was obtained from the Research Ethics Board at the University of Bremen before the study began. All participants gave written consent for the recording and analysis of the transcripts, and all received financial compensation of 100 Euros each for their participation. Confidentiality was protected by strict anonymization of the data (described in the next section).

Data analysis. Using MaxQDA Version 10, data analysis was carried out with reference to Mayring's qualitative content analysis method, which Mayring believes best treats the complexity and meaningfulness of linguistic materials by "systematically [analyzing] texts by treating the material step-by-step with a theory-guided category system evolving from the material" (Mayring, 2002, p. 114). Content analysis analyzes not only the content of the material—as its name suggests—but it also explicates different levels of content: themes and main ideas of the text as primary content and context information as latent content. In the process of analysis, three basic forms are used: summarization, explication,

and structuring. We carried out the analysis of the interviews in several steps. After the verbatim transcription of the interviews, all personal identifiers were removed or replaced and a letter and a number was attributed to each participant (P for nurses and M for family physicians). The aim of the summarization in Mayring's analysis is to reduce the material to its essential content through paraphrasing and bundling text in case of overlaps to obtain an overseeable, abstract text. The material summarization along complexes of themes allowed a category system to evolve that was further reviewed and revised through the analysis of more interviews. Mayring describes this reductive process of content analysis "inductive category development." To develop the aspects of interpretation, the categories should, as near as possible to the material, be formulated in terms of the material.

According to Mayring, after completing the analysis of 10% to 50% of the material, the next step is to revise the complete category system so that there are no overlaps and the level of abstraction fits the research question and the research object. Mayring named this step the "formative check of reliability." If the category system needs to be modified, the whole material must be revised from scratch, which Mayring called "summative check of reliability" (Mayring, 2002, p. 117). In our case, the perspective was broadened from the case level of the individual interview to include the entirety of the interviews of the respective group of participants.

Deductive category application works with previously formulated, theoretically derived aspects of analysis, bringing them in connection with the text. These deductive categories are also the foundation of the interview guides (derived from the thorough literature review, theoretical considerations, and the pilot interviews). The qualitative step of analysis consists of a methodologically controlled assignment of the category to a passage of the text. The main idea is to give explicit definitions, examples, and coding rules for each deductive category, determining exactly under what circumstances a text passage can be coded with a category. Those category definitions are put together with a coding agenda. Categories and coding agenda are continuously revised (formative check of reliability) in relation to the texts. This final working through the texts is the summative check of reliability. At the end stands the interpretation of the results.

Two researchers simultaneously and independently performed the categorization (inductive and deductive) of the material. In case of different categorization, we used a consensus procedure in the form of an interpretation group specifically composed for this project. Our analysis was complemented by regular discussions with other research groups. The research workshop at the Institute of Public Health and Nursing Sciences, University of Bremen, which consists of scholars from nursing science and public health, meets regularly to discuss the interpretation of interview data presented at the meetings. Also helpful to our project was an interdisciplinary interpretation group, composed of researchers and graduate students from medicine, health sciences, cultural studies, education, nursing sciences, and sociology. We aimed to include as many perspectives as possible and to make the analysis both transparent and explicit, thereby making it more rigorous. Subjective impressions, themes, and content were critically highlighted and discussed.

Results

We derived four main categories out of our analysis: different logics of actions in the provision of care, cooperation and power, communication, and power and conflict management.

Different "Logics of Action" in the Provision of Care

What struck us as significant and puzzling in our study were the different ways nurses and physicians described their experiences of interprofessional cooperation, or lack of it. Even though not specifically asked, many of the interviewed nurses provided very personal accounts of situations of conflict that they had found stressful, and seemed to relive these experiences when they talked about them. Physicians, however, were much more technical in their descriptions of similar situations. Oevermann's (1996) definition of "professionalized action" provides a useful theoretical base from which to analyze the different perspectives that emerged from our interviews.

Oevermann's theory of professionalized actions. Traditionally, professions are defined by high prestige, personal and factual autonomy, professional codes of ethics, and vocational organization in the form of professional associations (Abbott, 1988). These characteristics are, according to Oevermann, attributable to sets of actions specific to each profession. Oevermann criticizes classical theories of professions that define them as associations of experts and connect professionalization with the development of expert knowledge. Freidson (2001) or Larson (2012), for example, perceived the development of professionalism as the result of a struggle for a service monopoly with according endowments of power, income, and influence. In these theories, institutionalized characteristics are nothing more than desirable privileges that are ideologically justified (Oevermann, 1996).

Overemann tried to overcome these deficits of classical theories by situating the origin of professions within their specific sets of actions, believing that institutionalization of these actions only follows. These specific sets of action are of central significance for the functioning of advanced societies and professions can therefore neither be controlled through the market nor through administration—only through the internalization of professional ideals and collegial self-control. Oevermann outlines three broad foci of professionalized action: the somatic-psychic-social integrity of a concrete life praxis (the focus of therapy and prophylaxis), justice in the cohabitation of a collective with a shared sense of justice (the focus of judicature), and the methodological examination of claims of validity (the focus of the sciences).

Oevermann's focus of therapy and prophylaxis is the most useful in analyzing the type of actions of nurses and physicians. These professionals act as advocates for clients who are unable to cope with their crises on their own, which Oevermann named professionalized actions. However, advocates in these circumstances are put into contradictory situations. They have to play a social role determined by larger structures (like a health care system) in which they work but at the same time, they experience working with clients holistically at a personal and emotional level. However, they must also interact with people who are struggling to maintain their autonomy but who find themselves dependent on others for help.

In the case of nursing, for example, the nurse is involved with patients on multiple dimensions: affectively (emotionally), cognitively (nursing diagnosis, nursing process), corporeally (the interaction is not only face-to-face but also body-to-body, a dimension of the "lived body" as defined by Merleau-Ponty, for example), and institutionally. Nursing actions are thus characterized by a unit of theoretical and practical knowledge: They are the contradictory unit between rule knowledge (or the dimension of the disease) and the understanding of the individual, singular case (or the dimension of illness-the experience of being ill). Nursing care is complex. Nurses' interventions aim to help strengthen client autonomy, but as clients themselves are individuals, solutions to their problems cannot be standardized. Clients are dependent on the nurse for their needs, and thus, nursing care situations are based on an asymmetrical relationship of power.

Nurses in our study are caught in these types of very complex situations: They are in personal relationships with their patients in which they strive to realize ideals of caring but, at the same time, are confronted with the requirements of a modern-day health care system that forces them to adjust their actions according to economic criteria of efficiency. The interviews highlight the tension-laden circumstances in which nurses are caught and that define the nursing "logic of action."

Similar situations with clients can be found in medicine but physicians are rarely involved in the close personal relationships with a patient that nurses experience. Physicians' "logic of action" thus appears to differ from that of nurses and follows more of an instrumental rationality (Weber, 1988) in that it is based on a rational means-end analysis where a specific diagnosis requires a specific intervention that is implemented after evaluating its consequences. Furthermore, family physicians in our study perceive themselves situated more within the framework of the traditional idea of professions and professionals (Abbott, 1988; Rabe-Kleberg, 1993)—where they possess a comprehensive knowledge and are able to act autonomously. Indeed, they attach great significance to being independent in their decision making.

"Logic of action" from physicians' perspectives. The family physicians (MDs) describe their experiences of everyday health care situations from a technical-rational perspective, an apparent consequence of secure beliefs in their medical expertise and in their ability to make decisions autonomously, which to them form the cornerstones of their professional identity. Autonomy is often mentioned by MDs but never by nurses. The idea of autonomy relates not only to their work schedules (the vast majority of family physicians in Germany are in solo practice) but also to their care of patients. As physician M5 explains, "I decide how I want to handle the patient, there are no directions, I can make my own directions, how I want to do it—it is a kind of personal style." Unlike nurses, physicians perceive increasingly complex health care problems as an intellectual challenge and as riddles to be solved. For example, physician M11 describes the

thing that I find most exciting is what kind of a medical condition the people come to see me with. That's a bit like guesswork for me. Am I able to solve it or am I not able to do so. What tasks need to be prioritized, what comes to me? That's what I find really interesting.

The physicians use expressions like "try[ing] to get the disease under control" (or "checking what the patient really needs") to describe their expertise. They also perceive themselves as the critical link in the health supply chain, able to see beyond the individual patient to the whole health care system—they consider themselves "gatekeepers" and indeed they are, because MDs are the first contact point for patients in the German health care system. From their perspective, nurses do not possess this kind of expertise and do not have an overview of the complex impacts of their actions on these broader structures. Country physician M10 complained that some nurses working in homes request unnecessary supplies and interventions:

[Health care providers request material] according to the motto: "We need this and this and this, you must prescribe these things now." [I answer to begin with] "No. Why, for what?" [The nurse:] "Yeah, she has a small decubitus [pressure ulcer] . . . we need a mattress, we need a chair, we need this and this." [However,] it is also possible to do it differently. We must in the end, with respect to the health insurance [stick to a certain code of conduct], that's what we signed up for when we set ourselves up as physicians. We must work economically, work appropriately and adequately. . . . [The nurses] want to get all these things [but I will] critically analyze and clarify and review and then [I will] reduce [the requests] very much.¹

Physicians see themselves as the sole decision-making authority, making it difficult to give up this power or to search for an equal exchange with other health care professionals. In other words, reflecting on ways to change core elements in physicians' self-conception seems to be necessary to initiate any redistribution of responsibilities within health care structures.

"Logic of action" from nurses' perspectives. In contrast to the apparent confidence of physicians in their place in the health care system and in their practice, nurses in our study constantly describe their experiences from the perspective of uncertainties in their everyday practice-care situations can rarely be planned in advance, nurses face situations that often require immediate action but they are often restricted through legal regulations, and ad hoc solutions are often blocked because nurses depend on physicians to authorize their actions. Nevertheless, they are under "pressure to act"; deferring a decision ultimately constitutes an action because even nonaction has consequences. Moreover, nursing situations may be interpreted several ways without the possibility of determining which interpretation is correct. Nurse P9 described this dilemma. Home care nurses "must think right away, what do we need to do now, how should we act, should I simply do it or do I need to speak to the physician?" These types of questions push nurses to create leeway, enabling them to respond quickly to changes even though this strategy often leaves them at the edge of current legislation and increases the pressures that they are exposed to. As one nursing home nurse stated,

We are not permitted to decide ourselves ... during the night for example [if] somebody falls, has pain, [and does not have] an as-needed prescription for pain medication pills. Usually we are not allowed to decide, if [we have] to give something to someone, [we] must call the physician in the night. ... [In these cases], we give a painkiller and do not document it anywhere and [only] during the handover [do we tell our colleagues] that "Miss so and so fell, I gave her one Paracetamol."

The tendency to work in a legal "gray zone" is enforced through the paradoxical situation that nurses need to depend on physicians' directives but are expected to decide "independently." Nurse P6 describes her feeling of constant pressure from the fact that physicians might assess situations differently. In many of these cases, physicians also misconceive the nurses' legal situation "particularly if a situation evolves and one is always bawled out by the physicians along the lines: 'Why are you bothering me with this, just inject two units more after all."" The constraints nurses experience are aggravated by the current transformations in the health care system that reduces time for "non-medical" interventions. For example, the unrecognized and unpaid labor nurses provide in establishing and maintaining contacts with multiple professionals is often very time-consuming. Physicians seem to take this work for granted and it is neither recognized nor paid for.

Typical example, a patient gets many psychotropic drugs, neuroleptics, analgesics, psychotropic drugs. . . . And yes often the family physician does not exchange information with the neurologist, psychiatrist, but rather one realizes that no communication is taking place. [In these cases] nursing is in demand and this is what nursing always must do. [Nurses] must establish ways of communication, they coordinate, they negotiate and they must be able to accurately estimate the physician's sensitivity, with [this physician] how far can I go. Could I ask: "Does Miss C still need this high dosage of [this medication], she has taken it for [number of] weeks, the acute situation is over after all." [Nurses] must very carefully approach these situations and they are able to say exactly that "with [this particular physician] he will be touchy if I ask." This is to say that nurses are really in an uncomfortable situation. [Laughing] And they are not allowed to decide anything themselves in this area. Which is at the expense of the residents.

Nurses perceive their everyday care interventions as a kind of "being together" with their patients. P4, who works in a nursing home, said,

[A]nd what is even more important to me is simply, particularly with the residents suffering from dementia, that I give them somehow yes everyday a bit of pleasure, that they smile at me and that they take me in their arms. That is what is most important for me.

Nurses experience these situations as being involved as a "whole person" and do not analyze them simply as moments for technically planned interventions. This is especially important in palliative care. Nurses in our interviews describe particular challenges when family physicians perceive endof-life situations differently.

But some physicians are completely opposed to [to not providing liquids in end-of-life situations]. They do not want this. And [physicians] say drinking yes, food no. Ok if the person does not eat and, if an advanced directive exists [the physicians will agree] that no PEG [stomach tube] and no life extending technologies [should be used], but she must drink. And if she is not able to drink then she will get a subcutaneous infusion, 1,500 ml per day. A small thin person without legs, 1,500 ml. One does not even know where to puncture. She actually is so thin, no skin at all but we must puncture . . . and I say to myself, ok, it is as it is, this is your job, you should watch out for the people and try to treat them like human beings, not like a thing that lays around. [In the situation] with this woman and with this [physician] we were all happy that she died. We were obliged to give 1,500 ml

per day. And that happened, and she, oh no that is bad. [And one thinks] oh no, no, no.

And another nurse was critical of the lowering educational standards for geriatric nurses—She saw them as training courses that are offered to persons who are not really interested in nursing but see them as a chance to get a job.

And when I see these people I think to myself, my goodness how will this end. People who are not interested in geriatric nursing and are able to only do one thing at the time. But geriatric nursing does not work like this. One needs to keep several things in mind and sometimes perform several things at the same time. That is how geriatric nursing functions. And that is also why geriatric nursing is so nice in a certain way. If people decide to go into nursing because they have no more alternatives then I think that cooperation cannot get better.

Particularly interesting is the fact that the nurse connects the level of education with the quality of cooperation, an assumption also shared by some physicians in our study. Situations in which nurses feel that the core work of nursing becomes more and more devalued are also related to the economic cutbacks in the health care system.

At the moment they are cut in such a way that I am only doing the medical stuff and nursing assistants provide all the social tasks and also the cleaning jobs [which leads to the situation] that they become closer to the patients [and are] longer with them. Thus, I actually only come for short assignments . . . for insulin injections or subcutaneous things and medications. And for the actually important things for me, like care for patients with dementia [I am] practically left out. [In these cases] personnel that are, from my perspective, not well-trained, take over.

And nurse P12 emphasizes, "I always thought these dressing changes could be done by nursing assistants. But these actual nursing situations, these are the important [aspects], it is here that nursing is required." But through current developments, medical tasks are not only more prestigious, they are also better remunerated.

Intense nursing care situations require competently educated nurses but these kinds of nursing competencies are neither recognized by society and family physicians nor are they legally codified or financially remunerated by the health care system, which tends to promote deskilling of nursing actions rather than professionalizing them. As one nurse stated, a reorganized health care systems needs

... nursing experts who are able to show [that we can] make [these transformations] without skillful nursing being neglected. Because the developments that we see in foreign countries, in England, the USA, are such that highly qualified nurses adopt medical tasks whereas the actual care is done by less qualified personal. [By this means] nursing is not made better; the medical services become good ... or better. The outcomes of Advanced Nursing Practice and medicine are quite similar, but the higher satisfaction is found with the nurses, because they use more of their time, they are more empathetic, they are better educated regarding communicating and interacting with patients. That is to say, [nurses] ameliorate medical expertise, but the care will be delegated to less qualified persons. For me, this is the wrong way. To put it simply, we need academics at the bedside too. We need highly qualified nurses, who also work at the bedside, otherwise we academize, but we do not professionalize. From my perspective that would be a fatal development.

Cooperation and Power

The aspect of cooperation from the physicians' perspectives. In our interviews, cooperation between nurses and physicians was not always problematic. Some doctors value nursing expertise, particularly in wound management and patient observation.

These issues are not always incredibly important or difficult and to carry them out you do not need a medical education. Rather the opposite—cooperation was excellent [with one nurse] because she had special training in wound care. . . . I always consulted her when I had difficult wounds and . . . it was much more effective than if I had used trial and error.

The physician obviously recognizes the nurse's expertise in wound management, which in Germany is a medically controlled act. At the same time, by defining wound management as a "not incredibly important or difficult" task that could be carried out without a medical education, this physician is also devaluing this work. Physicians in our interviews emphasize that they would like to delegate some of their controlled acts to nurses, something that they saw as defining nursing competence.

Other nursing behaviors are criticized as unprofessional, with physicians accusing nurses of lacking interest in patients if they perceive that medical directives are not followed. "Thus [the nurses] take the blood pressure and are not interested to tell me at the end of the week if the blood pressure was normal at all . . . I think this shows no interest in the patient." Despite the criticism of the behavior, however, no strategies for conflict resolution existed.

Because medical directives are seen as symbols of the physician's authority, perceived nonobedience in carrying them out is seen as an offense to the physician's professional position. Some of the physicians interviewed blame the nurses' lack of organizational skills, which they believe lead to ineffective exchanges of information that affect not only the quality of care but also provide extra work for them. Some would sanction the nurse by informing the nurse manager.

[That's when] I called in the lady who was the manager there. [In situations like this one] I can definitely become very serious. I will insist that this situation be clarified and I will argue that we did agree on this procedure. [And I will tell the manager], that if the nurse is there [at the patient's home] the next time this will be clarified or she [the nurse] has to show up in my office. In contrast, some physicians perceive nurses' commitment as boundless: "Over-motivated" nurses want physicians available all the time. M8 perceives these nurses as one of his biggest challenges.

Because [over-motivated nurses] need steady support in this respect. Thus they have some sort of idea and then they want to get one's blessing again and again, or they propose something [like] one could do this or one should do that... The [nurses] best to work with are the less-motivated but reliable ones.

Some physicians in our study tend to see ideas proposed by nurses as absurd and not worthy of debate, suggesting that they lack knowledge of nursing competencies or that they expect nurses never to question their authority.

The aspect of cooperation from the nurse's perspective. Some of the nurses, particularly those possessing long-term nursing experience and/or additional qualifications, suggest that lack of physician knowledge in especially such areas as geriatric psychiatry, wound management, and end-of-life care is a further barrier to interprofessional cooperation.

So okay, recently we had a story. I was with a client, who I believed was demented, and the physician dismissed it as a kind of old age disorientation (*Alterstüddeligkeit*). . . . I told him again in the elevator what this elderly person was doing during the day. And only then was he amazed. I said, "Yeah, and now?" [He said,] "Yes, she is disoriented, eh." I said, "No, that is dementia, that is almost paranoia, that is not just disorientation." [He said] "Come off it, elderly people are like that."

According to these nurses, some physicians use "obsolete" therapeutic interventions that are not consistent with newer scientific evidence. This lack of knowledge often results in inadequate therapeutic intervention, leading to increased and unnecessary patient suffering.

Of course there are physicians—I [cannot] even imagine how they ever got their license. Professional qualifications beyond the pale. I had to explain to the physician what the best medication would be, and I thought to myself, that is not my job, not at all. Or, I must point out a mistake to him, and I think, that too is not my job, he should know that.

Some nurses also complain that diagnoses are made on the phone instead of through face-to-face encounters and that decisions on therapeutic interventions are made on the basis of economic considerations.

Some physicians . . . make the diagnosis on the phone, since it is too inconvenient to get here. I [experienced] this, for example, with a family physician. Municipality A and town A are not as far apart so that one couldn't come here. . . . For example, [a patient] had a severe cold. Well, I know that my family physician auscultates me, if my bronchia or my lungs need antibiotics. But in this case, the physician just ordered an antibiotic from the pharmacy. Should work somehow—. . . [The physician] never saw the resident at all.

When nurses are not able to realize their ideal of "good" care they feel that their expertise is devalued. They suspect that physicians care less about their patients' well-being and are more motivated by financial remuneration, which nurses consider a morally inferior perspective. The authoritarian delegation of medical orders is a further point of conflict, which nurses perceive both as a symbol of medical dominance and as a devaluation of their own competencies. Hierarchical working relations contradict the nurses' desire for team-oriented cooperation.

The Aspect of Communication

Both the physicians and nurses interviewed identify the same problem areas of communication but have different perspectives on the reasons. Remarkably though, neither group suggests any ways to find compromises or alternatives to the usual methods of communication.

Conflict-laden situations are related to problems with reaching a contact person, transferring information and the quality of that information, and the timing of home visiting and medical rounds. Both physicians and nurses value timely information as important support for their actions but each group criticizes the other because a contact person from the other profession cannot always be found to provide it. Nurses complain that physicians are difficult to reach and physicians protest that informed nurses are often not available because of the shift system in nursing, indicating the collision between the organization of nursing and medical services. The physicians assume that the deficient information provided by nurses is due to their unsatisfactory qualifications. Nurses in turn point to receptionists who "protect" physicians as a significant barrier to information flow. They also find problematic the random "corridor" talks with physicians because they are always at the expense of the nurse's time. Physician-nurse joint medical rounds or home visits rarely take place anymore or if they do, they occur under extreme time pressures. Again, the organization of physicians' work collides with nursing work schedules, as physicians visit their patients when it fits into their time frame and nurses are often not informed, or forced to adapt to the time designated by the physician to this activity.

Overall, the obvious deficit in communication processes is perceived as less problematic and burdening by physicians than by nurses, likely due to physicians' greater workplace autonomy. Both groups complain of scarce time resources, which on the surface seem justified in the face of increasing time compression through current transformations in health care systems. Nevertheless, this argument loses sight of the fact that the interviewed physicians, at least, do not show any willingness to question their time management.

The interviews convey a one-sided path to nurse-physician communication: Nurses usually request meetings with physicians and provide information to them. But physicians criticize nurses for attempting to implicitly influence their decisions by using carefully formulated indirect proposals instead of expressing their opinions openly and unself-consciously. Nurses are perceived as "beating around the bush"; physician M5 states that this "one behavior makes it very difficult. Many nurses do not dare to actually say what their opinion is and to openly discuss" it. The nurses' scope of practice is very limited and they are not "authorized" to criticize physicians, but the physicians expect critical thinking and an independent viewpoint. This paradoxical situation leads to a kind of "double bind" because physicians expect nurses to have more individual responsibility, particularly if this helps to reduce the physician's workload, but at the same time, they emphasize hierarchical boundaries.

For me it is important that if I ordered something it is actually done and that I get a kind of feedback if it worked. And on the other hand, I expect that nurses should think independently and realize if something is wrong, they inform me on their own accord. "Hello we need you, we must talk about this now, how should this go on." I find that important.

Physicians do not question why nurses (must) deploy these communication strategies, and thus fail to acknowledge that this form of communication reflects hierarchical differences between nurses and physicians. Why nurses employ these communication strategies has already been described in Stein at al.'s "classic" articles from the 1960s and 1990s.

Power and Conflict Management

Nurses in our study spontaneously point to a lack of selfesteem in relation to problems with interprofessional cooperation, but physicians rarely see their powerful position as problematic. Both, though, agree that they use (different) strategies to keep open conflicts at bay. Nurses try to build solid working relations by strategically (and kindly) contributing their expertise to avoid being perceived as trying to dominate or be confrontational. In contrast, physicians attempt to deal mainly with those nurses they deem to share the same health care goals. To avoid tensions, both nurses and physicians in our study have tried to establish teamwork through strategies congruent with those described in conflict management literature. Nevertheless, the hierarchical relations that continue to characterize teamwork between nursing and medicine leads to the impression that physicians devalue nursing actions or do not recognize them at all.

One typical nursing strategy in our study to ease conflictridden situations is to carry out physicians' directives even if they cause inner turmoil among the nurses. Physicians, in turn, are more likely to "back down" by trying to avoid discussing perceived problems, even if they feel strongly about them. Both groups perceive conflict as something negative, destabilizing, and a threat to successful cooperation. Nevertheless, conflict avoidance implies that conflict rumbles on, and prevents open discussions and negotiations around the value of recognizing each other's professional status. The strategies employed by each group around questions of patient care and treatment also demonstrate that no "culture" exists to support conciliation; few structures for constructive debates are in place. Any rare mutual consent obtained is more the result of individual factors than any institutionalized structure.

Discussion

The problems in interprofessional cooperation identified in our study overlap with findings from many other international studies, which demonstrate that these difficulties are independent of a particular practice context. Most research undertaken so far focuses on the direct interactions between the two professions and most interventions aim to ameliorate these interactions. Our study indicates that these interventions do not appropriately address the problems, which to us seem more on the societal and political level. We conclude therefore that the effectiveness of most interventions still needs to be demonstrated (Zwarenstein et al., 2009) and our findings suggest some reasons why changes in interprofessional cooperation are so difficult to achieve. Different from other studies, we identified that professionalization strategies for nursing and the economic transformations of the health care system are two important factors contributing to the persistent problems in interprofessional cooperation. Because many other countries are confronting similar challenges in interprofessional cooperation and are undergoing similar transformations in their health care systems and their nursing workforce, we suggest that the results of our study could be applied more broadly. However, we are still conscious that the German situation is specific with, for example, a low degree of professionalization in nursing in comparison with many other Western countries. With the late onset of post-registered nurse (RN) academic education, nurses in our study were critically assessing changes in "more advanced" countries in, for example, the implementation of advanced nursing practitioners and asking themselves if this was the way to go.

Barriers to communication is one of the largest areas described in the research literature, and as noted by one author, each professional group concludes "the other to be the primary culprit in communication breakdown" (Flicek, 2012). These findings are congruent with those in our study. Marrone (2003), for example, highlighted the difficulties nurses in home care face in trying to reach family physicians in cases of emergency. Manojilovich (2013) found that many nurses believe physicians do not communicate with them, and Zwarenstein et al. (2013) criticized the scheduling of medical rounds that excludes nurses. In turn, physicians complained about the quality of nursing (Akeroyd, Oandasan, Alsaffar, Whitehead, & Lingard, 2009; Schadewaldt, McInnes, Hiller, & Gardner, 2013, 2014; Weinberg et al., 2009).

Different interventions have been tried to ameliorate these barriers to interprofessional communication. Some have worked on improving nurses' communication skills (Bays et al., 2014; Fraleigh, 2010); others have tried to implement collaborative communication protocols as "quasi scripts for face-to-face interprofessional interactions" (Schneider, 2012; Zwarenstein & Reeves, 2002; Zwarenstein et al., 2013); and others again have employed interprofessional task or focus groups to collaboratively develop solutions to communications issues on hospital units (see, for example, Casanova et al., 2007). Currently, interprofessional education, a complex intervention that aims to encourage a deeper understanding of the different perspectives in medicine and nursing early in the careers of students in both professions, is the method of choice. Nevertheless, problems in communication continue to persist (Johannessen & Steihaug, 2014; Tschannen et al., 2011; Zwarenstein & Reeves, 2002; Zwarenstein et al., 2009; Zwarenstein et al., 2013).

Issues of trust were raised in our study when doctors treated nurses with paternalism, or degraded or devalued nurses by acting as if they were incompetent. Manojilovich (2013) described similar findings. Akeroyd et al. (2009) and Weinberg et al. (2009) suggested doctors tended to treat nurses as if they did not understand what was happening with patients (see also Burford et al., 2013). However, physicians were considered trustworthy by the nurses we interviewed if doctors demonstrated interprofessional cooperation during their training in hospitals or if they seemed to understand the nursing spectrum of tasks. Conversely, physicians were more likely to trust the nurses if the doctors considered them professionally competent in exchanging information, observing patients, and carrying out other specific skills. Our findings indicated that nurses did indeed possess special qualifications in wound management, pain management, and geriatric care, which, if valued by the doctors, could have served to ameliorate their subordinate position in interprofessional collaboration. However, physicians' "esoteric" knowledge and high status position left nurses afraid to challenge physicians' orders. Green (2000) concluded that "physicians still behave as superiors and treat nurses as subordinate, while nurses struggle to gain respect for the essential role they play" (p. 13).

In our study, both nurses and physicians emphasized that a shared definition of goals, cooperative tasks, and responsibilities, alongside the development of cooperative work schedules, would help improve patient care. Both emphasized how important cooperative goal setting was for adequate care and each saw themselves as the real advocates for patients and their needs. We suggest that these claims do not reflect actual practices of professional cooperation and are more "myth" than anything else (see, for example, Crecelius, 2011; Lieble, Katz, & Brechtelsbauer, 2011; Schneider, 2012; Weinberg et al., 2009). Our findings indicate that patients' needs were not taken into consideration in interdisciplinary conflicts and it appears that any negotiations around interprofessional conflicts were oriented more toward determining professional status than considering patients' needs. Loos (2006) came to similar conclusions in her empirical research about conflicts and conflict management in interdisciplinary cooperation in hospitals.

We found from our interviews that interdisciplinary conflicts were either avoided or kept hidden, making it more difficult to modify the existing order. Current research highlights that the hierarchical approach is still the prevailing model for physician–nurse cooperation—in which nurses either adapt, openly resist (and risk being disciplined), or play what has been described as the "doctor-nurse game" (Stein, Watts, & Howell, 1990; Stein & Wis, 1967). Traditional power relations are therefore reinforced even in cases in which shortterm modifications at the level of individual interactions might have been made (Loos, 2006). Only in specialized areas like intensive care units (ICUs) and emergency rooms (ERs) does this traditional model become more flexible, but even in these practice areas problems in cooperation persist.

Overall, multiple unsuccessful interventions have been implemented in attempts to solve specific problem areas in interprofessional cooperation, indicating that the root causes of interprofessional disagreement remain to be addressed (Miller, 2008). Despite the delegation of many former medical tasks to nurses, professional silos still exist and the traditional organization of the health care system that revolves around the family physician as primary decision maker remains intact. Even in countries with a more "balanced" system of professions, family physicians have the final say in most therapeutic interventions. For example, although ANPs have been implemented in countries such as Canada as a response to a physician shortage (Bourgeault, 2005; Cummings, Fraser, & Tarlier, 2003; Holmes & Perron, 2006), the status of nursing within the health care system has not been substantially modified (Holmes & Perron, 2006), and research shows that ANPs struggle with the same challenges as nurses with less advanced education (Bailey et al., 2006; Crecelius, 2011; Marrone, 2003).

To our minds, this latter finding touches on a core aspect of the difficulties in nurse-physician cooperation. The problem areas identified in our study seem to be related to a recurrent devaluing of nursing practice—obvious with respect to the physicians' behavior in our study but, we argue, is something that is more a consequence of the transformations in health care.

The restructuring of health care systems in countries with universal public health care like Germany or Canada has emphasized the need for efficiencies, and subsequent cost cutting has led to the layoff of many nurses and a casualization of the hospital workforce (Blythe, Baumann, & Giovannetti, 2001; Stasilius & Bakan, 2003). "Productivity thus replaced care as the orientation for nursing work, leading to further work intensification" (Valiani, 2013, p. 77). The implementation of new management instruments like the nursing process, patient classification systems, quality management, certifications, and the like, has enabled the monitoring (White, 1992) and the fragmentation of nursing caring work, specifically at the bedside. This compartmentalization of nursing work is based on an undervaluing of the role of caring labor and targets particularly those areas of nursing our nurses considered the core aspects of nursing care.

Ongoing transformations of health care systems that reduce nursing to purpose-oriented actions neglect the complexity of professional nursing and its strategies for personcentered, holistic, and individualistic care. This overarching political context puts efforts to improve the cooperation between nurses and physicians in a paradoxical situation not only in the German context but also in most other Western countries. Politicians might emphasize the need for equitable collaboration between nurses and physicians but rationalization targets those areas in nursing that constitute nurses' professionalized actions. The latter jeopardizes efforts to improve interprofessional cooperation because it culminates in a systematic devaluation of nurses' expertise. From the theoretical perspective of professionalized action, these developments must be considered a form of de-professionalization because they reduce nursing to adhering to rules captured in guidelines and standards based on a technocratic definition of expert knowledge. The current tendencies in the restructuring of (nursing) research and academic (nursing) teaching must also be subsumed under the term de-professionalization, particularly the claim that nursing research and teaching should be use oriented and should only serve the demands of practice. Linking research funding to aspects of practical use disables innovation because innovation is related to inherent unpredictable results. Through the coupling of financial funding with practical usefulness, nursing scientific action is assimilated to administrative action. This becomes particularly apparent in the efforts to adapt the unexpected, the special, and the unknown to the universal, the schematized, the standardized, and the well-known.

Several limitations of the study need to be mentioned. With regard to the question of how professionalization tendencies influence interprofessional cooperation, more interviews with graduate nurses might have provided deeper insights about the preconditions for successful egalitarian cooperation. Interest from more doctors in the study would have been desirable; perhaps they might have been stimulated to think more deeply about granting more autonomy to nurses, especially in rural areas with shortages of physicians. As well, the interview guide did not encourage participants to discuss their vision for greater collaboration between medicine and nursing, and more pronounced consideration should have been given to ascertaining how our participants believed interprofessional cooperation, or the lack of it, affected patients. Conflicts arising over active life-prolonging treatment versus palliative care stood out for us as especially stressful, and an area where we saw different "logics of actions" particularly highlighted. More research on this

specific field of interprofessional collaboration may prove fruitful. Finally, it has to be noted that this study focused on one particular region in Germany, and although we believe the results could be applicable elsewhere, more studies in Germany and internationally need to be developed. Through our study we also "falsified" our assumption that nurses in home care would be more independent and autonomous than in other fields of nursing practice, at least in the German context.

Conclusion

To create the proper climate in which interprofessional cooperation can truly thrive, and where the professional status between medicine and nursing is harmonized, amelioration of identified problems must proceed on multiple levels. Certainly such aspects as communication training, joint discussion rounds, and interprofessional education are necessary. However, the results of this study, albeit with a small number of participants and focusing on the specific German situation, indicate that changes must be implemented on a broader structural level, especially concerning the professionalization of nursing. Not only do nurses need increased recognition of their skills and knowledge but also the current political eagerness to eliminate or reassign what many nurses consider core areas of nursing practice must come to an end before interprofessional cooperation can be sustained.

In an increasing number of countries, the professionalization of nursing is defined by higher standards of education and by the enthusiastically acclaimed transfer of medicaltechnical tasks from physicians to nurses. Nursing academization therefore has the potential to lead to situations in which highly qualified nurses assume medical tasks in a merely substitutive way and actual caring is delegated to less qualified nurses. Our findings suggest that nursing professionalization must go beyond a mere delegation of medical tasks, which involves only a narrow interpretation of nursing care and which has the potential to evolve into a competitive situation in which nursing would be disadvantaged. We argue instead that professionalization be founded on the valuing, by all members of the health care system, of a nursing logic of action, a very specific kind of complex social action using both verbal and corporeal ways of communication that support patients in their struggle with health care issues without robbing them of autonomy. From this perspective, nursing could then distinguish itself as an autonomous, physician-free area of action and would be based on what we have called "professionalized action" (Oevermann 1996). Only on this basis, we argue, can interprofessional cooperation between nurses and physicians develop into an equitable partnership.

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Note

1. Please contact the corresponding author for a key to the symbols used for the interview transcriptions.

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