

# Conflicts and conflict management in the collaboration between nurses and physicians – a qualitative study.

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## Abstract

In health care, optimal collaboration between nurses and physicians is crucial in the quality of the care process - but not self-generating. Little is known about how health-care professionals cope with conflicts within their collaboration. This qualitative study investigates the way nurses and physicians cope with conflict, and clarifies the determinants of conflict management styles.

All respondents formulate clear expectations which in their opinion are essential to collaboration. When collaboration leads to disagreement, physicians and nurses choose between *ignoring* the conflict or *engaging* in it. Choice is determined by five factors: the *influence of one-self*, the *influence of the other*, the *nature of the conflict*, the *context of conflict*, and *personal motives*.

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## Introduction

In health care, many professions are involved, but the collaboration between nurses and physicians is a crucial determinant of the quality of the care process (Forté, 1997; Vazirani et al., 2005). The better the collaboration, the better patient outcomes will be (Baggs et al., 1999).

Over recent decades, there has been a growing need for collaboration for health care professionals. Three developments have led to this increased need (Cooper, 2007; Cooper, 2004). Firstly, rapid developments in medical sciences have caused a growth in the number of specialisms (Cooper, 2007). Secondly, today's in-patients have more complex and time-consuming problems (Cooper, 2007). The third factor is the continuing rise in health-care costs (Cooper, 2004), which causes hospitals to formulate their goals in terms of increased quality of care and efficiency.

As physicians and nurses differ in the degree of their professional goals - clinical care delivery and patient care and advocacy - they face great challenges in their collaboration (Garman et al., 2006).

Previous research shows that many determinants play a role in collaboration, which makes it very complex, dynamic and not self-generating (San Martin-Rodriguez et al., 2005). In this situation conflicts arise easily, but surprisingly little research is published about conflict situations nurses and physicians encounter and how they are handled. In this paper we present our research on this subject. Before we start to discuss conflict and conflict management, we will briefly discuss collaboration.

## Collaboration

In general, collaboration requires that parties perceiving different aspects of problems communicate with each other and constructively explore their differences in search of solutions that go beyond each party's own limited vision of what is possible (Gray, 1989). A specific definition of collaboration concerning nurses and physicians is the following: "*Nurses and physicians cooperatively working together, sharing responsibilities for solving problems and making decisions to formulate and carry out plans for patient care*" (Baggs et al., 1999). Improving communication and collaboration between nurses and physicians can improve their morale, and can improve patients' satisfaction and quality of care (Vazirani et al., 2005). In contrast, poor communication and inadequate resolving of disagreement can have potentially serious consequences for patient care (Prescott & Bowen, 1985).

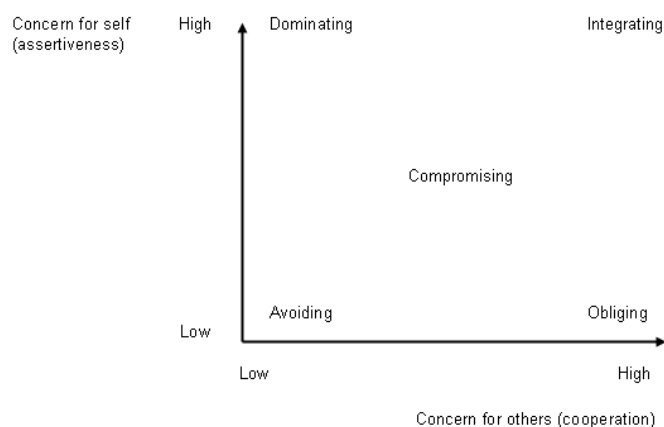
But not only communication plays an important role. San Martin-Rodriguez et al. (2005) carried out a review (theoretical and empirical studies) to identify the determinants of successful collaboration. They showed that successful collaboration in health care can be attributed to numerous elements, which they classify in interactional determinants, organizational determinants and systemic determinants. Other research shows that a correspondence in the role concepts and expectancies of nurses on the one hand and physicians on the other is a necessary prerogative for a positive collaboration between them (Verschuren & Masselink, 1997; Casanova et al., 2007). Furthermore,

sound professional communication and mutual respect are keys to a successful collaboration (Casanova et al., 2007). Pullon (2008) showed that a shared understanding of each others' roles and the complex interplay between them over time led from respect to interprofessional trust.

### ***Conflicts and conflict management***

As illustrated above collaboration is very complex, dynamic and not self-generating. Poor collaboration is likely to be caused by, or to result in, conflict. In psychological literature the definition of conflict is “*the process that begins when one party perceives that the other party has negatively affected, or is about to negatively affect, something that he or she cares about*” (Thomas, 1992). Marquis and Huston (2006) defined conflict as “*the internal or external discord that results from differences in ideas, values, or feelings between two or more people*”. These definitions apply to small-scale as well as large-scale conflicts. Conflict may occur between two individuals, within small groups and work teams, or between groups (De Dreu & Van de Vliert, 1997).

Conflict management refers to the styles used by either or both parties to cope with a conflict (Keenan et al., 1998). One broad and well-validated model for conflict management is based on a two-dimensional framework (Rahim, 1983). The first dimension is the degree to which a person satisfies his own concerns in a conflict situation. The second dimension is the degree to which a person satisfies the concerns of the other. Bringing together these two dimensions results in five specific styles of handling conflict: *integrating* (problem solving), *obliging*, *dominating* (forcing), *avoiding* and *compromising* (Rahim, 1983) (Figure 1).



**Figure 1: Overview of conflict management styles as defined by Rahim (1983)**

*Integrating* involves high levels of concern for both the self-interest and that of the other party. *Obliging* denotes high other-party concern and low self-concern. *Dominating* demonstrates high self-interest and low other-party concern. People *avoiding* conflict neither care for their own interest nor for the other party's interests. *Compromising* is a middle way that reflects an intermediate level of concern for both sides (Kilmann & Thomas, 1977).

In early empirical studies, researchers attempted to attribute conflict style preferences to personal characteristics (Bell & Blakeney, 1972; Kilmann & Thomas, 1975). More recently, however, researchers have looked into the influence of context on an individual's choice of conflict style (Brewer et al., 2002; Aritzeta et al., 2005).

Two relevant studies focus on conflicts between nurses and physicians. Hendel et al. (2007) carried out a quantitative study to identify and compare the conflict style choices of head nurses and physicians in five Israeli hospitals. *Compromising* was found to be the style most frequently chosen by both nurses and physicians. *Problem solving* was chosen more frequently by head nurses, and least frequently by physicians. As Keenan et al. (1998) pointed out, many studies on the choice of conflict management style have focused on personal characteristics. Hendel et al. (2007) also followed this approach, and found that most of the demographic characteristics - gender, age, country of origin,

work experience, and professional status - were not significantly correlated to the choice of strategy of head nurses' and physicians in conflict management.

The second relevant study was carried out by Skjørshammer (2001). This was a (qualitative) case study in a Norwegian hospital, it categorized the styles nurses and physicians use as *avoiding*, *forcing* and *negotiation* (=compromising). In terms of Rahim (1983), *negotiation* as described by Skjørshammer (2001) involves trying to find a satisfying compromise in an escalated conflict situation. *Integrating* and *obliging* were not mentioned in this study, but if the *forcing* strategy of one party is successful, the other party will have to *oblige*. Thus, it can be assumed that *obliging* is also found in the hospital context. Furthermore, Skjørshammer (2001) found that the different styles seem to be determined by two major contextual factors: the perceived interdependence between parties, and the perceived urgency of doing something about the situation.

### ***Research questions***

The studies mentioned above show there is more research to be done concerning conflicts and conflict management in the collaboration between nurses and physicians. This present study aims to investigate these themes in more detail and develop a conceptual model. The main research questions is: How do conflicts arise in collaboration, and how do professionals handle these conflicts?

### **Methods**

We chose to investigate the situation between nurses and medical staff on a single ward. Interviews of a confidential and in-depth nature is a way to discover respondents' motives and thoughts. That is why we chose an explorative, qualitative approach (Bartunek & Seo, 2002) and collected data through semi-structured in-depth interviews. We analysed the data following a grounded theory approach (Strauss & Corbin, 1998). The Medical Ethics Committee of the University Medical Centre Groningen decided the study did not require ethical approval because in the Netherlands this is only required for research involving patients.

### ***Characteristics of the ward***

The medical and nursing staff of a ward (32 beds) at a Dutch University Medical Centre (1339 beds) with two surgical disciplines volunteered to participate in the research. These two surgical disciplines (Gynaecology and Oral and Maxillofacial Surgery) were integrated only a year ago. Generally speaking, the nursing staff is quite satisfied with their collaboration, but they experience differences with the different physicians. At this ward 12 gynaecologists, 9 maxillofacial surgeons and 30 nurses are employed. The maxillofacial surgeons do their rounds twice a day, the gynaecologists once a day. Once a week physicians from each discipline have a multidisciplinary meeting with physicians, fellows, residences, registered staff nurses, and social workers. A substantial proportion of the patients of both disciplines are being treated for an oncological condition. These patients need special intensive care. The average stay is 5 days, and per day there are 20 patients in care.

### ***Selection of participants***

Twelve participants, six nurses and six physicians (three of each discipline) were interviewed. The selection of participants was based on purposive theoretical sampling, to achieve an optimal spectrum of gender, function, age and experience. All ranks were represented (student nurse, registered nurse, registered staff nurse) and experience varied from 6 months to 36 years. The nurses were all female, age varying from 21 to 59 years. Of the physicians, three were male, and three female. Their ages ranged from 26 to 54. Both disciplines were equally represented, and experience ranged from 6 months to 26 years. All 12 prospective participants who were approached agreed to take part.

### ***Interviews***

Before the interviews took place participants were informed that confidentiality was guaranteed and that citations would not be traceable to any individuals. With their permission the interviews were recorded. The interviews took place on a one to one basis, at a quiet place in or near the office or the workstation of the interviewee. Each interview lasted approximately one hour, from 50 minutes to 75 minutes. Interviews were semi-structured, using a topic list with open-ended questions. The topics

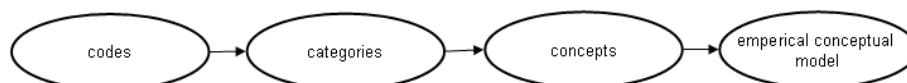
focused on the respondents' perceptions and experiences related to their collaboration and conflicts. The main topics were:

- *Collaboration between nurses and physicians* (introduction to conflict and conflict management)  
E.g.
  - What do you think is important in collaboration?
  - What do you experience as unpleasant in collaboration?
- *Definition of conflict and causes of conflicts*  
E.g.
  - How would you describe a conflict?
  - When would you define a situation as being a conflict?
- *Conflict management and preferences as to styles*  
E.g.
  - If a conflict situation arises with someone you have to collaborate with, how do you deal with the situation?
  - Why would you choose that particular approach to deal with the situation?

The subjects were asked to use examples to illustrate their opinions. Because of the in-depth nature of the interviews not all topics were discussed at equal length in every interview. In accordance with the qualitative nature of our research, the topic list was adjusted between interviews when necessary. In this way it was possible to collect complementary facts, in order to develop a valid conceptual model.

### ***Analysis***

The analysis of the interviews was a multi-step process following grounded theory procedures and techniques (Strauss & Corbin, 1998). Coding and analysis were conducted after each interview. After a verbatim transcription of the interview, the first step was open coding. Text fragments were analysed line by line and were provided with a code. These codes were then analysed and sorted into categories. Codes corresponding or relating to the same subject were linked to concepts. This second step is called axial coding, "making connections between a category and its subcategories" (Strauss & Corbin, 1998). Finally, selective coding was used to fit and link the concepts together in an empirical conceptual model (Figure 2).



**Figure 2: Analysis**

Data analysis was supported by the software package Atlas.ti version 5.2. Everything possible was done to acknowledge or minimize, the effect of possible bias on the interviews and on the interpretation. After the development of the code set, six independent researchers analysed two blank interviews each. The initial agreement was approximately 90%, and the few differences between the codes given by the researchers were discussed until full consensus was achieved. The first author discussed her findings with the other authors individually. The resulting findings were discussed among all authors until consensus was achieved. Saturation of information was achieved after ten interviews, as was evidenced after coding twelve interviews.

### ***Presentation of findings***

The findings are presented illustrated by citations. These are printed in italics within the general text. A small number have been slightly edited to improve readability (before translation, tr. note), but without changing their meaning. In the general text citations are referred to in superscript as <sup>#</sup>. Each respondent is identified as physician or nurse by the letter (p) or (n) respectively, in brackets after the citation. Concepts and categories are introduced with a definition that is derived from (grounded in) the interviews.

## Findings

### *Conflict or friction: concept definition*

The respondents indicate that in general they are satisfied with the levels of collaboration. Nevertheless they sometimes experience situations where collaboration is less than optimal. However, they do not refer to these situations as being a 'conflict'. Conflicts are seen as seriously negative events <sup>1)</sup>, ranging from an atmosphere of discord to a state of affairs where working together is no longer possible. The respondents themselves use the term 'friction' in referring to events where collaboration is not optimal. Where we use the word 'conflict' in this section, we are referring to situations which our respondents define as 'friction'.

<sup>1)</sup> "Yes, well, I always think 'conflict' is such a strong word, it makes me think of something really serious." (n)

### *Concepts and categories*

Analysis of the interviews shows that four concepts, and in total 13 categories, determine the quality of collaboration between physicians and nurses, and the ways in which they deal with conflict (Figure 3).

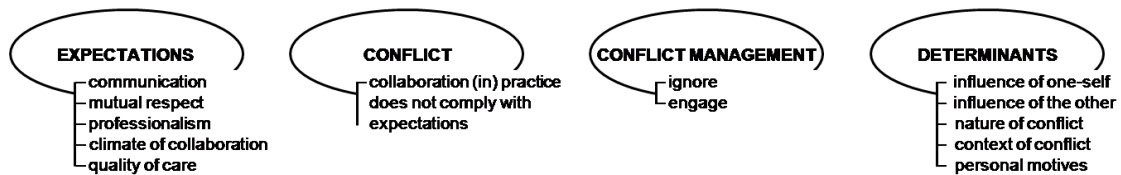


Figure 3: Concepts and categories

### *Expectations*

All respondents formulate clear expectations which they feel are essential to collaboration. Expectations are the opinions one holds as to how people ought to behave in a situation of collaboration. As is exemplified in citation <sup>2)</sup> most respondents formulate expectations in several areas, but the importance attached to each varies from person to person.

<sup>2)</sup> "Hallmarks of good collaboration. Well – openness, trust, knowledge of what you're dealing with, comfortable communication, frankness, professionalism, that kind of things." (p)

The respondents' expectations can be categorised into five distinct categories: communication, mutual respect, professionalism, climate of collaboration, and quality of care.

The first category is *communication*: the exchange of ideas, opinions and information, especially in the context of verbal communication. Respondents state they think it important communication is clear and explicit <sup>3)</sup>, that information is exchanged, and that everyone pays attention.

<sup>3)</sup> "Of course you must communicate clearly, at any rate so there's no confusion or uncertainty – so it's clear what everyone means." (p)

The second category can be labeled as *mutual respect*: the existence of a balanced relationship. Respondents think it is important that although there is a hierarchical difference in position, as human beings they should work together as equals. <sup>4) 5)</sup>.

<sup>4)</sup> "So it's just normal. You're not more important than me, and vice-versa." (n)

<sup>5)</sup> *“Yes, what I personally think is important in collaborating is that you work together on equal terms.” (p)*

*Professionalism* is the third category which encompasses expectations over a wide range of aspects surrounding the core of professional practice. First and foremost, respondents hold expectations regarding professional knowledge and skills <sup>6)</sup>. They see it as crucial that all concerned are well up to the mark within their own disciplines, and that there is a mutual trust between nurses and physicians in this <sup>7)</sup>. Furthermore, responsibility for, and commitment to the well-being of the patient are important <sup>10)</sup>. Finally, respondents say that it is important that all personnel pay attention to their clothes and personal appearance, in order to come across as professionals <sup>8)</sup>.

<sup>6)</sup> *“And then make sure, too, that you’re really up to date in your field. And I think that certain things should be expected of the nurses, too, that they know the basic skills of the job.” (p)*

<sup>7)</sup> *“You’ve got to be able to rely on each other. If someone says something, you’ve got to be able to assume it’s correct. That goes for nurses, of course, but also, that goes without saying, between nurses and doctors.” (n)*

<sup>8)</sup> *“...That everyone behaves properly, is neatly dressed. In this hospital there are some who walk around with bare navels showing under their white coats! I think you should present a bit of a professional appearance.” (p)*

A fourth category respondents bring forward is *climate of collaboration*: the manner in which people work together as a team <sup>9)</sup>. Many respondents indicate that, for effective collaboration, it is important to be working towards a common goal <sup>10)</sup>.

<sup>9)</sup> *“You’ve just got to be a team, you’ve got to do it all together.” (n)*

<sup>10)</sup> *“That from both sides you just have one aim, and that’s to care for the patient, each of you from your own field.” (n)*

*Quality of care* is the fifth and last category and holds expectations regarding the organization of care, the policy towards, and treatment of the patient. For example, respondents indicate that it is very important to them to have enough time to do their rounds so they can take care of their patients efficiently. They also make it very clear that the quality of care is extremely important to them <sup>11)</sup>.

<sup>11)</sup> *“Yes, the quality of care – that’s what it’s all about. Yes of course, it’s about the quality – that’s number 1.” (n)*

### **Conflict**

In the interviews, respondents list a great variety of reasons for conflicts. In all cases it appeared that these conflicts came about through a lack of compliance between the above-mentioned expectations and reality <sup>12)</sup><sup>13)</sup>.

<sup>12)</sup> *“Well, then I think that, really, someone hasn’t properly carried out the task they were given, so then it’s simply, in effect, that your job performance wasn’t up to scratch.” (p)*

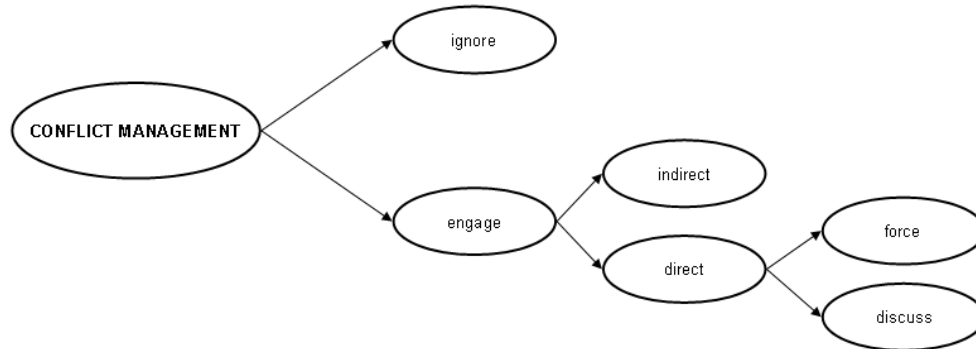
<sup>13)</sup> *“...when they start to expect more of me, things I don’t know yet, or not well enough. Yes, and that can be, well, awkward, in terms of working together.” (n)*

### **Conflict management**

From the interviews, two ways emerge with which respondents deal with conflicts (Figure 4). Some respondents tend to ignore the conflict <sup>14)</sup>, while others easily speak up and engage in the conflict <sup>15)</sup>.

<sup>14)</sup> *“O, I just ignore it”. (p)*

<sup>15)</sup> “In principle I always speak up [...] Yes, actually I nearly always accept the confrontation.”  
(n)



**Figure 4: An overview of the conflict management styles used by the health professionals**

*Ignoring the conflict* to respondents means not to react to the conflict or be drawn into it. For example, the respondent walks or turns away<sup>16) 17)</sup> or just ignores the conflict<sup>18)</sup>.

<sup>16)</sup> “Yes, I mean it’s just human to simply walk away and hope it will quickly blow over.” (p)

<sup>17)</sup> “So then I just turned away. I thought: once you start treating me normal I’ll be there again, but not right now.” (n)

<sup>18)</sup> “Oh, I’ll answer, because it’s got to happen anyway and they should know what’s got to be done; so in terms of that I just put up with it, and then it’s over.” (p)

By *engaging in the conflict* respondents mean to confront the person(s) with whom collaboration is not going smoothly. This may be a direct confrontation with the person concerned, or a different approach. When respondents engage in direct conflict with the person concerned, two conflict management styles are mentioned: *forcing* or *discussing*. Forcing is understood by the respondents to be the response of making clear what their position is, in such a way that little or no room is left for the opinion of the other<sup>19) 20)</sup>.

<sup>19)</sup> “Well, if in my view the situation is that it’s important for the patient that something is done a certain way, then I will make that very clear, and as far as I’m concerned there’s not much leeway at all.” (p)

<sup>20)</sup> “In the end, we decide how the patient is treated, and of course it will happen that way” (p)

When respondents attempt to discuss matters, they are indeed taking into account the position and the experiences of the other<sup>21) 22)</sup>. Through discussion a compromise or solution is reached<sup>23)</sup>.

<sup>21)</sup> “And then I think in an open discussion you can perfectly well talk to someone who also thinks he knows what should happen, and then there’s a good chance that in the end you come up with a middle way, of course, through the experience of both of you.” (p)

<sup>22)</sup> “I do try to discuss it, try to make clear my point of view and provide an alternative perspective.” (n)

<sup>23)</sup> *“Listening to the other persons’ arguments is of course very important, and then try to come to a solution together.”* (p)

When respondents do not engage in a direct confrontation with the person concerned, they choose a different way of dealing with the situation; for example, by bringing it up at a meeting, or by discussing it with another person such as another physician <sup>24)</sup> or a staff nurse <sup>25)</sup>..

<sup>24)</sup> *“Well, I handle it by going through Doctor A, for example. He’s more easy-going, you can talk about things with him. So yes, I use a roundabout way.”* (n)

<sup>25)</sup> *“Of course it depends on how badly it could escalate. I think, if things were likely to stay the same, then I would bring it up for discussion with the staff nurse.”* (n)

### ***Determinants for style of conflict management***

From the interviews it appears that respondents are aware of various factors which play a role in the choice between avoiding, or engaging in, a conflict. These factors are categorized in five categories: *influence of one-self, influence of the other, the nature of the conflict, the context of conflict, and the personal motives.*

The first category that determines the choice for style is the *influence of one-self*: determinants linked to the person’s self. It appeared not only personality characteristics such as extraversion or self-confidence were relevant <sup>26)</sup>, but also (lack of) knowledge and experience <sup>27)</sup>.

<sup>26)</sup> *“In that sense I’m just not the type that quickly gets into conflict, or creates it. I think perhaps that comes from how you deal with things.”* (p)

<sup>27)</sup> *“If I’m unsure about something, or don’t know something exactly, then I find it difficult to bring it up with a doctor, if he’s done something wrong in that area, or has forgotten something.”* (n)

The second category is labelled as *influence of the other*: determinants linked to the person with whom collaboration is not in accordance with the accepted expectations. Many respondents mentioned that the relationship with the other <sup>28)</sup>, his or her personality and attitude <sup>29)</sup>, and his or her expertise and experience <sup>30)</sup> influence the way they handle a conflict.

<sup>28)</sup> *“This also depends on confidence and how comfortable you feel with the other”.* (n)

<sup>29)</sup> *“One person may be a bit more open than another, and give you more chance to give your opinion.”* (n)

<sup>30)</sup> *“I would try to make it clear, but I think this also depends on [the expertise] of the doctor.”* (n)

*Nature of conflict* is the third category, which holds determinants linked to the nature of the conflict. Respondents state that the frequency <sup>31)</sup>, seriousness and urgency of the conflict all play a role. They make a distinction between structural and incidental conflicts <sup>32)</sup>. They don’t tend to engage very quickly in an incidental conflict, unless it is very serious <sup>33)</sup>. If the conflict is a structural one, they will no hesitate to seek a confrontation.

<sup>31)</sup> *“It depends a bit, if it’s just a one-time thing, then no. But if it’s something that could happen more often, then yes.”* (n)

<sup>32)</sup> *“Well, what would be important to me if it is structural or not.”* (p)

<sup>33)</sup> *“No, if it is just an incident I wouldn’t say something about it, unless it is very serious.”* (p)



A fourth category respondents mention is *context of conflict*: determinants linked to the moment when, and the atmosphere in which the conflict arises. Respondents think it important that when something needs to be discussed it will happen at an appropriate moment<sup>34)</sup>. Respondents also say that experiences of their team members play a role in the decision to ignore or engage in a conflict<sup>35)</sup>.

<sup>34)</sup> “Yes, well, you say nothing beside the bed, for example. That’s important. You say nothing in the patient’s presence, so that’s more that the situation means you don’t start.” (p)

<sup>35)</sup> “If I see that other people are having to deal with it as well, then you make sure that you talk it through together.” (n)

The fifth and last category that influences respondents in choosing a style are *personal motives*: reasons respondents see for either ignoring a conflict or engaging in it. Respondents say that different motives (which can be goals or desired results) influence the decision how to handle a conflict. For example their reasons are related to: clarification<sup>35)</sup>, optimizing care<sup>36)</sup>, improving collaboration<sup>37)</sup>, avoiding escalation<sup>37)</sup>, changing structures/practices<sup>38)</sup> and creating learning opportunities for others<sup>38)</sup>.

<sup>35)</sup> “I always really like to talk things through, so everything’s clear to me as well.” (n)

<sup>36)</sup> “Well, to improve the quality of care.” (p)

<sup>37)</sup> “Yes, to keep collaboration up to a good standard, and to avoid a further escalation of things in the future, of course.” (p)

<sup>38)</sup> “If in the department, structurally, things are not getting done, or aren’t being done properly, then it’s not very efficient to talk to individuals separately about it. Then it has to be taken on by whoever is in charge, and the structures have to be changed.” (p)

<sup>39)</sup> “In this case it concerned a trainee [ . . . ]. That means we are talking about feedback, sort of forcing him to look into a mirror.” (p)

### **Conceptual model**

Based on our findings we developed a conceptual model, which shows the relationships between the concepts (Figure 5). As mentioned before, respondents formulated expectations about collaboration in several areas, but the importance attached to each varies from person to person. This also influences whether a person perceives a situation as a conflict (this happens if there is a lack of compliance between expectations and reality), so expectations have a moderating role. When conflict is perceived, respondents choose between ignoring the conflict or engaging in it. This choice is influenced by five factors, which also play a moderating role.

### **Discussion**

In this study, we developed a conceptual model for collaboration, conflicts and conflict management between physicians and nurses (Figure 5). Collaboration is a multi-dimensional concept for the participating doctors and nurses. They judge their mutual collaboration against expectations in five areas: *communication, mutual respect, professionalism, climate of collaboration, and quality of care*. However, the weight given to each of these expectations varies from person to person, or on the other hand the respondents may vary in what they perceive as ‘good collaboration’.

Conflicts arise when specific collaboration situations do not meet expectations. When conflicts arise respondents ignore the conflict or engage in the conflict (Figure 4). If one engages in the conflict, it may or may not be directly with the person(s) concerned, the other party. If the engagement is direct, then one attempts either to *force* or to *discuss*. In the decision whether to engage in the conflict or ignore it, five factors play a role: *influence of one- self, influence of the other, the nature of the conflict, the context of the conflict, and personal motives*.

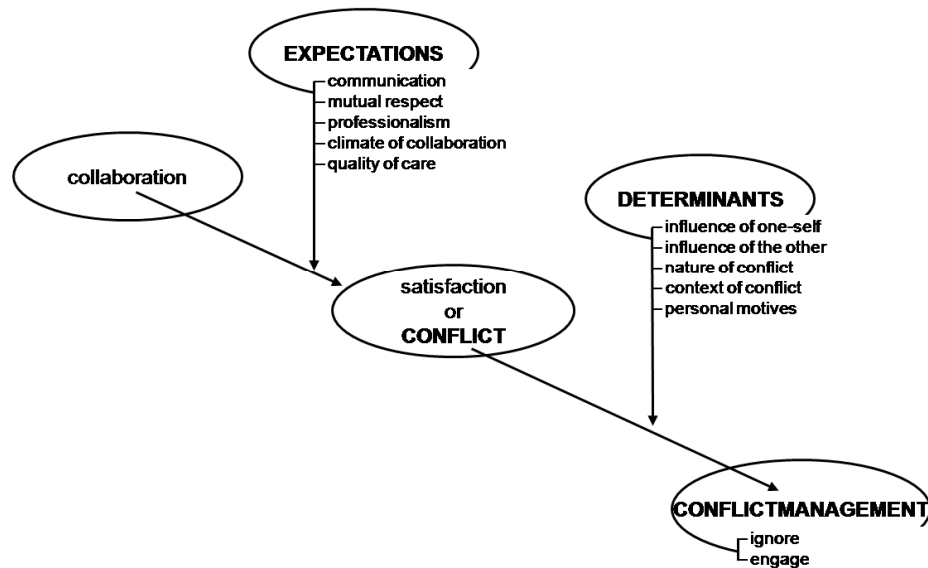


Figure 5: Model for conflict management with developed concepts and categories

Our findings conform in part with the literature, but also give additional indications. Marquis and Huston (2006) state that when a conflict arises, dissatisfaction is present as a result of differences in ideas, values or feelings between two or more people. This research shows that for physicians and nurses, these differences are predominantly linked to the practice of their collaboration. Conflicts arise if that practice does not match to their expectations. Casanova et al. (2007) specify communication and equality (respect) as success factors for effective collaboration. This present study adds *professionalism*, *climate of collaboration*, and *quality of care* as relevant factors as well. These expectations play a moderating role in how collaboration is perceived.

Conflicts within the collaboration between physicians and nurses arise in a complex field of forces composed of individual expectations against which daily practice is judged. It is notable that those involved do not themselves speak of 'conflicts', but of 'friction'. 'Conflicts' are seen as very serious occurrences which obstruct collaboration. This study demonstrates that there are differences between the psychological literature and the respondents, in how conflict is defined. This difference could be explained by the 'culture' in hospitals. Labeling things that went wrong, as mistakes and talking about these is still difficult in hospitals. Especially when mistakes can be subscribed to conflicts in collaboration. This may effect the perception of the term conflict by the respondents. But following the psychological literature, friction can be defined as small-scale conflict.

In Rahim's quantitative study (1983) on conflict management styles, factorially independent scales were constructed to measure the five styles of handling conflicts. They also provided evidence of the reliability and validity of these five styles. In our study we labelled conflict management styles on the basis of information of the respondents. In essence, we found two conflict management styles, either to ignore or to engage. To *engage* can be subdivided in indirect and direct, direct can be subdivided in *discuss* and *force*. Compared to Rahim (1983), in our study different styles are found which can be explained by the differences in research method. For example, contrary to Rahim (1983) avoiding was not found. This can be explained because in the interviews we asked for concrete examples of conflict situations and the way respondents reacted to them. In these cases the conflict had already happened and the respondents could choose to ignore it, but avoiding the conflict was not an option anymore. Another example is when respondents decide to directly engage in confrontation with the person concerned, two conflict management styles are mentioned: *forcing* and *discussing*. *Forcing*

corresponds with Rahim (1983), discussing does not. The style *discussing* is chosen to give a valid representation of the answers of our respondents because no difference appeared between *integrating* and *compromising*.

Various determinants play a role in the decision whether to engage in a conflict or to ignore it. From literature it appears that in earlier research the choice of conflict management style was often attributed to personality, but that at present attention is increasingly paid to the influence of context on the choice for a particular conflict management style (Keenan et al., 1998). Hendel et al. (2007) found in their research no determinants significantly correlated to conflict management style. Skjørshammer (2001) found only two determinants: *perceived interdependence* and *perceived urgency*. This present study goes further than Skjørshammer (2001) in establishing more determinants, both person-linked and context-linked, which play an important (moderating) role in the choice of conflict management style. The determinants supplied by this study are: *influence of one-self*, *influence of the other* (one's opponent), *nature of conflict* and *context of conflict*.

One important proposition emerging from this research is that, besides variables of personality and context, various other underlying reasons affect the choice of conflict management style. Respondents have certain *personal motives* in mind which they are trying to achieve when engaging in conflict. Examples of these are: clarification, avoidance of escalation, improvement of collaboration and care, modification of an existing structure and creation of a learning opportunity.

### **Strengths and limitations**

This study differs from the research by Skjørshammer (2001) in that it was carried out within just one ward. Herein lies its strength. The expectations of physicians and nurses regarding effective collaboration, and their ways of handling conflict, have been mapped out in far greater detail. The same goes for the factors influencing the choice of conflict management style.

Thanks to the qualitative research approach, the model in Figure 5 gives a valid representation of the actual situation in the department studied. In particular, the use of interviews allowed the motives underlying the behavior of the respondents to be clearly delineated. This would not have been possible with a quantitative research approach. The inter-subjectivity of the concepts and factors developed is high. In using them, independent researchers reached a concurrence of approximately 90%.

This study also has its limitations. The choice of concentrating on just one department means that the possibility of generalizing across wards is limited. First of all, the characteristics of for example an intensive care unit or a operation theatre, where situations can be acute and life threatening, are very different from a regular ward. Secondly, this study focused on surgical disciplines. Non-surgical disciplines may very well have a different 'culture' in collaboration. However, the variation in roles/status can indeed be generalized, although further investigation on this point fell outside the scope of this study.

Though collaboration between nurses and physicians in a hospital is crucial for the individual patient, other disciplines, like physical therapists or social workers are involved in this collaboration as well. They were not included in this study.

### **Recommendations for further research**

The study presented here offers many starting-points for further research. The most important in our opinion are as follows:

Quantitative research in order to answer questions as: to what extent are the five expectation areas determinant for conflicts, how often is the choice made for a certain conflict management style, who has a preference for which management style, and are there indeed variations between the practitioners of different medical disciplines? The 'Thomas-Kilmann Conflict Mode Instrument' could be used as a basis for this type of research (Hendel et al., 2007; Thomas & Kilmann, 1974).

This research and the models cited take either a role or a cognitive approach to collaboration, conflict and conflict management styles, while focusing on the roles and/or perceptions of the respondents. For additional information it might be interesting to investigate collaboration, conflict and conflict management styles from other point of views, e.g. observation.

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