



RESEARCH IN BRIEF

Don't leave me alone! Inter-professional documentation relating to the effects of time spent in the communication of information to lung cancer patients regarding their status

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Background

Providing information to the patient about diagnosis, prognosis and necessary medical therapy in Germany is the task of the medical profession (LÄK Baden-Württemberg, 2006; MBO-Ä, 2006). The flow of information between doctors and nursing staff on the basis of the patient-documentation is currently considered to be poor (Lecher et al., 2001). One reason is the separated medical and nursing documentation that is common in Germany. Nursing staff are made unsure by the plurality of legal regulations relating to the provision of information to patients and their relationship with patients is impaired by it (Baust, 1992; Glaser and Strauss, 1995; Hofmann, 2002).

Holistic patient care is a nursing responsibility and conversations about illness, prognosis and therapy are part of the nurses' role (KrPflG, 2003, § 3 Sections 1, Großkopf, 2002). But the information given by nurses to patients cannot go beyond the information provided by medical staff, nor can they change its meaning (Wiesing et al., 2000). The question is: "What does the patient know about his/her diagnosis?" Most medical documentation shows just that the doctor spoke to the patient about his/her illness—but not the detailed information or the level of understanding of the patient (Ott, 2001). Glaser and Strauss (1995) commen-

ted on this with cynicism referring to the well-known nursing response to patients' questions, as we found in a previous study: "I cannot tell you; would you be so kind as to ask the doctor?" (Luderer and Behrens, 2005). This behaviour leads, in the worst case, to nurses staying away from the patients—afraid of unpleasant questions (Glaser and Strauss, 1995). In our 2005 study, above, we also described the high correlation between nursing personnel's uncertainty and the avoidance of talking to patients. Better knowledge about patients' information leads to the personnel's emotional and legal security (Luderer and Behrens, 2005)—and that is the main hypothesis of this study: the advantages of a longer stay at the bedside of the patient.

Insecurity about the information provided by medical and nursing staff also has deleterious effects on patients diagnosed to have cancer (Arndt et al., 2002; Weber, 2002; Baust, 1992; Randall and Downie, 1996; Van der Molen, 1999; Mesters and van den Borne, 2001). One in five patients is dissatisfied with their experience in being informed about the situation (Geiser et al., 2006). Other studies show that due to poor communication (Rodriguez et al., 2007) just 20 percent of patients understand the given information (van den Brink-Muinen et al., 2006). A lack of information leads to frustration (Mills and Sullivan, 1999), stress and anxiety (Evans, 1995) as well as to patient dissatisfaction (Higgins, 2002). An unclear or insensitive imparting of information causes a reduced quality of life for patients (Kerr et al., 2003; Mager and Andrykowski, 2002; Walker et al., 2003; Gustavsson-Lilius et al., 2007).

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Aim of the study

The abbreviation IDAK stands for the documentation paper developed and tested during the project: Inter-professional documentation of information (German: Aufklärung) in the hospital (German: Krankenhaus).

The aim of the IDAK-project, promoted by the German Robert-Bosch-Foundation and the Wilhelm-Roux-Program of the Medical Faculty of the Martin-Luther-University Halle-Wittenberg in Germany, was to evaluate one single documentation for both: medical and nursing staff about what the patient knows about his diagnosis and prognosis.

Accurate documentation of the patient's status of being well-informed should help to realize congruent communication by the health care team. The case control study was undertaken by patients with lung cancer and should show that the staff's knowledge about patient's understanding of diagnosis, leads to more confidence in talks and therefore to a longer stay at the bedside.

The project was led by the following hypothesis:

The use of an inter-professional documentation about the patient's state of information regarding their diagnosis and prognosis resulted in a significant extension of the personnel's contact-time with patients over 24 h periods.

Methods

The research was carried out from June 2005 to January 2006. The ethics committee had no objection as no direct therapy-related or invasive interventions were necessary.

By a structured check of two university clinics we identified two research areas (lung cancer centres), comparable in medical and nursing staff, main patient groups, room architecture, nursing organization and documentation. Patients included in the survey were adults with suspected or diagnosed lung cancer. That was not only because this patient group offered the highest number of cases of homogenous diagnosis in the field; it was also because a (suspect) lung cancer diagnosis leads to different and critical situations in the imparting of information.

The intervention was the implementation and evaluation of the IDAK-documentation for nurses and physicians together. That was new and not practised in the intervention group before and in the control group during the study. The intervention was allocated to the case group by a throw of a coin. All (suspect) lung cancer patients in that area got the new documentation. Together with nurses and doctors in the case group we modified the IDAK-documentation. Content and layout were adapted to existing documentation papers. A weekly documentation check in the case group showed how the IDAK-documentation was used by medical and nursing staff. All IDAK-documentations were written accurately and meaningfully.

Eight weeks after the implementation had began, the evaluation started. In the control group the previous documentation without IDAK-documentation was used all the time.

For 4 weeks we collected data of contact times continually from Tuesday 6 o'clock until Friday 6 o'clock. No weekends and public holidays were included. Daily measured contact times of the rooms were included only if

no change of patients was registered from morning to morning. The included patients stayed in their room the whole day—most of them were not able to walk outside of the room due to weakness. So, 145 from 178 24-h profiles of the contact times and frequencies between patients and the health care team could be included. These are 76 daily profiles in the intervention group and 69 in the control group ($N = 145$).

The frequency and duration of presence by the staff was documented by contact protocols. Measurement of the contacts took place by the method of blinding, thereby concealing the purpose of the experiment: it was not known that the time spent in the patient rooms was being observed or was of interest. Measurement was made by the non-participant observation of a ward station corridor, using a stopwatch. The blinding, to measure the personnel's way-times on the ward (how often they walked from one room to another), was authorised by the ethics committee.

The data of the time measurements were recorded in four categories: the contact duration and frequencies between patients and

- (a) any members of hospital staff presence in the room;
- (b) nursing staff presence in the room;
- (c) doctors presence in the room; and
- (d) other co-workers of the hospital (diagnostic professions, physio- and occupational therapists as well as pastors) presence in the room.

The data showed that whenever more than one patient was cared for in a room, the number of patients in the ward and an individual factorizing of care needs (low, middle and high care in nine steps) was assigned to the measured times. Using this factor, the length of time of the personnel's stay in the room, relevant to the individual patient, should be appropriately portrayed (we called it "cleared contact times"). Since not only the statistical accuracy rather than the importance of the data for staff and patients was focused, data was compared with the *t*-test, which is flexible and robust enough for different variances. The Mann-Whitney test was used for data without normal distribution.

Results

- (a) *Any members of hospital staff's presence in the room:* Patients have an opportunity to communicate with the different co-workers of the hospital for approximately one hour a day. This hour was distributed among approximately 50 contacts (intervention group: $t = 1:01:30$ h, $f = 47/d$; control group: $t = 0:57:28$ h, $f = 58/d$). Significant differences between intervention and control group emerged regarding the contact frequencies in the morning work ($\alpha = 0.003$, $T = -3.0$, $df = 125.8$) and afternoon work ($\alpha < 0.001$, $T = -6.2$, $df = 114.1$) and frequency of all contacts ($\alpha < 0.001$, $T = -5.2$, $df = 120.9$) relating to the control group of staff with the patients throughout the day (Fig. 1).
- (b) *Nursing staff presence in the room:* Nursing staff in the control group were present with the patient for an average 48:33 min per day with 51.28 contacts. In the

intervention group nursing staff were present for 41:27 min (35.95 contacts) in the patients' rooms. More details are to be seen in Fig. 2.

By calculating the quotient of the day-contact-time and day-frequency of the time spent with patients, the average per conversation yielded for the intervention group was 2:46 min and for the control group 2:19 min (Mann-Whitney: $p_{0.05} = 0.016$). Table 1 shows the detailed information. The presence of one nurse alone with the possibility of intensive and private communication "face to face" was, per day, in the control group, two minutes shorter than in the intervention group—but the Mann-Whitney showed no significance. On the other hand, this person-to-person situation between a nursing student and a patient in the control group was nearly three times longer than in the intervention group (Mann-Whitney: $p_{0.05} < 0.001$). More details in Table 2.

(c) *Doctors presence in the room:* The average time spent by doctors with patients per day was 13:05 min (6.39 contacts) in the intervention group and 14:08 min (6.86 contacts) in the control group. Here, no essential differences between the groups appeared. For further information see Fig. 3. In the control group, a higher frequency of joint stays by nurses and doctors was shown (control group: 2.55; intervention group: 1.93; $\alpha = 0.006$, $T = -2.8$, $df = 143$). However, the differences in the duration of the joint stays (intervention group: 6:35 min; control group: 7:45 min) were not statistically significant.

(d) *Other co-workers of the hospital (diagnostic professions, physio- and occupational therapists as well as pastors) presence in the room:* With an average length of time of 14:00 min per day (5.86 contacts), a stronger presence of other co-workers in the patient rooms was seen in the intervention group ($\alpha < 0.001$, $T = 5.25$, $df = 121.9$) compared with the control group with 5:02 min (2.64 contacts). This is especially to be examined with regard to medical behaviour towards

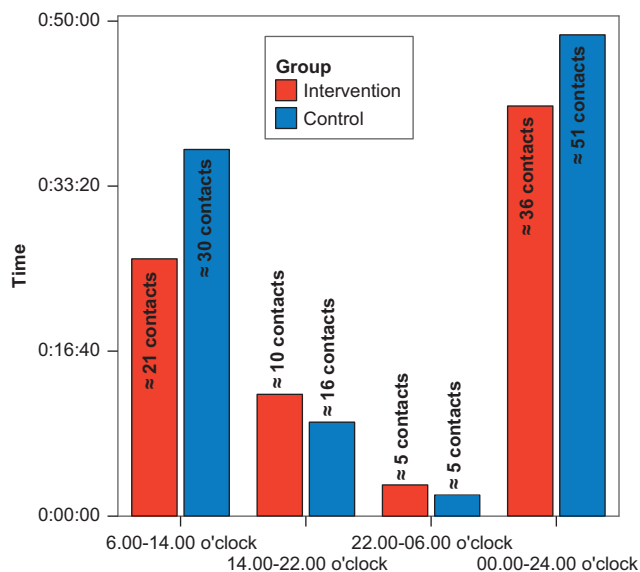


Fig. 2 Nursing staff presence in the room.

Table 1

	N	Average	SD
<i>Contact time per day</i>			
Intervention group	76	0:41:27	0:28:50
Control group	69	0:48:33	0:20:44
<i>Contact frequency per day</i>			
Intervention group	76	35.95	9.494
Control group	69	51.28	12.269
<i>Day time/day frequency: average per conversation</i>			
Intervention group	76	0:02:46	0:01:05
Control group	69	0:02:19	0:00:40

Table 2

	N	Average	SD
<i>One nurse alone in the patients room per day</i>			
Intervention group	76	0:20:53	0:20:48
Control group	69	0:18:36	0:09:52
<i>One nurse-student alone in the patients room per day</i>			
Intervention group	76	0:03:15	0:05:41
Control group	69	0:09:30	0:08:26

therapeutic offers (physio- and occupational therapy) as well as to diagnostic interventions in the patient's room.

Discussion

It is surprising and alarming, that a patient with lung cancer has the possibility to talk to doctors, nurses or other members of the therapeutic team for just 1 h a day.

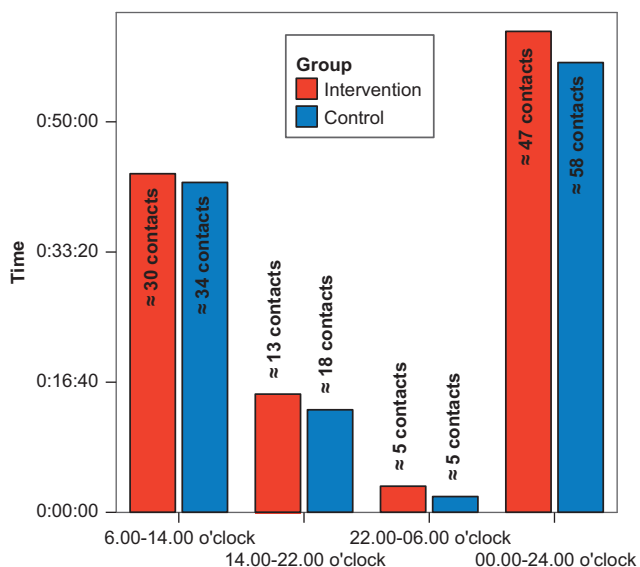


Fig. 1 Any members of hospital staff's presence in the room.

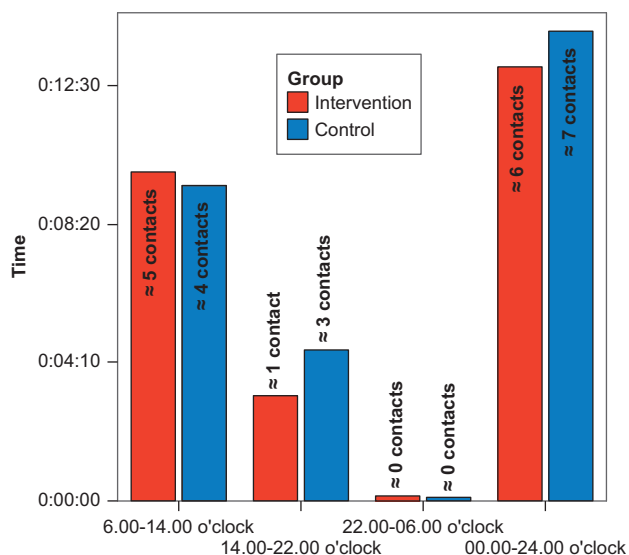


Fig. 3 Doctors presence in the room.

This time is split into nearly 50 contacts, a fact that does not allow for an intensive relationship with the patient. The result characterizes an “open-the-door-and-shut-the-door” organization. Lemonidou et al. previously showed in 1996 that nurses perform direct care interventions during only 8.2 percent of the working time. For 23.8 percent of the working time they are present with the patients (Lemonidou et al., 1996). Using this data for comparison, the observed direct contact times (times present) is quite in the appropriate area for the intervention and control groups.

The result of this study shows how it is possible for patients with lung cancer to exchange information with health care personnel in frequency and length of time. In the intervention group we could detect a significantly higher contact time per conversation (quotient from contact-time/contact frequencies in 24-h-profile) that a more intensive communication favours (Glaser and Strauss, 1995). But that result is limited for showing an effect of the IDAK-documentation and identifying really good communication.

The staff members in both groups were said to be too few; they worked (and walked) all the time. But the question to be asked is why the nurses in the control group need more ways and means for the same work? Maybe, that not identified confounders, i.e. poor daily working organization, or desired behaviour, affected the results. The systematic analysis of the groups showed no differences—but a longer pre-observation could have helped identifying confounders. A larger study using additional observation methods, e.g. direct observation of communication situations or interviews is recommended.

The special situation of lung cancer patients demands specific observation and research methods. Most of the patients do feel stigmatized because they smoked before their illness or are still smoking. How the communication is influenced by this, has up to now only scarcely been examined in the German context. However, this study shows that the patients in both groups have only few opportunities to enter a deep conversation.

The intervention itself—related with the talks about the situation of lung cancer patients and about truth at the

bedside could lead to a higher awareness and sensibility in the staff in the intervention group. This on the other hand can explain the low person-to-person situation between a nursing student and a patient in the intervention group.

A paper like the IDAK-documentation as well as other corresponding information about the state of enlightenment of the patients represents help for patient-related interactions between nurses and doctors. This was stated by the staff working at the stations involved in this study during pre-test and implementation of the intervention. They recommend the documentation to apply over all cases. Doctors and nurses working in the outpatient setting also see a benefit of the documentation of the status of enlightenment in the transition following discharge from hospital. Studies confirm the inconsistent passing in of information about the patient’s level of understanding and information in the management of discharge (Spiessl and Cording, 2002). Here, the need for further research focusing on this problem for all occupations in the ambulant sector becomes obvious.

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