Peer reviewed article

What patients and relatives expect from an intensivist – the Swiss side of a European survey

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Summary

Background: Until recently, patients' and families' expectations of specialists in intensive care medicine were largely unknown. This paper reports the results from the Swiss subgroup of a recently performed European multicentre study addressing this question.

Methods: Purposeful sample of adult ICUs in Switzerland. A questionnaire was distributed to ICU patients and relatives. It included 21 statements in the domains "medical knowledge", "communication with patients", "communication with relatives". Statements were rated for importance on a four-point Likert scale.

Results: All addressed ICUs participated; there were two from the French and eight from the German speaking part of Switzerland. 197 questionnaires were returned (46%). Overall, the majority of characteristics were rated as important. As in the other participating countries, patients and relatives ranked, "medical knowledge" as most essential, followed by, "communication with patients" and, "communication with relatives". This remained unchanged when analysed for German or French language, female or male, age >65 years. Female responders rated "communication" as more important than male responders. For French speaking participants "treating patients as individuals" was the most important statement.

Conclusions: In accordance to respondents from other countries, Swiss patients and their families with experience of intensive care rate medical knowledge as most essential for specialists in intensive care medicine. However, communication with patients and with relatives is considered important, too. Accordingly, developing and ensuring medical knowledge and skills, as well as competence in communication must remain top priorities for the institutions responsible for training ICU physicians.

Key words: intensive care; critical care; professional competence; training; CoBaTrICE; physician-patient relations; professional-family relations

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Note: a complete list of all involved persons is given e.g. in [21].

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Introduction

Intensive care medicine (ICM) has a reputation for being highly dependent on technical high-end devices, for dealing with extremely complex medical situations under pressure of time, and in many cases for treating patients who are sedated or unconscious. These aspects require appropriately trained staff with up-to-date knowledge, and skills. In addition, clear and timely information is of paramount interest for patients and their relatives when going through the frightening and physically as well as emotionally challenging experience of a stay in an intensive care unit (ICU; [1–7]). Giving information, but also giving hope and support are very much appreciated during this vulnerable period [8]. Despite this, little is known about the needs and wishes of patients and their relatives in these circumstances [9]. Notably, such needs cannot be estimated from what we know from patients undergoing elective hospital stays, out-patient treatment [10], or subacute care wards [11]. The differences accumulate when it comes to providing end-of-life care in the intensive care setting [12–18].

During the past few years, national and international societies of intensive care medicine around the world developed a competency-based training programme in the specialty (Competency based training in intensive care medicine in Europe, CoBaTrICE; http://www.cobatrice.org; [9, 19–21]). For the development of this project, critical care professionals, trainees, patients and their relatives were involved [20]. To appropriately incorporate the needs and requirements of patients and their relatives into these training

programmes a detailed European survey was conducted. It was designed to learn about what adult patients and their relatives feel to be desirable characteristics of intensivists. The overall results of this survey were published recently [21].

The aim of the present paper is to report specifically the results of this survey obtained from patients and their relatives in Switzerland and to test for differences to the other participating countries.

Methods

The survey was approved by national or local ethics committees as appropriate.

Questionnaire

The methods have been comprehensively described previously [21]. In brief, a self-completion questionnaire was designed, based on reviews of published research. The same questionnaire was distributed to patients and relatives. The aim of the survey was to ask about the qualities patients and relatives believed to be the most important for an intensivist in general. There were 21 statements, divided into three main domains: 1) medical knowledge and skills, 2) communication with patients, and 3) communication with relatives (table 1). The importance of each statement was rated based on a Likert scale: 1 = essential, 2 = very important, 3 = not too important, and 4 = unimportant. In addition, there was a possibility for free text comments.

Also, demographic data of the respondents were collected. The English language version of the questionnaire was published elsewhere [21]. The translated [21] German and French versions were minimally further edited by the participating Swiss ICU professionals.

Table 1

Statements used for the questionnaire. The statements are assigned to three domains: 1) medical knowledge and skills (K&S), 2) communication with patients (C-P), and 3) communication with relatives (C-R). Numbers of statements are identical to the ones used in figures 1 and 2.

Statement		Domain		
Nr	Text	K&S	C-P	C-R
1	Be decisive when action is needed	X		
2	Carry out practical procedures skilfully	X		
3	Do everything possible to control pain	X		
4	Inform patients about future care		X	
5	Have up-to-date knowledge about illness and treatment	X		
6	Give patients opportunity to ask questions		X	
7	Give patients full information even when upsetting		X	
8	Discuss fears and anxieties with patients		X	
9	Explain in ways patients can understand		X	
10	Give bad news in a caring way		X	X
11	Be courteous and polite		X	X
12	Give relatives opportunity to ask questions			X
13	Not give information that is upsetting		X	X
14	Not talk as if the patient is not there		X	
15	Handle crises calmly	X		
16	Involve patients in decisions about care and treatment		X	
17	Involve relatives in decisions about care and treatment			X
18	Work well as member of a team	X		
19	Treat patients as individuals		X	
20	Listen to patients		X	
21	Find out what relatives think and feel			X

Questionnaire distribution

Intensive care units from eight European countries were invited to participate in the survey [21]. By study protocol, in each participating country a sample of 10 adult ICUs was selected, reflecting the range of ICUs of that country. In Switzerland, medical directors of ten ICUs were approached by the country coordinator, and each of them agreed to participate. The units represent a purposeful sample, selected from the 85 ICUs recognised by the Swiss Society of Intensive Care Medicine. The aim was to include units both from the French and Swiss regions of Switzerland, and to have both university and non-university ICUs.

Distribution of the questionnaire took place over a 3-month period in 2004–5. Exclusion- and inclusion criteria have been described previously [21]. Responses were returned by post directly and anonymously for central analysis. Non-responders could thus not be followed up. For each country, 600 questionnaires were available for further distribution. However, due to the pre-defined study period, the number of effectively distributed questionnaires was considerably smaller.

Data analysis

Answers were dichotomised, categorising them as "essential" (category of importance = 1) or "not so essential" (categories 2–4). Based on the relative number of "essential" ratings, rankings were derived. Summary data per domain were calculated based on the average level of importance for all statements assigned to the respective domain (table 1). There was no substitution for missing data. If not stated otherwise, data for "Europe" are based on all participating countries, with the exception of Switzerland. Data are presented as mean ± SD and median (25th–75th percentile) as appropriate.

Differences in ranking were tested for significance by the Pearson Chi square test, and differences between domains were tested by Friedman test statistics and Wilcoxon signed rank test. Univariate analysis was performed to check for age, sex, educational level, and length of stay in ICU as explanatory variables. To test for differences between two groups, the Mann Whitney U test was employed. A $p < 0.05$ was considered statistically significant for all tests. No correction for multiple testing was made.

Results

Overall, 70 ICUs participated in the European multicentre survey. In total, 1398 returned questionnaires were suitable for analysis (including 197 from Switzerland). Overall, 2% of all questions were not answered (either unclear marking or no answer at all). Further results of the European survey are presented in detail elsewhere [21].

In Switzerland, ten ICUs participated (table 2). A total of 432 questionnaires were distributed, including distribution to 217 patients and 215 relatives (French: 31 patients, 58 relatives). The return rate was 46%. Patients returned 99 questionnaires (German language 84, French 15), and relatives returned 93 questionnaires (German 71, French 22). A further 5 French language questionnaires were returned with no indication whether from patient or relative.

Table 2

Characteristics of participating Intensive Care Units. Type of ICU: U = university hospital; N = non-university hospital; Principal language in the ICU: Location of ICU in the German (G) or French (F) part of Switzerland; Beds: number of beds in the ICU; Questionnaires: Number of questionnaires distributed to patients or relatives

Type of ICU		Language	Beds	Questionnaires
U	General	G	30	118
N	Surgical	G	18	56
N	General	G	16	54
U	Surgical	F	16	40
N	General	G	8	35
U	Medical	G	12	29
N	General	G	8	28
N	General	G	7	26
U	Surgical	G	26	25
N	General	F	11	21

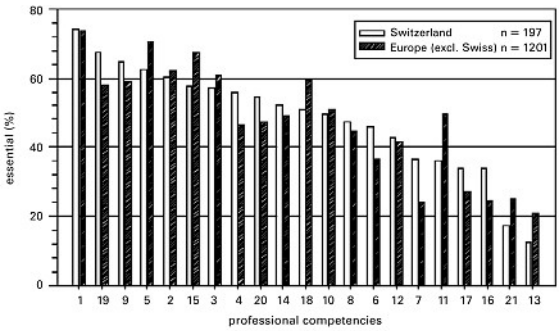

Figure 1

Rating considered as "essential" per single statement. The bars show the Swiss (left bar) and the European (right bar) ranking. The order on the horizontal axis is based on the rating by Swiss respondents (numbers of statements: see table 1).

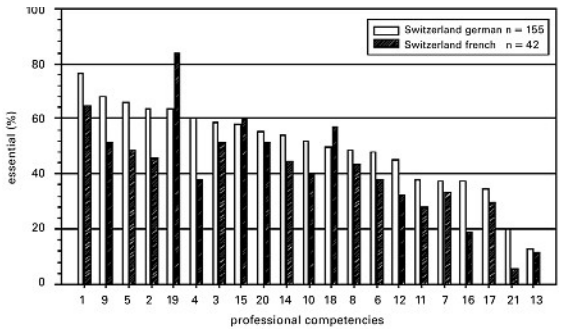

Figure 2

Rating considered as "essential" per single statement. The bars show the German Swiss (left bar) and the French Swiss (right bar) ranking. The order on the horizontal axis is based on the rating by German language Swiss respondents (numbers of statements: see table 1).

The mean age of Swiss respondents was 56 ± 16 years, 53% male and 47% female. In 64% of the participants the patients' length of stay in the ICU (LOS-ICU) was 2 days or less, in 36% LOS-ICU was >2 days.

Similar to the overall European survey, all 21 statements were rated as "essential" or "very important" by the majority of participants (90.7%; Europe: 87.7%).

Swiss respondents included three statements from the domain "medical knowledge and skills" and two statements from the domain "communication with patients" among the five top ranks (fig. 1). Among the five lowest prioritised statements, no statement from the domain "medical knowledge and skills" was found. As in nearly all European countries, aspects of autonomy such as "involving patients" or "involving relatives in decisions about care and treatment" were rated less important in Switzerland. Figures 1 and 2 show the relative amount of "essential" rating for each individual statement. Figure 1 gives overall data for Switzerland and the European sample (without Swiss data). The largest relative difference of "essential" rating between Swiss and European answers was found for "be courteous and polite" (Difference –12%, P <0.001) and "give patients full information, even when upsetting" (+11%, P <0.001). Figure 2 gives Swiss data, stratified by language. The largest differences between German Swiss and French Swiss rating was found for "inform patients about future care (+22%, P = 0.014), "treat patients as individuals" (–20%, P = 0.018) and "involve patients in decision about care and treatment" (+18%, P = 0.035).

Overall, Swiss patients and relatives ranked the domain "medical knowledge and skills" as most important, followed by "communication with patients" and by "communication with relatives" (table 3). The general ranking remained unchanged when analysing the data stratified by language, sex, age, or educational level (data not shown). Participants from German language regions of Switzerland rated the domain "communication with relatives" as more important than participants from French language regions. The same was seen for participants aged over 65 years. Female responders rated "communication with patients" and "communication with relatives" as more important than male participants.

Free-text comments were given by 61 responders. Showing empathy, being tactful, and explaining medical matters in understandable words were the most frequent-mentioned statements.

Table 3

Summary data for ranking of the three domains.
n: Number of returned questionnaires.
K&S, C-P, C-R: Domain of questionnaire, see table 1.
Data are mean ± SD, and median (25th – 75th percentile).
The possible range of rating was from 1 (essential) to 4 (does not matter).
P *: Comparing Switzerland to all other participating countries, calculated with Mann-Whitney U test
P **: Comparing domains, calculated with Friedman test

Country / Domain	Europe (excl. Switzerland)	Switzerland	P *
n	1201	197	
K&S	1.38 ± 0.33 1.33 (1.17–1.67)	1.41 ± 0.30 1.33 (1.17–1.67)	0.045
C-P	1.75 ± 0.38 1.75 (1.50–2.00)	1.67 ± 0.35 1.67 (1.42–1.97)**	0.006
C-R	1.90 ± 0.48 1.83 (1.50–2.17)	1.94 ± 0.49 2.00 (1.67–2.33)**	0.268
P **	<0.001	<0.001	

Discussion

CoBaTrICE stands for "Competency Based Training in Intensive Care in Europe" and is a project supported by the European Union (Leonardo da Vinci Programme), the European Society of Intensive Care Medicine (ESICM), the Society of Critical Care Medicine (SCCM), the Swiss Society of Intensive Care Medicine (SGI-SSMI-SSICM), and industrial partners [21]. The objective of the CoBaTrICE project was to create an internationally accepted training programme in intensive care medicine (ICM). As part of this project, competencies considered relevant and realistic to be achieved in training for specialists in intensive care medicine were identified and presented [20, 21].

To identify desirable characteristics of ICM specialists, it was considered appropriate to include not only suggestions from professional societies and national institutions, but also the views and expectations of ICU patients and their relatives. With this aim, a questionnaire was used, with anonymous evaluation of answers.

Overall, "medical knowledge and skills" was found to be most important, both in the European multicentre survey [21] and in the Swiss subgroup. This was followed by "communication with patients"; finally "communication with relatives" was assigned lesser importance. The ranking of the three main domains was the same when analysing the data separately for German and French language Swiss participants. The single most essential characteristic was "to be decisive when action is needed", again both in the European sample and the Swiss subgroup. Overall, these findings are consistent between countries and regions [21]. Both patients and their families expect skilled, medically competent physicians. Indeed, these characteristics are core elements of professionalism [22] and the key to provide quality care. However, communication is of high importance as well [23, 24]. There were however some regional differences that will be discussed in the following paragraphs.

Swiss patients and relatives seem to have a rather personally oriented view of how a stay in the ICU should be managed. Patients want to be informed, they should be given the opportunity to get answers to the questions they have, and they want to be involved in important decisions and future plans. Of note, up-to-date knowledge of their physician was slightly less often considered essential by Swiss as compared to the European participants. This might be due to the fact that Swiss participants of the study have a high trust in their medical system, seeing well educated doctors as a prerequisite in the first place. Still, to "be decisive when action is needed" was assigned the highest importance by both the European sample as well as the Swiss subgroup. Interestingly being polite was considered less important by Swiss as compared to European participants.

Overall, 18 of 21 statements were more often rated as essential by German as compared to French language participants, with a difference of 10% or more in 11 statements. Even if the total number of answers is rather small, it is striking to see that "treating patients as individuals" was clearly the highest ranked statement for French language participants. On the other hand, and somehow in contradiction to this, "involvement of patients in decisions about care and treatment" was significantly less important for French as compared to German language Swiss respondents. Also, French participants assigned less high importance to "information about future care".

The ranking of the three main domains was unchanged when looking at the data separately for female and male participants. However, communication skills, both with patients and with relatives were seen as more essential characteristics by female participants. This finding seems to be in accordance with the intuitive emotion of females putting higher stress on the so called soft factors, such as communication or showing empathy. No difference in the ranking of the main domains was found when looking at the data separated according to the length of stay in the ICU [25], or by educational level of the respondent. Of note, "communication with the patient" was considered more often as essential by older respondents. Possibly, this group of patients already has more personal experience in hospital environment, and they thus more often consider communication as an essential element in patient care [14, 26, 27].

There are limitations to this study. Those considered relevant for the European multicentre study have been discussed previously [21]. They are primarily related to the non-randomised character of the study, leaving room for bias. Regarding the Swiss data, the sample may be considered rather small. Still, concordance of the Swiss subsample with the European sample in respect to the general rating of the three domains is plausible and lends support to our conclusions. Further, the questionnaire does not allow differentiation between expectations centred on the view of the answering person (i.e. what is relevant for me) and expectations at a more general level (i.e. what is relevant for any ICU). The study coordinator sought to include a diverse sample of ICUs covering the whole range of Swiss ICU's. Still, as selection of study sites was not done at random, this might have introduced additional bias. This can however not be analysed in further detail, as characteristics of non-participating units were not collected. Overall, statistical analysis is of exploratory rather than confirmatory nature.

In conclusion, ICU patients and their relatives rate medical knowledge as most essential for specialists in intensive care medicine. Still, communication with patients and communication with relatives are also considered important. Overall, there was agreement between Swiss and European respondents concerning the relative level of importance of the three domains covered by the questionnaire. Accordingly, developing and ensuring medical knowledge and skills, as well as competence in communication must remain top priorities for the institutions responsible for training ICU physicians.

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