Does the status of surgical resident compared to that of consultant have an impact on patient's satisfaction over the informed consent process?

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Does the status of Surgical Resident compared to that of Consultant have an impact on patient's satisfaction over the informed consent process?

OBJECTIVE: *The informed consent process is a fundamental element of best practice in the surgical patient's care. The aim of the present study is to investigate the value of informed consent from the patient's perspective in a Teaching Hospital. In particular, the role of the Residents within this process is analyzed to compare their performance with that of Consultants.*
DESIGN: *This is a prospective observational study based on a consecutive cohort of patients who were offered an elective surgical procedure during the period April 2015 – September 2015.*
SETTING: *The study was conducted in the Surgical and Transplantation Unit of the University Hospital of Udine, Italy, accredited by the Joint Commission International.*
PARTICIPANTS: *The study population consisted of 236 patients. The participants were asked on a voluntary basis to fill in a self-evaluating questionnaire after being requested to complete a written informed consent before the operation.*
RESULTS: *In the present study we didn't register any significant difference of patient's satisfaction over informed consent when we evaluated the performance of Residents in comparison to Consultants.*
CONCLUSIONS: *We believe that our positive results may be related to our educational training approach. However, adequate education of Residents about seeking informed consent is not sufficient to guarantee an effective informed consent process if it is not supported as a counterpart by the promotion of correct and positive patient knowledge and perception of the Residents' skills, clinical role and responsibilities.*

KEY WORDS: Educational program, Informed consent, Informed consent process, Patient's satisfaction, Resident

Introduction

The informed consent (IC) process is a fundamental element of best practice in the surgical patient's care. It is an ethical and legal obligation which establishes a contract of trust between patient and doctor [1].

The constituting steps of an IC are the assessment of patient's preconditions, the provision of information and the acquisition of consent [2]. Furthermore the process must guarantee and respect three criteria to be effective and valid:
– capacity: patient's ability to understand all the information relevant to the decision making and any reasonably foreseeable consequences of the patient's decision;
– autonomy: patient's ability to make a decision freely and without any unwanted conditioning;
– disclosure: patient's ability to make a clear and explicit decision, based on sufficient, relevant and updated information received.
Thus a properly conducted IC is an interactive and structured process whose result is a fully informed patient

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who knows risks, benefits and alternatives of a specific invasive procedure and who truly and freely decides to proceed to the treatment [1-3].

Major efforts have been made to enhance the IC quality with different approaches, as using multimedia supports or standardized patient simulation training. Even specific education projects for Residents have been supported [4,5].

This approach is particularly relevant not only because it is mandatory to provide the trainees with the necessary skills to obtain an adequate IC, but also because in the clinical routine the Residents are regularly involved in the IC process [1,2,6,7].

So far the research has mainly focused on evaluating IC teaching methods or assessing Resident IC competency. However, there is a specific variable in this setting that has not been fully accounted for or analyzed: the impact of the Residents status on the patient's satisfaction over IC.

The aim of the present study was to investigate the value of IC from the patient's perspective in a Teaching Hospital. In particular, the role of the Residents within this process was analyzed to define their performance in comparison to that of Consultants. As the identification of the professional qualification by the patient did not always correspond to the real qualification of the physician requesting IC, it was possible to investigate whether the subjective identification of a Resident could affect the patient's satisfaction over IC.

Material and Methods

This is a prospective observational study based on a consecutive cohort of patients submitted to an elective surgical procedure during the period April 2015 – September 2015. The study was conducted in the Surgical Unit of the University Hospital of Udine, accredited by the Joint Commission International.

The participants were asked on a voluntary basis to fill in a self-evaluating questionnaire after being requested a written IC before the operation. The study was authorized by the Hospital Administrative Bureau.

The IC at our Institution is based on a standard template for surgical procedures which is filled in by the physician in charge with the specific details of the programmed surgical intervention. Additional details describe potential benefits, risks and therapeutic alternatives. The physician reviews and discusses with the patient the information in the template and then the patient who has given a positive feedback is asked to sign the document. In all cases the support and surveillance of Consultant was guaranteed for every procedure performed by a Resident and the patients were informed that a direct interview with a Consultant was always possible and available. At the clinical visit for

TABLE I - *General characteristics of the study population*

		Pts (%)
Study Population		236 (100%)
Sex	M	78 (33.0%)
	F	158 (67%)
Age	<55 years	104 (44.0%)
	>55 years	132 (56%)
Education	lower secondary or less	123 (52.1%)
	upper secondary or better	113 (47.9%)
Type of surgery	minor-medium	197 (83.5%)
	major	39 (16.5%)
Professional category of the Doctor seeking IC	Consultant	55 (23.3%)
	Resident	181 (76.7%)

TABLE II - *Questionnaire (the answers to questions 13 and 14 are reported in italics below the question). Questions have been divided in four aspects (Aspect 1: information received about the disease suffered and the indicated surgical treatment, questions 1-7; Aspect 2: patient's involvement in the therapeutic decision making, questions 8-10; Aspect 3: the relevance of the IC, questions 11-12; Aspect 4: patient's overall satisfaction about the IC and the questionnaire, questions 15-16)*

1. Do you know the condition (illness) you suffer of which requires the surgical procedure?
2. Is the information concerning the surgical procedure clear to you?
3. Did you receive any information regarding possible complications and risks of the surgical procedure?
4. Would you have preferred being given more information about risks and complications?
5. Did you understand what are the benefits of the surgical procedure?
6. Have the risks related to not undergoing surgery been explained to you?
7. Has any other possible treatment option been presented to you?
8. Do you feel involved in the decision of undergoing the surgical procedure?
9. Would you have preferred a greater involvement?
10. Did you have the chance to ask any question about the surgical procedure?
11. Do you see the informed consent as an important moment?
12. In your opinion, did the Doctor who explained the surgical procedure to you consider this as an important moment?
13. Which professional figure obtained the informed consent from you?
    - *Consultant*
    - *Resident*
    - *I don't know*
14. Undergoing the surgical procedure should be:
    - *a decision of the doctors*
    - *a personal decision, shared with the doctor*
    - *a personal decision, only after being given the necessary information*
15. Do you consider satisfactory the information received and the decisions regarding your condition and the surgical procedure proposed?
16. What do you think about this questionnaire?

informed consent procedure the physician in charge introduced himself/herself as Doctor. However, according to the administrative regulations, every health caregiver must wear and keep in evidence the Hospital identity card, which states his/her professional position in the Department. All patients were made aware when being admitted that they were treated in a teaching hospital where Residents were actively involved in the daily clinical practice.

The questionnaire was anonymous and the physician in charge was requested to record the planned type of surgery and his professional qualification (Consultant or Resident). Exclusion criteria were patients under 18 years old, patients with cognitive or sensorial impairment requiring a caregiver or legal representative, non-native Italian language speaking patients and patients admitted for emergency operations.

The questionnaire was divided into two parts. Part 1 aimed to collect demographic information (sex, age, education level). Part 2 (Table II) was made up of 16 questions which could be grouped according to the targeted topic of investigation as follows:

– questions 1-7: information received about the patient's disease and the indicated surgical procedure;
– questions 8-10: involvement in the therapeutic decision making;
– questions 11-12: relevance of the IC;
– question 13: identification of the professional qualification (Consultant, Resident, not identified) of the seeking physician;
– question 14: identification of the patient's role in the decision making;
– questions 15-16: overall satisfaction about the IC and the questionnaire.

Each question (except n° 13 and n° 14) had a closed multiple choice answer, modulated according to a Likert scale of 5 grades. For questions 1-3, 5-8, 10-12, 15: score 1="absolutely no", score 5="absolutely yes". For

TABLE III - *Questionnaire scores for Aspect 1 (information received about the disease suffered and the indicated surgical treatment, questions 1-7) and Aspect 2 (patient's involvement in the therapeutic decision making, questions 8-10) in the whole population and in the real qualification groups (real-C: real Consultant, real-R: real Resident).*

Questions(by aspect)		Overall score(n=236)	real-C group score(n=55)	real-R group score(n=181)	real-R Vs real-C
Aspect 1	Q 1-7	26.0 (24.0-28.0)	26.0 (24.0-28.5)	26.0 (24.0-28.0)	p=0.70
Aspect 2	Q 8-10	9.0 (9.0-10.0)	9.0 (9.0-10.0)	9.0 (9.0-10.0)	p=0.44

TABLE IV - *Distribution of the answers to questions 11-12 (Aspect 3: the relevance of the IC) and 15-16 (Aspect 4: patient's overall satisfaction about the IC and the questionnaire) in the whole population and in the real qualifications groups (real-C: real Consultant, real-R: real Resident). For each question, the distribution among the five alternative choices is reported. For each question, the percentages are relative to the total number of patients in each group who answered to question.*

Questions (by aspect)			Overall distribution (%)(n=236)	real-C group distribution (%)(n=55)	real-R group distribution (%)(n=181)	real-R Vs real-C
Aspect 3	Q 11	1	3 (1%)	1 (2%)	2 (1%)	p<0.01
		2	9 (4%)	4 (7%)	5 (3%)	
		3	41 (18%)	9 (17%)	32 (18%)	
		4	136 (58%)	21 (39%)	115 (64%)	
		5	45 (19%)	19 (35%)	26 (14%)	
	Q 12	1	0 (0%)	0 (0%)	0 (0%)	p<0.01
		2	5 (2%)	1 (2%)	4 (2%)	
		3	40 (17%)	7 (13%)	33 (18%)	
		4	155 (66%)	30 (56%)	125 (70%)	
		5	33 (14%)	16 (30%)	17 (9%)	
Aspect 4	Q 15	1	(0%)	0 (0%)	1 (1%)	p=0.33
		2	2 (1%)	1 (2%)	1 (1%)	
		3	30 (13%)	5 (9%)	25 (14%)	
		4	162 (69%)	35 (65%)	127 (71%)	
		5	38 (16%)	13 (24%)	25 (14%)	
	Q 16	1	1 (0%)	0 (0%)	1 (1%)	p=0.36
		2	1 (0%)	0 (0%)	1 (1%)	
		3	33 (14%)	12 (22%)	21 (12%)	
		4	160 (68%)	34 (63%)	126 (70%)	
		5	39 (17%)	8 (15%)	31 (17%)	

questions 4 and 9 the scoring was inverted to make the results homogeneous in terms of increasing level of patient's satisfaction over the IC. For question 16: score 1= "absolutely inappropriate, I felt uncomfortable", score 5= "very appropriate, I liked it". Questions 13 and 14 offered 3 descriptive options (Table II).

The questionnaire was developed taking into consideration the current literature regarding the goals and requirements for the IC [8-11]. It was written in Italian by the Authors and the version provided in the present paper is just a translation.

To analyze the performance of the Residents, the study cohort was divided according to the real professional qualification of the physician seeking the IC and their results in the questionnaire were compared. Thus 2 groups were identified (real qualification groups):

– real-C: real Consultants, 55 patients;
– real-R: real Residents, 181 patients.

The same analysis was run dividing the population according to the perceived professional qualification of the Doctor seeking IC, as the patient understood it. Thus 3 groups were created (perceived qualification groups):

– p-C: physicians perceived as Consultants, 117 patients;
– p-R: physicians perceived as Residents, 72 patients;
– p-M: physicians whose professional identification was missed or not understood by the patient, 47 patients.

The analysis of the answers to the questionnaire was done grouping the questions according to the common aspect being investigated. (Aspect 1: information received about the disease suffered and the indicated surgical treatment; Aspect 2: patient's involvement in the therapeutic decision making; Aspect 3: the relevance of the IC; Aspect 4: patient's overall satisfaction about the IC and the questionnaire). The scores of the questions of Aspect 1 and 2 were calculated to obtain an overall total score

TABLE V - *Questionnaire scores for Aspect 1 (information received about the disease suffered and the indicated surgical treatment, questions 1-7) and Aspect 2 (patient's involvement in the therapeutic decision making, question 8-10) in the perceived qualification groups (p-C= perceived as Consultant, p-R= perceived as Resident, p-M = identification missed). The p-value of the overall test is reported, as well as the individual inter-group comparisons (where appropriate).*

Questions (by aspect)		p-C group score (n=117)	p-R group score (n=72)	p-M group score (n=47)	Overall test	p-C Vs p-R	p-C Vs p-M	p-R Vs p-M
Aspect 1	Q 1-7	27.0 (24.0-29.0)	26.0 (24.0-27.8)	26.0 (23.0-27.5)	p=0.01	p=0.01	p<0.01	p=0.29
Aspect 2	Q 8-10	9.0 (9.0-10.0)	9.0 (9.0-10.0)	9.0 (9.0-10.0)	p=0.37	N.A.	N.A.	N.A.

TABLE VI - *Distribution of the answers to questions (Q) 11 through 16 (Aspect 3: the relevance of the IC, Aspect 4: patient's overall satisfaction about the IC and the questionnaire) in the three perceived qualification role groups (p-C= perceived as Consultant, p-R= perceived as Resident, p-M= identification missed)*

Questions (by aspect)			p-C groupdistribution (%)(n=117)	p-R groupdistribution (%)(n=72)	p-M groupdistribution (%)(n=47)	Overall test
Aspect 3	Q11	1	0 (0%)	1 (1%)	2 (4%)	0.05
		2	2 (2%)	3 (4%)	4 (9%)	
		3	16 (14%)	16 (22%)	9 (20%)	
		4	70 (60%)	41 (57%)	25 (56%)	
		5	29 (25%)	11 (15%)	5 (11%)	
	Q12	1	0 (0%)	0 (0%)	0 (0%)	<0.01
		2	0 (0%)	0 (0%)	5 (11%)	
		3	11 (9%)	14 (19%)	15 (34%)	
		4	79 (68%)	53 (74%)	23 (52%)	
		5	27 (23%)	5 (7%)	1 (2%)	
Aspect 4	Q13	1	0 (0%)	1 (1%)	0 (0%)	0.01
		2	0 (0%)	0 (0%)	2 (5%)	
		3	15 (13%)	11 (15%)	4 (9%)	
		4	74 (63%)	54 (75%)	34 (77%)	
		5	28 (24%)	6 (8%)	4 (9%)	
	Q14	1	1 (1%)	0 (0%)	0 (0%)	0.73
		2	1 (1%)	0 (0%)	0 (0%)	
		3	17 (15%)	9 (13%)	7 (16%)	
		4	74 (63%)	54 (75%)	32 (71%)	
		5	24 (21%)	9 (13%)	6 (13%)	

TABLE VII - *Contingency table for patients' capacity to identify the correct physician's qualification based on population characteristics (as reported in table 1). Answers where the perceived and the real qualification corresponded were considered "correct", answers with either missing or incorrect identification were considered "wrong".*

	Age group			Education level		
Physician's qualification	**<55 years (%)**	**>55 years (%)**	**Total (%)**	**Lower secondary or lower (%)**	**Upper secondary or higher (%)**	**Total (%)**
Correct	58 (25%)	83 (35%)	141 (60%)	82 (35%)	59 (25%)	141 (60%)
Wrong	46 (19%)	49 (21%)	95 (40%)	41 (17%)	54 (23%)	95 (40%)
Total	104 (44%)	132 (56%)	236 (100%)	123 (52%)	113 (48%)	236 (100%)

TABLE VIII - *Contingency table for the perceived qualification groups and patient's opinion about the "Author of the therapeutic decision" (question 14).*

	Physician's perceived qualification			
Author of therapeutic decision	**p-C group(n=117)**	**p-R group(n=72)**	**p-M group(n=47)**	**Total (%)**
Doctor	15 (6%)	4 (2%)	3 (1%)	22 (9%)
Shared	84 (36%)	56 (24%)	29 (12%)	169 (72%)
Patient	18 (8%)	12 (5%)	13 (6%)	43 (18%)
Total	117 (50%)	72 (31%)	45 (19%)	234 (100%)

for each aspect. Given their heterogeneity, the questions for Aspect 3 and 4 were instead analyzed individually.
Statistical analysis was obtained using the R software environment (version 3.3.3), with a significance level of $p<0.05$. Resulting data were presented as median value and interquartile range (IQR) or as prevalence where appropriate. The analysis of inter-group differences for aggregated data (Aspect 1 and 2) was performed with Kruskal-Wallis test; post-hoc pair-wise analysis, where appropriate, was performed with a Dunn's test, with Bonferroni adjustment for multiple comparisons. The analysis for Aspect 3 and 4 was performed through Chi-squared test. The presence of a correlation between patients' general characteristics and wrong physician identification was assessed with Fisher's exact test.

Results

The study population was made up of 236 patients and their demographic characteristics are reported in Table I. 83.4% (197) of the patients underwent minor-medium surgery while 16.5% (39) had major surgery.
A Resident requested IC from 76.7% (181) of patients while Consultants 23.3% (55). However, according to the answers given to question 13, the patients identified a Resident in 30.5% (72) of cases, Consultants in 49.6% (117) and couldn't identify the professional qualification of the physician in 19.9% (47) of cases.

Age differences did not have any statistically significant impact on the patients' capacity to identify the correct physician's qualification ($p=0.29$), but a lower education level was associated with higher tendency of wrong identification ($p=0.02$) For the sake of the comparison, only answers where the perceived physician's qualification corresponded to the real one were considered "correct", while the cases where the patient couldn't identify the physician's qualification or where the identified qualification was different from the real one were equally considered "wrong". Contingency tables for both aspects are reported in Table VII. A summary of the questionnaire answers and the results of the various comparisons are reported in Tables 3 through 6, and further analyzed in the paragraphs below.

ASPECT 1
INFORMATION RECEIVED ABOUT THE DISEASE SUFFERED AND THE INDICATED SURGICAL TREATMENT

The results of the questions relative to Aspect 1 are reported in tables III and V. The median score for questions 1-7 (min 7, max 35) was 26 (IQR 24-28). There was no statistically significant difference between the real-C and real-R groups ($p=0.70$). However, there was a significant difference based on the perceived qualification groups ($p=0.01$), with the performance of the p-C group being significantly better than both the p-R ($p=0.01$) and p-M groups ($p<0.01$), while no difference was recorded between the p-R and p-M groups ($p=0.29$).

Aspect 2
Patient's involvement in the therapeutic decision making

The results of the questions relative to Aspect 2 are reported in tables III and V. The overall questionnaire score for questions 8-10 (min 3, max 15) was 9 (IQR 9-10). No statistically significant difference between the real-C group and real-R group (p=0.44) was recorded, as well as between the p-C, p-R and p-M groups (p=0.37).
In 9.2% (22) of cases the patient considered the choice to undertake a surgical operation a decision of the surgeon only (passive role), in 18.1% (43) a decision of the patient (active role) and in 71.0% (169) a shared decision between the patient and the surgeon (shared). No association between the perceived professional category of the physician and the type of answer to question 14 was recorded (p=0.16 contingency table is reported in Table VIII).

Aspect 3
The relevance of the IC

The distribution of the answers to questions 11 and 12 is reported in Tables IV and VI. The subjective importance of IC for the patients was significantly different in the comparison of both real qualification groups as well as perceived qualification groups (p<0.01 and p=0.05, respectively). Similarly, when the patient was asked to evaluate the importance of the IC for the physician, the scores differed both at real-C vs real-R groups comparison and at the p-C, p-R and p-M confront (both p<0.01).

Aspect 4
Patients' overall satisfaction about the IC and the questionnaire

The distribution of the answers to questions 15 and 16 is reported in Tables IV and VI. While the real-C Vs real-R comparison showed no significant difference in both questions (respectively p=0.33 and p=0.36), the overall satisfaction on the IC appeared to be different based on the perceived qualifications group (p=0.01), recording a significantly higher patient's satisfaction when the physician was perceived as an Consultants (iC). On the other hand, the overall satisfaction on the questionnaire did not show any difference (p=0.73).

Discussion

IC process requires an advanced level of clinical skill and knowledge. The physician seeking IC must not only know the surgical risks, benefits, and alternatives to the proposed procedure, but also be able to communicate this information to the patient in a clear and comprehensible way.
Thus Residents' exposure to IC must be necessarily based on education, training and tutoring [2,5,6]. This approach has been confirmed by several studies using simulation with standard patient [4], role-play, IC checklist and structured IC to enhance Residents performance in IC.
However, several reports based on surveys of clinical routines indicate that especially Junior-level Residents do not have valid knowledge of the surgical procedures for which they must obtain consent [2,7]. Even exploring the Surgical Residents' self-perception about their performance has indicated that in a majority of cases they requested IC on behalf of Consultants, believing themselves to be inadequately informed of relevant surgical risks and benefits of the proposed procedures [6].
In the present study we didn't register any significant difference of patient's satisfaction over IC when we evaluated the performance of Residents in comparison to Consultants, and we believe that this promising result may be related to our educational training approach.
At our Institution the strategy applied to guarantee adequate information in terms of surgical risks, benefits and therapeutic alternatives is based on the use a standard IC template, which is filled in with the patient's specific details by the Resident under the supervision and approval of Consultants. The information included represents the core knowledge provided to the patient during the IC process. After obtaining the IC, the Resident and the Consultant in charge have a debriefing to discuss any possible concerns and to verify the need for a direct intervention of the Consultant with the patient. Furthermore, as part of the trainees' job-description, Senior Residents are expected to mentor Junior ones, providing them with a ready-at-hand support for the development of communicative and empathic skills.
The main outcome of the present study was not to evaluate the level of objective information provided, but the level of patient's satisfaction with the IC. From this perspective, Consultants and Residents showed comparable results in terms of the patient's perception of information received, involvement in decision making and relevance of IC. However, when the patient subjectively identified the physician seeking IC as Consultant rather than as a Resident, the satisfaction level was statistically higher, independently from the real qualification of the physician. This result was not unexpected. In a survey performed at a tertiary-level US Army teaching hospital [12], most of the interviewed patients demonstrated overall understanding and support of teaching and surgical trainee education. However, when a complete disclosure about the trainee participation in the surgical procedure was applied, the patient's willingness to consent to such procedure significantly decreased for scenarios with increasing level of trainee participation or

lower level of trainee education. In contrast to the actual general opinion, the Authors concluded that significant concern should be raised regarding the effect of a "full disclosure" policy on Resident education and the possibility of increased levels of trainees autonomy [12].
It has already been verified that patients do not understand the various roles and responsibilities of the physicians at different levels of training [13,14].
Unruh at al. [14] conducted a survey in an Orthopedic outpatient clinic and showed that only 36% of the patient population knew that a Resident required no additional training to become a physician and that 64% of the patients were unaware that the Residents who cared for them already had a medical degree. In the present study as in other previous reports, patient's education level appeared to be the most significant predictive factor for wrong identification and understanding of the Residents' clinical role and training level [13,14].
Wiggins et al [15] conducted a survey at an ophthalmology clinic to investigate the Residents' profile at several representative characteristics of professionalism as was evaluated by the attended patients. As a result, 85% of the respondents indicated that the Residents exhibited every characteristic listed on the survey, such as neat appearance, spoke in understandable terms, paid attention to patient concerns and demonstrated other skills termed to be humanistic in the literature. Despite this high level of perceived professionalism, 83% of patients still reported that the subsequent involvement of the Consultants was important, with 65% deeming it very important.
This result is in line with our evidence of a higher evaluation of the Resident's performance in terms of the patient's satisfaction if they were perceived as Consultant and not as Resident while seeking IC.

Conclusion

It is mandatory to provide the Residents with the necessary skills and knowledge to obtain an adequate IC. In the clinical routine Residents are regularly involved in the IC process on behalf of Consultants, and we believe that this patient-based applied training model should not be withdrawn as some Authors have suggested [7] because of reported inadequate Residents' knowledge. It should rather be enhanced in the early phase of the surgical residency by educational programs including simulation with standard patients or role-play exercises and by the use of supportive material as IC checklist, structured IC.
However, adequate education of Residents about securing IC is not sufficient to guarantee an effective IC process. It must also be supported as a counterpart by the promotion of correct and positive patient knowledge and perception of the Residents' skills, clinical role and responsibilities.

Riassunto

Il consenso informato è un elemento fondamentale nella pratica medica. Lo scopo di questo studio è stato indagare il valore del consenso informato dal punto di vista del paziente in un "Teaching Hospital". In particolare viene analizzato il ruolo del Medico in Formazione Specialistica comparando la sua performance con quella di un Medico Specialista Strutturato. Si tratta di uno studio osservazionale prospettico basato su una coorte consecutiva di pazienti sottoposti a un intervento chirurgico elettivo nel periodo da aprile a settembre 2015. Lo studio è stato condotto presso la Clinica di Chirurgia Generale e dei Trapianti dell'Azienda Sanitaria Universitaria Integrata di Udine, accreditato dalla Joint Commission International. La popolazione dello studio comprende 236 pazienti a cui è stato sottoposto un questionario di autovalutazione dopo aver sottoscritto il consenso informato all'intervento chirurgico. Non è stata rilevata alcuna differenza statisticamente significativa nel livello di soddisfazione del paziente tra la performance del Medico in Formazione Specialistica e quella del Medico Specialista Strutturato. Noi crediamo che i risultati positivi osservati siano correlati al nostro approccio educativo e che sia fondamentale la descrizione di "skills" e responsabilità ben definite nel percorso di formazione dei giovani Medici.

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ERRATA CORRIGE

In the Leading Article of n.1-2018 by Professor Nicola Picardi "Aspetti deontologici e giuridici della responsabilità professionale del chirurgo in Italia. Evoluzione storica a partire dal '900" there was a mistake at the 25th line of the second column where was written "precisamente il 16 ottobre 1946 con l'intervento di John Cotton Warren al General Massachussets General Hospital di Boston" instead of "*precisamente il 16 ottobre 1846 con l'intervento di John Cotton Warren al Massachussets General Hospital di Boston*"

ERRATA CORRIGE

In the paper "*Recurrent residual or progressive varicose veins: postoperative long term follow-up of 353 patients*" by Ebner et al. published in the n. 6/2017 of Annali Italiani di Chirurgia there was included erroneously the name of Anna Ebner as co-author that must be delated.