

Supplementary File 1:

Table S1 Means and standard deviations of items and scales measuring psychosocial determinants of surgical site infection preventive compliance

Scale Items ^a	Physicians			Nurses		
	N	M	SD	N	M	SD
Capability	86	5.7	1.1	186	5.6	1.0
I have been sufficiently trained to implement these measures in accordance with the guidelines.	89	4.9	1.9	190	5.5	1.6
I am confident in my ability to implement these measures correctly in practice.	89	6.0	1.1	193	6.0	1.1
Even if I previously made a mistake in relation to these measures, I am confident in my ability to implement them correctly again.	90	6.1	1.2	193	6.1	1.1
I know exactly how to implement these measures correctly.	90	5.8	1.3	191	5.9	1.2
I regularly verify that I have implemented these measures correctly.	90	5.3	1.6	192	5.7	1.3
Effectively implementing these measures has become routine for me.	88	5.7	1.3	190	5.8	1.2
Opportunity^b	85	4.6	1.3	188	4.5	1.2
The technical and spatial equipment in “my” ward and operating theatre are appropriate for implementing these measures.	88	5.4	1.6	192	5.2	1.6
The personnel resources in “my” ward and operating theatre are appropriate for implementing these measures.	90	5.0	1.6	193	4.3	1.8
I have sufficient time to implement these measures effectively.	90	4.4	1.7	193	3.9	1.7
I have sufficient opportunities to keep me informed about the correct implementation of these measures (in-house standards).	90	4.6	1.7	193	4.7	1.7
The cooperation between my colleagues and me regarding these measures is effective.	88	5.2	1.5	193	5.3	1.4
I receive sufficient recognition for implementing these measures, e.g. from my supervisor.	89	3.6	2.1	188	3.6	1.9
Motivation	89	6.2	1.1	185	6.2	.9
If I implement these measures correctly, I contribute to the prevention of surgical site infections.	90	6.4	1.2	191	6.3	1.0
If I implement these measures correctly, I will be a role model for my colleagues.	89	6.0	1.5	190	5.9	1.4
I have set myself the goal of always implementing these measures correctly.	90	6.2	1.2	191	6.2	1.1
As an employee, I feel obliged to always implement these measures correctly.	90	6.4	1.1	192	6.4	.9
Planning	89	3.9	1.8	184	3.9	1.7
I have recently developed specific plans for implementing these measures most effectively.	89	3.8	1.9	184	3.9	1.8
I have recently developed specific plans for overcoming barriers and challenges that make the implementation of these measures increasingly difficult.	89	3.9	1.8	185	3.9	1.7

Notes: M, mean; SD, standard deviation.

^a German originals are available from the senior author upon request.

^b Comparisons of means of the opportunity scale and items between physicians and nurses may be biased because measurement equivalence was not established

Supplementary File 2:

Table S2 Mean rates (in %) and standard deviations of self-reported compliance with surgical site infection (SSI) preventive interventions for which participants reported responsibility for

SSI-preventive clinical interventions	Physicians			Nurses		
	N ^b	Mean compliance rate (in %)	SD	N ^b	Mean compliance rate (in %)	SD
Surgical hand disinfection						
- exposure time	66	96.0	9.2	67	94.2	11.3
- technique	65	97.9	5.0	67	96.4	8.9
Preparing of sterile instruments						
- within the operating theatre	30	99.0	2.8	63	98.5	3.7
- outside the operating theatre	29	92.4	19.1	32	96.2	7.8
Covering prepared sterile instruments						
- within the operating theatre	30	99.3	2.5	51	89.8	23.8
- outside the operating theatre	24	91.1	21.4	18	89.2	30.7
Hair removal—clipping	30	87.8	21.6	50	87.8	20.6
Wearing surgical cap	80	99.9	0.7	88	98.9	3.3
Wearing surgical mask	81	98.1	7.7	89	95.8	10.5
Use of double gloving	57	84.1	28.5	61	91.4	18.7
Using remnant antiseptic	67	97.3	7.5	64	88.8	20.9
Use of iodine-impregnated incision drape	36	79.4	33.3	33	61.0	31.8
Sterile handing over of instruments in the operating theatre	60	97.9	11.0	75	97.9	7.7
Perioperative antibiotic prophylaxis	82	94.3	12.6	42	88.3	20.2
Perioperative temperature measurement	45	82.9	29.1	32	84.7	18.4
Perioperative blood glucose control	38	81.6	25.8	21	78.6	27.1
Perioperative pre-warming	43	69.0	31.2	39	68.7	36.6
Examination of the indication of existing surgical drains	58	92.3	17.3	70	89.5	16.6
Aseptic dressing change	59	89.4	20.0	98	92.1	12.6
Septic dressing change	58	88.6	19.7	94	89.1	16.3
Removing white coat before touching a patient	54	60.3	37.1	-	-	-
Hygienic hand disinfection ^a						
- before touching a patient	89	81.1	19.6	191	81.5	16.8
- before aseptic procedures	87	93.5	13.1	184	92.3	10.6
- after exposure to potentially infectious material	90	97.9	4.3	189	95.9	8.6
- after touching a patient	90	87.8	15.6	191	86.9	15.1
- after touching patients' surroundings	90	71.1	24.7	190	76.1	20.3
Mean overall compliance rate	90	88.8	7.5	193	88.3	9.8

Note: SD, standard deviation.

^a Differences to rates reported in ³³ are due to slightly different analytical samples due to missing values.

^b Denotes the number of respondents who indicated responsibility for the action in question.