Ann Ig. 2025 Jan-Feb; 37(1): 14-24. doi: 10.7416/ai.2024.2643. Epub 2024 Jun 20.

Training in infection prevention and control: survey on the volume and on the learning demands of healthcare-associated infections control figures in the Emilia-Romagna Region (Northern Italy)

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Keywords: Healthcare associated infections; HAI; Infection prevention and control; training; Italy
Parole chiave: Rischio infettivo; infezioni correlate all'assistenza; formazione; Italia

Abstract

Background. *In the context of Infections Prevention and Control activities, the training of healthcare-associated infection control figures is crucial; the COVID-19 pandemic further emphasized the necessity of ensuring a widespread and stable level of skills over time for such professionals. The present work aims to identify the number and training needs of the personnel working in the Emilia-Romagna Region's healthcare facilities as "healthcare-associated infection control figures".*
Methods. *Data were collected through a survey created by experts from the Regional Group "Training in the prevention and control of antibiotic resistance". The questionnaire explored the number, professional and educational background, and training requirements of Healthcare-associated infections control figures in Emilia-Romagna.*
Results. *With 73 figures dedicated to Healthcare-associated infections control, the Emilia-Romagna Region appears to be in line with the European standard ratio (1 professional every 125 beds). Professionals with a nursing background, over 50 years old and of female sex prevail in the group, while the training needs expressed include both theoretical and practical aspects.*
Conclusions. *Healthcare assistants and nursing staff represent a fundamental resource for the implementation of infection prevention and control programs in our healthcare facilities; continuous, multidisciplinary and targeted training of these professionals is confirmed as necessary.*

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Annali di Igiene : Medicina Preventiva e di Comunità (Ann Ig)
ISSN 1120-9135 https://www.annali-igiene.it

Introduction

Health care-associated infections (HAIs) are a major public health issue (1): in 2016-17 the prevalence of patients with at least one HAI was 5.9% in European countries and 8% in Italy (2). The most frequently reported types of HAI are respiratory tract infections, urinary tract infections, surgical site infections, and bloodstream infections. As infection prevention and control (IPC) programmes represent key strategies for dealing with such public health issue, education and training of HAI control figures is crucial (1).

In Italy, the figure dedicated to HAI control originated with Circulars n. 52/1985 (3) and n. 8/1988 (4) issued by the Ministry of Health. Such documents defined the skills profile of HAI control figures and fixed the minimum staff standards - as defined by the US Centers for Disease Control and Prevention (5,6) - as one HAI control figure every 25 beds, or, depending on the type of ward, every 9,000-10,000 admissions per year.

The introduction of HAI control figures in the Italian National Health Service was gradual and not always homogeneous throughout the country (7). In the Emilia-Romagna region (Northern Italy) the HAI control figures were set shortly after the issuing of a circular, however the training of HAI control figures has been a major concern for decades (8,9); a few "infection-control nurse" (Italian acronym: ICI) professional training courses started in the '90s (10) and, more recently, several dedicated first-level Masters courses have been activated (11).

According to the Regional Council decision n.318/2013 (8), each public health authority (University Hospital or Local Health Facility) must designate a multidisciplinary Strategic Committee dedicated to clinical risk management, in charge of developing both antimicrobial stewardship (AS) and IPC programs. These strategies are operationalized by two sub-groups of experts focused respectively on AS and IPC and highly integrated. HAI control figures (nurses or health assistants) are important non-medical members of the IPC working group. Further, inside each ward of each health facility, specifically designated health professionals promote the development of AS and IPC activities, acting as a link between the Risk Management Strategic Committee and their ward.

COVID-19 pandemic severely hit the Emilia-Romagna region (12,13) and emphasized further the importance of maintaining a widespread and consistent level of knowledge on IPC. Thus, the regional council decision n. 832/2022 (14) set up a regional multi-professional board of experts (the "HAI control figures board"), aimed at defining and implementing regional training activities for HAI control and responsible antibiotic use.

The HAI control figures board includes representatives of hygienists, of infectious disease specialists), microbiologists, pharmacists, and HAI control nurses from the whole Region. Further, in each public health service, an Infectious Risk Manager was designated as a point of contact between the local HAI control figures and the the regional board. The board is divided into smaller working groups; one is focused on the training requirements of nurses and healthcare assistants involved in IPC activities.

Considering both the high turnover of staff also due to COVID-19 emergency and the different educational and professional backgrounds of HAI control figures, in order to better understand their future training needs, the working group designed and carried out a survey with the following specific objectives:

to record the number of health professionals employed as HAI control figures in Emilia-Romagna Region and to map their formal roles, training backgrounds and working place;

to explore HAI control figures training needs in the main technical domains.

Methods

1. Setting

On 1 January 2023, the Emilia-Romagna Region counted 4,460,030 inhabitants. The functional articulation of Healthcare in the Emilia-Romagna Region includes 8 Local Health Authorities (LHAs), and 4 University/Regional Hospitals (Bologna, Ferrara, Modena, Parma). Further, three highly specialized facilities are currently classified as "IRCCS" (Intitutes for scientific hospitalization and treatment" in Italian, a network of hospitals, public or privately owned) approved by the Ministry of Health and sharing the compulsory duty to be additionally involved in applied research in their special field, financed by the same Ministry: the Montecatone Rehabilitation Institute (Imola, BO), the Rizzoli Orthopaedics Institute in Bologna, and the Romagna Scientific Institute for the Study and Treatment of Cancer (Meldola, FC).

2. Survey design and data collection

This cross-sectional study was carried out in 2022. During the first months of 2022, the regional multi-

professional board of experts focused on the training requirements of different professionals involved in IPC activities (14) designed a survey to explore the following issues:

- total number of HAI control figures;
- demographic, organisational and training characteristics of HAI control figures;
- their training needs.

The survey was planned to be carried out in two steps. Firstly, infectious risk managers of each regional public health service were asked to fill a form describing the amount of employees working as HAI control figures within their organization.

The amount of HAI control figures was expressed both as absolute numbers and as Full time equivalents (FTE) which is defined as total hours worked as HAI control figure divided by the total number of compensable hours worked by a healthcare professional.

Then, each HAI control figure was asked to fill in a qualitative questionnaire investigating organizational, training, and demographic aspects. The survey was managed through Microsoft Forms survey tool.

The questionnaire was composed of 4 parts: the first one collected data on gender, age category and institution of employment for each participant. The second section included questions on the service of work, the executive position, and the possible coordination role of each professional; the third part explored the professional and educational background of the respondents, and their job seniority. The last section investigated the training needs of the respondents and consisted of 7 items with a dichotomous closed answer (yes/no). Each item represented a specific domain of competences, and the professional was required to express his/her need for further training in it. The seven domains of the "training needs" section (Table 1) were based on both Italian and international guidelines (15-17).

Data collection was carried out from 12/07/2022 to 26/09/2022. Out of the 15 public healthcare institutions in the Emilia-Romagna Region, only one did not take part in the survey.

3. Statistical analysis

Data analysis was performed using the Software IBM SPSS Statistics Version 28. Categorical variables were summarized by absolute and relative frequencies and compared using Pearson's chi-square test or

Table 1 - IPC training domains as suggested by national and international guidelines (15-17). An acronym and some examples of the domain's essential topics are also reported.

Training domain	Acronym	Examples of essential knowledge and competences
1. Organizational process and care bundles evaluation domain	VAL	Promoting and participating in the evaluation of compliance to the procedures and contributing to the improvement of compliance by monitoring parameters regarding process or outcome.
2. Technical-professional domain	TEC	Isolating and activating special (barrier) precautions, skin disinfecting, patient preoperative preparing, decontaminating and sterilizing medical devices and addingother technical issues.
3. Preparedness for pandemic/ epidemic events domain	PREP	Contributing to the design and implementation of procedures for crisis management in infection control: alerting management, recalling patients, recalling potentially contaminated equipment and supplies, reporting and exchanging with relevant healthcare professionals.
4. Training/research domain	F/R	Collecting and analyzing the relevant documentation for the development of an infection control procedure. Adopting principles and methods of adult education and learning (participatory strategies, including bedside and simulation training). Giving priority IPC domains to be included in training and education programs according to the target audience and context.
5. Organizational-programmatic domain	PO	Planning strategies for the design of healthcare procedures. Setting a program for the implementation and the revision of infection control guidelines and recommendations; disseminating appropriate policies and procedures to clinical departments and helping clinicians in their implementation.
6. Antimicrobial stewardship domain	AMS	Taking part in AMR surveillance programs. Formulating and proposing appropriate indicators concerning the identification of AMR. Participating in periodic audits. Contributing to clinicians' training in antimicrobials use.
7. Communication/ relationships domain	COM	Facilitating the implementation of infection control procedures within the clinical care organization. Identifying barriers to compliance with procedures and involve clinicians.

Table 2 - HAI control figures in the surveyed healthcare institutions, Emilia Romagna region (Northern Italy), 2022.

Healthcare institution	Infectious risk manager		HAI control figures		Total		Number of beds [a]	Total admissions [a]	Human resources / bed ratio	Human resources /10.000 admissions ratio
	n	FTEs	n	FTEs	n	FTEs				
# 1	1	0.75	3	2.25	4	3	706	27,860	1/235	1.08
# 2	1	1	1	1	2	2	331	13,316	1/166	1.5
# 3	1	0.5	15	14.5	16	15	2,976	130,677	1/198	1.15
# 4	1	0.5	8	8	9	8.5	1,512	51,878	1/178	1.64
# 5	1	1	9	9	10	10	1,498	53,392	1/150	1.87
# 6	1	1	7	6	8	7	1,306	57,043	1/187	1.23
# 7	1	1	5	4.83	6	5.83	1,156	51,332	1/198	1.14
# 8	2	2	2	1	4	3	891	38,616	1/297	0.78
# 9	1	0.75	4	3	5	3.75	720	30,718	1/192	1.22
# 10	1	1	3	3	4	4	484	11,805	1/121	3.39
# 11	0	0	2	2	2	2	349	14,401	1/175	1.39
# 12 [b]	0	0.5	1	0.5	1	1	314	15,127	1/314	0.66
# 13 [b,c]	0	0.5	1	0.5	1	1	158	1,321	1/158	N/A
# 14	0	0	1	0.25	1	0.25	42	1,521	1/168	1.64
Total	11	10.5	62	55.83	73	66.33	12,443	499,007	1/188	1.33

[a] Number of beds and total admissions are referred to the year 2021.
Human resources/bed ratio and Human resources /10,000 admissions ratio are calculated based on FTEs.
[b] In institutions #12 and #13, the same person carries out the functions of Infectious risk manager and HAI control figure.
[c] In institution #13, the resources/10,000 admissions ratio has not been reported and is excluded from the calculation of the regional average value, as it is out of scale due to the rehabilitative and long-term care nature of the facility.

Fischer's exact test. Continuous variables were summarized by median and interquartile range (IQR).

Human resources FTEs/ bed ratio and Human resources FTEs/10,000 admissions ratio were calculated both in overall terms and for each individual institution, to provide both an overview of the regional situation and a measure of the variability among units.

Data on acute-care beds and hospital admissions of each institution were obtained from the regional databases.

This paper was written in accordance with Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines (18).

Results

1. HAI control figures census and main features

Out of the 15 public healthcare institutions in the Region, 14 provided information on the number and FTEs of the HAI control figures (Table 2).

Overall, the reported total number of HAI control figures was equal to 73 (ranging from 1 to 16 per facility). Among them, 11 were infectious risk managers and 62 were HAI control figures.

The global human resources (HR) /bed ratio was 1/188 (ranging from 1/324 to 1/121), while the overall HR/10,000 admissions ratio was 1.33 (ranging from 0.66 to 3.39).

As reported in Table 3, a total of 66 professionals (90% of the total number of HAI control figures in the Region) took part in the survey. Among them, 15% were males and 85% females and the most represented age category was 51-60 years old (56%).

The professionals worked mainly in the Medical Management or in the Nursing Management Department (44% and 42%, respectively), and most of them were employed in the LHAs (65%) or University Hospitals (30%).

Respondents were nurses (95%) or healthcare assistants (5%) and many did not hold an organizational/ functional position (71%).

Half of the professionals dedicated to HAI control in the region have less than five years of experience in the specific function. More specifically, at the moment of the survey, 28% of professionals had less than 2 years of experience (newly employed professionals recruited after COVID-19 pandemic outbreak), 26% of professionals had 2-5 years of experience, and 34% of professionals had more than 10 years of experience are present in the region.

Considering the educational background, the Pre-

Table 3 - Demographic and professional features of HAI control figures, Emilia-Romagna region, Italy, 2022. Data are expressed as n (%).

	Sample features (n= 66)	
Demographic dimension	***Age category (years)***	
	<30	4 (6%)
	31-40	8 (12%)
	41-50	15 (23%)
	51-60	37 (56%)
	>60	2 (3%)
	Gender	
	Female	56 (85%)
	Male	10 (15%)
Organizational and operational dimension	***Healthcare institution of work***	
	Local Health Authority	43 (65%)
	University Hospital	20 (30%)
	IRCCS [a] or other highly specialised facility	3 (5%)
	Service of work	
	Public Health Department	2 (3%)
	Medical Management	29 (44%)
	Nursing Management	28 (42%)
	Clinical Governance	2 (3%)
	Hospital Hygiene	3 (5%)
	Missing	2 (3%)
	Executive position	
	Organizational position holder	19 (29%)
	Non organizational position holder	47 (71%)
	Coordination function	
	Coordination position holder	19 (29%)
	Non coordination position holder	47 (71%)
Professional and Formative dimension	***Professional qualification***	
	Healthcare assistant	3 (5%)
	Nurse	63 (95%)
	Educational level	
	Practical nursing diploma (before Law 251/00)	25 (38%)
	University degree (3 years training)	25 (38%)
	Master degree (5 years)	16 (24%)
	Any IPC training received	
	Yes	34 (52%)
	No	32 (48%)
	Specific IPC training received	
	"ICI" [b] Regional Course	4 (6%)
	"ISRI" [c] Master	29 (44%)
	Master in Public Health	1 (2%)
	Years of activity as HAI control figure	
	<2	18 (28%)
	2-5	17 (26%)
	6-10	8 (12%)
	>10	22 (34%)

[a] IRCCS - "Scientific Institute for Treatment and Research", Italian acronym
[b] ICI - "Infectious risk control nurse", Italian acronym
[c] ISRI - "Infectious Risk Specialist Nurse", Italian acronym

Table 4 - Professionals specifically trained in IPC in relation to their age category and in relation to their years of specific activity as HAI control figures. Emilia Romagna Region, Italy, 2022.

		Any IPC training received		p
		No (N=31)	Yes (N=34)	
Age category	<30	2 (50%)	2 (50%)	0.264
	31-40	6 (75%)	2 (25%)	
	41-50	4 (27%)	11 (73%)	
	51-60	19 (51%)	18 (49%)	
	>60	1 (50%)	1 (50%)	
Years of activity as HAI control figure	<2	9 (50%)	9 (50%)	0.373
	2-5	7 (41%)	10 (59%)	
	6-10	2 (25%)	6 (75%)	
	>10	13 (59%)	9 (41%)	

Reformation Course (Practical Nursing Diploma) and the University Degree were the most reported. In particular, University education was more frequently reported by younger health workers (less than 50 years of age), while the Diploma was held by more than half of the over-50s. 52% of the sample received specific post-graduated training in the field of HAIs. Among them, only a small proportion attended the Regional course focused on the training of an Infectious risk control nurse (ICI) or the master's degree course in Public Health. On the other hand, 44% of the sample stated that they attended (or were attending) the Master course for "Infectious Risk Specialist Nurse (ISRI)" (Table 3).

No statistically significant difference was observed in the distribution of professionals who received specific training either according to the age of the subjects or according to the years of employment as HAI control figures (Table 4).

2. HAI control figures training needs

Overall, organizational processes and care bundles evaluation domain (VAL), technical-professional domain (TEC) and preparedness for pandemic/epidemic

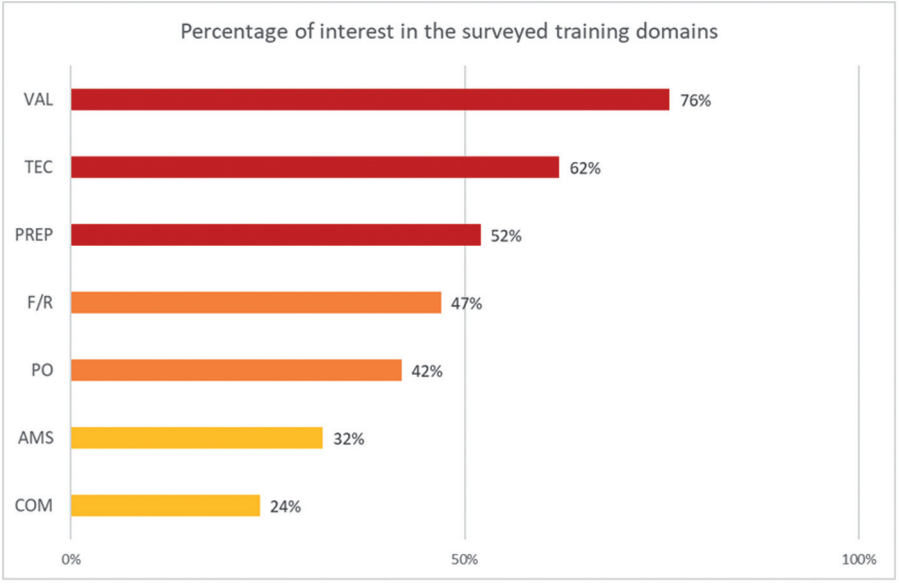

Figure 1 -Training needs of HAI control figures. Emilia Romagna Region, Italy, 2022

[a] VAL (organizational process and care bundles evaluation domain); TEC (technical-professional domain); PREP (preparedness for pandemic/epidemic events domain); F/R (training/research domain); PO (organizational-programmatic domain); AMS (antimicrobial stewardship domain); COM (communication/relationships domain).

Table 5 - Training domains required, by stratifying the sample according to years of HAI control activity and possession or not of specific IPC training. Emilia Romagna region, Italy, 2022

Training field	Whole sample (n=66)	<5 years of HAI control activity	>5 years of HAI control activity	p	Specific IPC training [a] not received	Specific IPC training [a] received	p
TEC	41	22 (55%)	18 (45%)	0.507	28 (68%)	13 (32%)	<0.001
PO	28	14 (50%)	14 (50%)	0.386	9 (32%)	19 (68%)	0.021
VAL	50	28 (57%)	21 (43%)	0.259	24 (48%)	26 (52%)	0.558
AMS	21	12 (57%)	9 (43%)	0.460	9 (43%)	12 (57%)	0.360
PREP	34	19 (57%)	14 (43%)	0.358	18 (53%)	16 (47%)	0.309
COM	16	8 (50%)	8 (50%)	0.472	4 (25%)	12 (75%)	0.029
F/R	31	17 (55%)	14 (45%)	0.538	12 (39%)	19 (61%)	0.106

[a] The specific IPC trainings received referred to "ISRI" Master, Public Health Master, or "ICI" Regional Course. VAL (organizational process and care bundles evaluation domain); TEC (technical-professional domain); PREP (preparedness for pandemic/epidemic events domain); F/R (training/research domain); PO (organizational-programmatic domain); AMS (antimicrobial stewardship domain); COM (communication/relationships domain).

events domain (PREP) were the three most requested training domains, representing the training needs respectively for 76%, 62% and 52% of the investigated professionals (Figure 1).

About a half of the interviewees were interested in the training/research domain (F/R) and in the organizational-programmatic domain (PO). On the other hand, professionals felt to have reached some consolidated knowledge in the domain of antimicrobial stewardship (AMS) and in the communication/relationships domain (COM).

When investigating job seniority across training needs (Table 5), no statistically significant differences emerged.

On the contrary, having received a specific IPC training seemed to affect the choice among the 7 training fields. The technical-professional domain was required predominantly by those who did not undergo specific training in IPC (p<0.001). The organizational-programmatic domain and the communication-relationship domain, on the other hand, were preferred by those who had received IPC training (p=0.021 and p=0.029, respectively).

Discussion and conclusions

Appropriate infectious risk prevention and control practices represent crucial activities for any healthcare system, globally and locally (19). As IPC teams need to have a sufficient number of employees adequately educated and trained, the multi-professional board of experts of the Emilia-Romagna region designed a regional survey to assess the volume, features and training needs of HAI control professionals in Emilia-Romagna.

According to our data, the number of HAI control figures in the region is 73. The regional median HR/bed ratio is 1 HAI control figure every 188 beds, and it appears to be higher than the Italian national ratio (about 1/415) (7)(20), but lower than the European ratio (1/125) (21).

If compared with the ratio of 1 IPC nurse/250 beds proposed in the eighties by CDC (6), the situation in our region respects international standards; still, the 1/250 ratio standard appears outdated. Several recently published national and international documents (7,21) suggest boosting these numbers, reaffirming that 1/250 is a minimum standard that can be considered as a useful starting benchmark in contexts where a proper IPC culture is still missing (22). At European level, standards such as 1 HAI control figure / 100 beds in Acute Care Hospitals and 1 per 150-200 beds in Long Term Care Facilities should be applied (21).

According to our findings, the demographic features of the samples (85% females mainly 51-60 years old) are in line with the nursing sector's main characteristics recorded in other Western countries (23). The distribution of professionals working in the LHAs or University Hospitals (about 2/3 and 1/3, respectively) is representative of the organization of public healthcare institutions in the Emilia-Romagna region (8 LHA and 4 University Hospitals, respectively). The percentages of professionals belonging to the different services (44% for the Medical Directorates, 42% for the Nursing Directorate) and those of professionals holding organizational positions (29%) are comparable with national data (7). Coordination position holders

are, on the contrary, more present in Emilia-Romagna than the national average (7). The prevalence of nurses (95%) over health assistants in the exercise of HAI control functions reflects the respective numbers of the two professional profile holders in our country. Although the figure of the health assistant (a profession dedicated to prevention and health promotion) has existed in Italy for more than a century, the number of health assistants in Italy today is only the 0.1% of the total number of nurses (24). Finally, the educational backgrounds seem to be consistent with the distribution of respondents in different age groups: the academic nursing degree has been established only in 1991,.à therefore the majority of the over-50s hold the previously established diploma.

A remarkable amount of HAI control professionals was actually recruited in our region during the pandemic period (28%); from a quantitative point of view, this number is much higher than the increase in recruitments (approximately +2%) that took place in the Italian National Health Service between 2019 and 2021 (25), and seems to account for a renewed focus on the importance of HAI control activities stimulated by the advent of the COVID-19 pandemic (26).

Additionally, our data indicate that only 52% of our responders received a specific post-degree training in the IPC field. The frequency of professionals who underwent specific training does not show any significant difference based on the subjects' age or years of experience as IPC nurses/health assistants; still, professionals 41-50 years old and professionals who have been in service for 6-10 years seem to have particularly low percentages of specific IPC training. These findings highlight the need to increase the offer both at regional and at local levels of post-degree specialized training activities for HAI control professionals and to monitor this educational process carefully and actively (8,15,16). Further, it is crucial to include Academia in the educational process in order to increase the offer of education in IPC and AMR in academic courses in the medical/veterinary area, and to take them up constantly in post-graduate training programs. (27, 28). Recent evidence suggests (29-31) that adult healthcare training (both early in the recruitment phase and subsequently on a regular schedule) should:

- prioritize blended learning (combining experiential and transmissive approaches)
- individualize teaching and learning strategies;
- focus on peer support initiatives.

As for our sample's learning needs, the most requested training fields are:

- organizational processes and care bundles evaluation domain (VAL);
- technical-professional domain (TEC);
- preparedness for pandemic/epidemic events domain (PREP).

A technical-specialistic education is especially required by those who did not receive any IPC training, while knowledge and competences in VAL and PREP domains lack both in trained and non-trained professionals. This finding confirms that healthcare professionals require practical skills (e.g., process evaluation and epidemic event preparedness) as well as academic and theoretical expertise (32-34).

Educational needs in the organizational-programmatic (PO), training/research (F/R) and communication/relationships domain (COM) are more expressed by IPC professionals who already received a specific training. Until the Seventies, IPC competences used to belong to the skill set of the physician who specialized in Hygiene and Preventive Medicine (19); as a result, many nurses and health assistants eventually got interested in the IPC field after attending specific courses (ICI course, Master degree).

Furthermore, it is important to highlight that, overall, the training in the communication and relationship area is the least requested (24%). (35), professionals seem to struggle recognizing their own communicative inadequacy. We should read this finding keeping in mind that medical education does not historically include soft skills, such as communication.

Finally, Emilia-Romagna Region, which has a great tradition in infectious disease monitoring and surveillance (36-37), paid great attention to the AMR problem over the last decades (38), since most of the antimicrobial resistance (AMR) burden is caused by microorganisms acquired in healthcare as HAIs (39). These training activities seem to be effective as our findings indicate that HAI control professionals in Emilia-Romagna ask very rarely to be further trained in the AS/AMR field.

The results of our survey should be read in light of the study limitations. Firstly, given the lack of a validated questionnaire to investigate the educational needs of HAI control figures, the survey was set up *ad hoc* for the study and not previously validated. Nevertheless to improve its validity, it was designed considering national and international guidelines on HAI control figures training needs (15-17). Secondly, due to the local nature of our investigation and the significant differences existing among regional health services (40), our results could have a relatively poor generalizability in the Italian context. On the other

hand, the very high response rate of the structures (14 out of 15) and of the healthcare professionals (90%) allow our data to be representative of the characteristics and training needs of HAI professionals in Emilia-Romagna.

In conclusion, the number of professionals employed as HAI control figures in the Emilia-Romagna region appeared to be sufficient, however it could be improved to reach high international quality standards. Despite the large number of professionals hired with COVID, our data do not show differences in terms of educational background or training needs between junior and senior professionals. We advocate, therefore, that IPC training should be standardized and continuous, even after academic/specialistic training, and not limited to the moment of hiring. Lastly, the training needs of our professionals appear to be strongly oriented towards managerial skills, preparedness and training and research skills. These findings will be useful to set up future training based on the actual needs of health professional involved in Infection prevention and control.

Acknowledgements

The present work was possible thanks to the infectious risk managers and the Healthcare Associated Infections control figures from the healthcare institutions of the Emilia-Romagna Region, who took part in the survey. We further want to thank our colleagues Diletta Priami, Federica Borsari, Alice Benini, Enrico Ricchizzi, Carlo Gagliotti, Rossella Buttazzi and Maria Luisa Moro from the Emilia-Romagna Region's Health Policies Department for their constant willingness to collaborate with the multidisciplinary group that conducted the survey and the other professionals belonging to the multidisciplinary working group "Training in the prevention and control of antibiotic resistance" (Regional Council Determination Num. 832 of 19/01/2022) - Working Subgroup 2 "Dedicated figures": Edoardo Carretto, Laura Cavazzuti, Sandra Monalti, Sara Tedeschi and Annamaria Valcavi.

We finally want to thank Prof. Elena Righi and Dr. Elena Vecchi from University of Modena and Reggio-Emilia for supervising our work from a methodological point of view.

Riassunto

Prevenzione e controllo del rischio infettivo nelle attività assistenziali: volume e bisogni formativi del personale dedicato nella Regione Emilia-Romagna (Italia)

Background. La formazione del personale per il Governo del Rischio infettivo nelle attività assistenziali è fondamentale nel contesto delle attività Prevenzione e Controllo del Rischio Infettivo; la pandemia COVID-19 ha ulteriormente evidenziato la necessità di garantire un livello di competenze diffuso e stabile nel tempo per il personale dedicato. L obiettivo di questo lavoro è inquadrare il volume e i bisogni formativi del personale specializzato nella prevenzione delle infezioni correlate all'assistenza nelle aziende sanitarie della Regione Emilia-Romagna.

Metodi. La raccolta dati è stata effettuata attraverso un questionario ideato da professionisti appartenenti al Gruppo Regionale "Formazione in tema di prevenzione e controllo

dell'antibioticoresistenza". Le diverse sezioni del questionario indagavano numero, retroterra educativo e professionale e bisogni formativi delle figure dedicate al controllo del rischio infettivo nelle Aziende Sanitarie della Regione Emilia-Romagna.

Risultati. Con 73 figure dedicate al controllo delle Infezioni correlate all'assistenza, la Regione Emilia-Romagna appare in linea rispetto agli standard europei (1 professionista ogni 125 letti). Prevalgono nel gruppo professionisti con formazione di natura infermieristica, di oltre 50 anni e di sesso femminile, mentre i bisogni formativi espressi includono sia aspetti teorici sia aspetti pratici.

Conclusioni. Assistenti sanitari e personale infermieristico rappresentano una risorsa fondamentale per l'implementazione di programmi per il controllo del rischio infettivo oggi nelle strutture sanitarie; si conferma come necessaria la formazione continua, multidisciplinare e mirata di tali professionisti.

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