L'internista e la sepsi

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Segretario Nazionale FADOI

Convegno «Diagnosi e gestione clinica della sepsi» – Roma 13 settembre 2019

I saluti























FONDAZIONE FADOI FORMAZIONE RICERCA

Agenda

- I Numeri
- Le attività di ricerca
- Le attività di formazione
- Fadoi 2.0
- Le competenze
- Conclusioni

I numeri

DRG 576: number of admissions, % and ratio/1000 beds

Admissions to: Year	Any discipline	Internal Medicine (code 26)	Infectious Disease (code 24)	ICU	Geriatrics (code 21)	Other medical disciplines
2012 **n.o** **%** **x1000beds**	44.659	28.943 (64,8%) **28,9**	4.140 (9,3%) 4,1	994 (2.2%) 0,99	3.397 (7,6%) 3,4	6.389 (14,3%) 6,4
2013 **n.o** **%** **x1000beds**	49.126	31.177 (63,4%) **31,2**	4.730 (9,6%) 4,7	1.071 (2.2%) 1,1	4.099 (8.3%) 4,0	7.236 (14,7%) 7,2
2014 **n.o** **%** **x1000beds**	53.508	33.930 (63,4%) **53,5**	4.942 (9,2%) 4,9	1.131 (2.1%) 1,1	4.748 (8.9%) 4,7	7.866 (14.7%) 7,9

Fonte: Ministero della Salute

La Ricerca

CLINICAL STUDY

The SNOOPII study on bloodstream infections: data from FADOI



31 internal medicine units from 14 different Italian regions was conducted from March 1, 2012, to December 31, 2012 (SNOOPII Study)

533 bloodstream infections from different regions of Italy

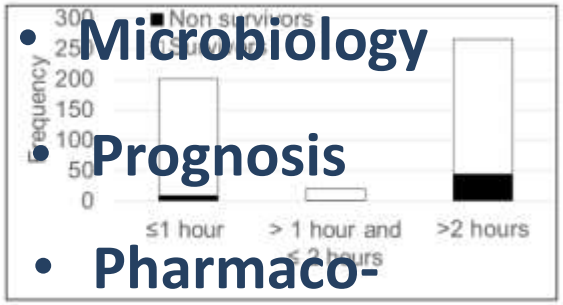
Mazzone A et al. Medicine (Baltimore). 2016;95:e2124.

La Ricerca

CLINICAL STUDY

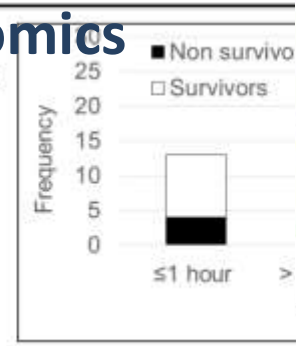
The SNOOPII study: major findings

- Epidemiology outside ICU
- Microbiology
- Prognosis
- Pharmaco-economics



Patie

Patients with septic shock



Mazzone A et al. Medicine (Baltimore). 2016;95:e2124.

TABLE 1. Baseline Characteristics

Characteristics	533 Patients

Table 5. Mean costs: comparison between different categories of patients with sepsis

	Non-severe Sepsis n=200		Severe Sepsis n=156		Septic Shock n=17		Multi-Organ Failure n=160		P-value and Chi squared
	Mean [€] *(Median)*	%	Mean [€] *(Median)*	%	Mean [€] *(Median)*	%	Mean [€] *(Median)*	%	
Human resources	1,146.75 *(884.59)*	9.66	1,447.33 *(1,052.3)*	12.58	1,621.26 *(1,547.91)*	15.58	2,442.97 *(1,332.18)*	19.27	0.00
Drugs	530.25 *(223.30)*	4.47	444.51 *(227.42)*	3.86	644.86 *(348.96)*	6.20	916.11 *(265.28)*	7.23	0.25
Clinical examinations	359.04 *(293.10)*	3.02	370.19 *(287.96)*	3.22	421.05 *(277.44)*	4.05	357.16 *(353.35)*	2.82	0.02
Blood transfusions	26.56 *(0.00)*	0.22	49.35 *(0.00)*	0.43	74.10 *(0.00)*	0.71	99.80 *(0.00)*	0.79	0.03
Minor surgical procedures	7.95 *(0.00)*	0.07	31.76 *(0.00)*	0.28	39.38 *(0.00)*	0.38	2.76 *(0.00)*	0.02	0.00
Hospitalisation	8,023.09 *(5,823.7)*	67.56	7,433.63 *(5,459.7)*	64.63	6,044.64 *(5,823.75)*	58.09	6,955.15 *(4,731.80)*	54.87	0.00
General costs	1,781.23 *(1,399.9)*	15.00	1,725.31 *(1,233.66)*	15.00	1,560.93 *(1,689.58)*	15.00	1,901.29 *(1,243.99)*	15.00	0.13
Total cost	**11,874.87** ***(9,332.7)***	100.00	**11,502.07** ***(8,224.39)***	100.00	**10,406.22** ***(11,263.84)***	100.00	**12,675.24** ***(8,293.26)***	100.00	**0.00**

	Non-severe Sepsis n=200	Severe Sepsis n=156	Septic Shock n=17	Multi-Organ Failure n=160	P-value and Chi squared
Mean lenght of stay [days]	21.85	19.30	18.82	15.69	0.01
Mortality rate [%]	5.50	17.31	11.76	23.75	0.00
Mean daily costs [€/day]	543.47	595.96	673.50	663.24	0.00

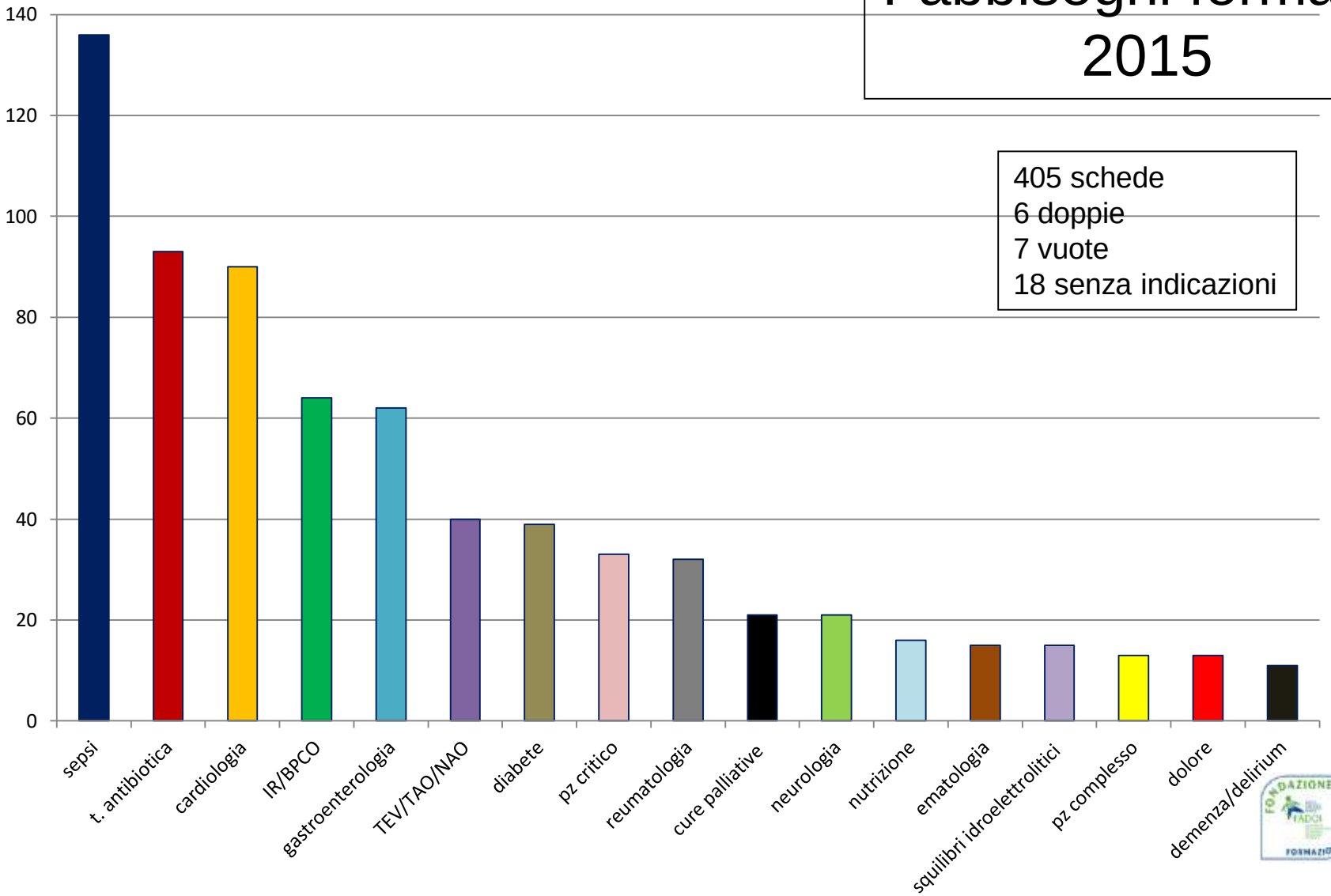
La Formazione

374 schr



Fabbisogni formativi 2015

405 schede
~~6 doppie~~
7 vuote
18 senza indicazioni



La Formazione









	A	B	C	D
1	TITOLO	DATA	CITTÀ	NUMERO
2	Corso Gestione delle infezioni Batteriche-Viminale	**16/05/2007**	Roma	89
3	Le infezioni gravi nel paziente internistico (nell'era dellamulti antibiotico-resistenza)	13/05/2009	Cernobbio	100
4	La gestione delle infezioni delle basse vie respiratorie in medicina interna	14/05/2009	Cernobbio	162
5	Le infezioni gravi nel paziente internistico	16/05/2010	Bologna	153
6	Paziente con infezioni gravi	15/05/2011	Firenze	322
7	Le infezioni gravi batteriche e fungine in medicina interna	16/05/2011	Firenze	172
8	Infezioni fungine in medicina interna	06/05/2012	Rimini	74
9	La procalcitonina nel percorso diagnostico terapeutico della sepsi e delle infezioni di origine batterica	06/05/2012	Rimini	95
10	Infezioni gravi nel paziente anziano fragile ospedalizzato	07/05/2012	Rimini	142
11	Infezioni gravi nel paziente anziano fragile ospedalizzato	11/05/2013	Messina	71
12	Infezioni emergenti in Medicina Interna	12/05/2013	Messina	100
13	Nuove infezioni e nuove strategie di antibioticoterapia	10/05/2014	Bologna	208
14	Update in infettivologia	12/05/2014	Bologna	161
15	Web Seminar Infezioni Fungine	18/09/2014	web	208
16	Problematiche infettivologiche emergenti in medicina interna e guida all'uso razionale della terapia antimicrobica	28/11/2014	Montecatini	54
17	Infezione da HIV e Aids – recenti acquisizioni e nuovi schemi di terapia	05/12/2014	Roma	33
18	Infezioni Gravi Nel Paziente Complesso In Medicina Interna	09/05/2015	Torino	251
19	I giovani gestiscono l'urgenza: l'abc in corso di pancreatite, sincope e sepsi	11/05/2015	Torino	102
20	Web Seminar Infezioni Fungine	06/02/2015	web	61
21	Problematiche infettivologiche emergenti in medicina interna e guida all'uso razionale della terapia antimicrobica	27/11/2015	Siena	85
22	Clinical competence Gestione del paziente con infezione da candida in Medicina Interna	14/05/2016	Roma	40
23	La Sepsi e le infezioni e resistenze batteriche in Medicina Interna	15/05/2016	Roma	209
24	Le polmoniti	16/06/2016	Roma	193
25	Il futuro della terapia antibiotica nelle infezioni dei tessuti molli	16/06/2016	Roma	88
26	La sepsi e il giovane internista	10/09/2016	Oristano	40
27	Problematiche infettivologiche emergenti in Medicina Interna e guida all'uso razionale della terapia antibìmicrobica	25/11/2016	Firenze	86
28	Gestioni delle infezioni nel paziente internistico complesso	13/05/2017	Sorrento	157
29	Antibiotico-terapia delle ABSSSI	15/05/2017	Sorrento	95
30	Problematiche infettivologiche emergenti in medicina interna e guida	24/11/2017	Siena	67
31	The dark side of immunology: infezione da HIV e malattie immunologiche – nuove acquisizioni	28-29/04/2017	Roma	69
32	Antibiotico terapia nella pratica clinica	14/06/2018	Napoli	58
33	Le infezioni gravi in medicina interna. gestione e nuovi farmaci	**13/05/2018**	Bologna	163
34				**3908**





FADOI 2.0


FASTWEB LTE 16:27 16%
Medici
Flow Charts
Linee Guida
FADOI
Medici
Infermieri
Formule
Bibliografia
Info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Medici
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Malattie Infettive
Malattie Cardiovascolari
Medicina Perioperatoria
Endocrinologia Malattie Metaboliche Disturbi Elettrolitici
Malattie Sistema Gastrointestinale
Malattie Apparato Urinario
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Medici
Linee Guida
Malattie Infettive
Sepsi Severa e Shock Settico
Gestione Clinico Terapeutica delle Polmoniti
Clostridium Difficile
Endocardite
Epatiti Infettive
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La Clinical competence



Management of Patients with Sepsis			
Basic professionalism	Optimal professionalism	Excellent professionalism	Distinctive professionalism
• Knowing the etiopathological and physiopathological aspects • Obtaining a complete anamnesis (including pharmacological) and carrying out an objective exam specific for possible etiological pictures • Managing treatment with dobutamine • Recognising the principal differential diagnoses, such as SIRS, severe SEPSIS, SEPTIC SHOCK • Requesting tests for diagnostic and monitoring evaluation • Carrying out a prognostic risk stratification by means of knowledge of specific scores (SOFA-Sepsis-related organ failure assessment) • Knowing the mechanism of action and the indications of the medications to use • Knowing the clinical conditions which make immediate transfer to intensive or haemodynamic care necessary, interacting with the relative medical specialist (e.g. septic shock) • Knowing the principles and techniques of oxygenation of the patient • Calculating the ratio between PaO2 and FiO2 and knowing the significance of the relative cut-off points • Insuring adequate vein access and knowing the principles for the restoration of correct blood volume • Managing therapy normalise the metabolic parameters (transfusions of concentrated red blood cells, eventual treatment with dobutamine • Knowing the metabolic parameters of sepsis and the prognostic significance of the laboratory exams (e.g. lactic acidemia, procalcitonin) • Planning discharge, favouring institutional continuity	• Evaluating the relative advantages/ disadvantages relative to pharmacological and invasive treatment • Rapidly identifying patients with septic shock and treating them in an aggressive manner while they are hospitalised in intensive care units. Evaluating cardiorespiratory stability and implementing an aggressive restoration of liquids, maintaining patent airways and circulation support • Concluding the correction of hypovolaemia. Knowing the risk scores in order to identify the patients with a severe prognosis (e.g. SOFA) • Knowing the procedures for diagnosis and the methodologies for treating possible complications • Making a clinico-laboratory and imaging technique synthesis in order to formulate a complete diagnostic plan aimed at specific complications	• Supporting, coordinating and participating in the development and promotion of guidelines and paths which facilitate an efficacious and rapid evaluation and treatment of patients with sepsis • Actively coordinating/participating in local implementation of guidelines and institutional paths in order to render assistance to patients with sepsis efficient and efficacious • Participating in initiatives for the improvement of the quality of efficacious prevention, early recognition and reduction of possible complications • Periodic reporting of the updating of the scientific literature on the topic	• Inserting and managing the use of PICC and Midline venous catheters



Conclusioni

SEPSI	INTERNISTA
• Malattia sistemica	Visione globale
• Malattia multiorgano	Mission: polipatologia
• Killer nascosto	Specialista «poco noto»



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Table 2. Reason for hospital admission

	Patients with sepsis n=533	Patients affected by a non-systemic infection n=180	Patients without diagnosis of infection n=185
Fever and nonspecific Signs and Symptoms [%]	34.71	29.44	6.49
Respiratory System Diseases [%]	12.95	23.89	12.97
Infectious Diseases [%]	11.07	2.22	0.00
Digestive System Diseases [%]	7.88	3.33	10.81
Cardiovascular Diseases [%]	7.88	7.78	28.65
Neurological Disorders [%]	6.94	6.67	10.81
Liver Disease [%]	6.19	2.78	8.65
Hematological Diseases [%]	4.13	6.11	7.03
Kidney Diseases and Urogenital disordes [%]	3.94	8.89	5.95
Endocrine and Metabolic Disorders [%]	1.69	1.11	2.16
Skin and skin structure infection (ABSSI) [%]	1.32	4.45	1.62
Chemical and physical agents [%]	1.13	1.11	3.24
Brain and Nervous System Disorders [%]	0.19	0.00	0.00
Immunodeficiency Disorders [%]	0.00	0.00	0.54

SNOOPII study: Unpublished data



Grazie per la cortese attenzione