L'IMPORTANZA DELLA RICERCA IN OSTEOPATIA

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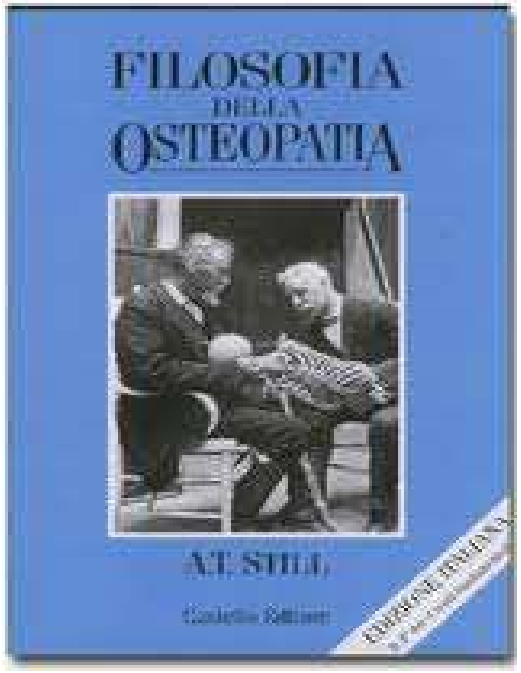
1. LA FILOSOFIA DELL'OSTEOPATIA E QUELLA DELLA SCIENZA



A.T. Still

Decide di chiamare "Osteopatia" questo suo metodo terapeutico. Spiega lui stesso il perché: "Ho ragionato così: le ossa sono il punto di partenza che ritengo sia la causa delle condizioni patologiche. Ho combinato ostéon (osso) con pathos (sofferenza) ed ho ottenuto come risultato osteopatia."

Special Committee on Osteopathic Principles and Osteopathic Technic, Kirksville College of Osteopathy and Surgery. An interpretation of the osteopathic concept. Tentative formulation of a teaching guide for faculty, hospital staff and student body. *J Osteop.* 1953; 60(Oct):8–10.

OSTEOPATHIC PHYSICIANS

Log Book

PHYSICIANS PLUS

PUBLISHED MONTHLY BY THE DES MOINES STILL COLLEGE OF OSTEOPATHY & SURGERY

Volume 29 NOVEMBER, 1953 Number 11

SERVICE FRATERNITY REACTIVATED

A.O.A. Committee on Christmas Seals

Ann Conlisk, Director

This is the 23rd campaign in osteopathic seal history. To get 80,000 seals into the hands of the profession, auxiliary and public is its objective. To publicize osteopathy and to raise funds for osteopathic student loans and research are its reasons for being.

Pictured above are the officers and some of the members of Alpha Chapter of Sigma Sigma Phi, National Honorary Osteopthic Service Fraternity. These students from the Kirksville College of Osteopathy and Surgery were in Des Moines to initiate twelve students of DMSCOS into the reactivated Beta Chapter of Sigma Sigma Phi.

Beta Chapter of Sigma Sigma Phi National Honorary Osteopathic Service Fraternity inactive in DMSCOS since 1942 was reactivated during an organization meeting held at the College on November 9.

Drs. S. V. Robuck, Grand President of Chicago, Illinois and P. R. Koogler, Grand Secretary-Treasurer of Kirksville, Missouri met with President Peters and students of DMSCOS to develop plans for the formal reactivation and initiation of new members.

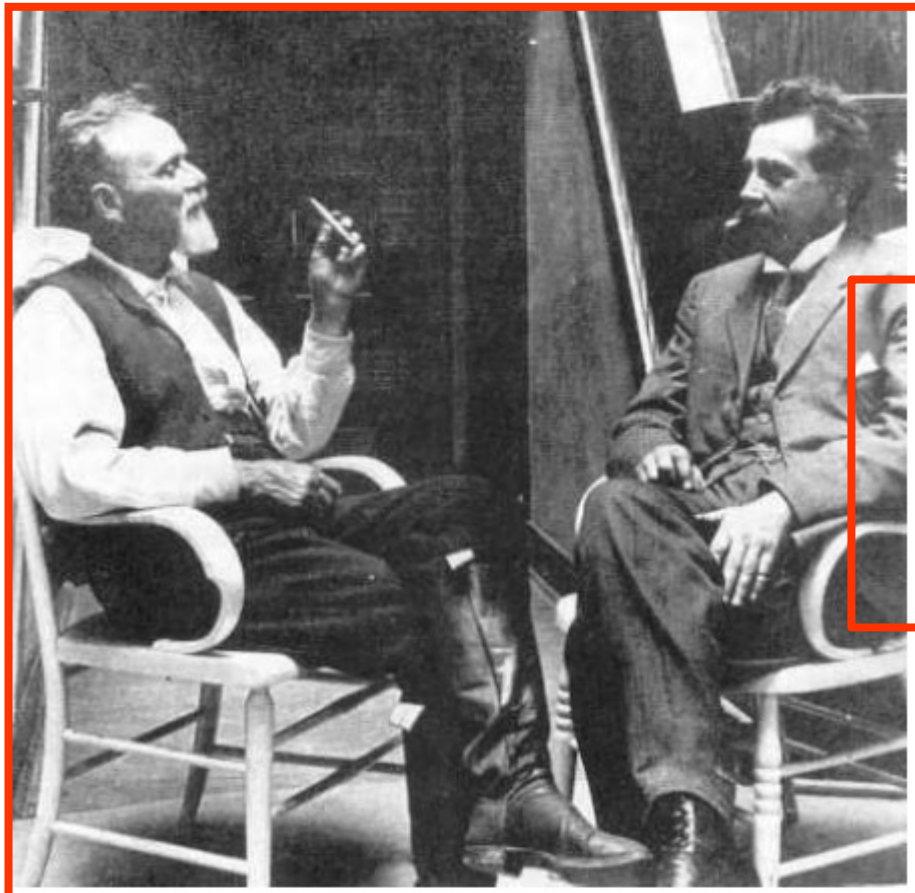
Objects and Purposes

Dr. Robuck told the students that the objects and purposes of Sigma Sigma Chi were: "To further the science of Osteopathy and its standards of practice, to improve the scholastic standings and to promote a higher degree of fellowship among its students;

To bring about a closer relationship and understanding among the student bodies and the officials and members of the faculties of our Colleges;

To foster allegiance to the American Osteopathic Association and to perpetuate these prin-

L'osteopatia, o medicina osteopatica, è una filosofia, una scienza e un'arte. La sua filosofia comprende il concetto di unità di struttura e di funzione del corpo, in salute e in malattia. La sua scienza include le scienze chimiche, fisiche e biologiche in relazione alla conservazione della salute e alla prevenzione, cura e lenimento della malattia. La sua arte è l'applicazione della filosofia e della scienza nella pratica della medicina e chirurgia osteopatica in tutte le sue branche e specialità.



Nella foto: Andrew Taylor Still e William Smith in piena conversazione

Ecco il racconto di Smith in seguito a questa prima visita: *«Quanto mi disse sembrava così lontano da tutto quello che mi avevano insegnato nelle scuole di medicina, così totalmente assurdo e chimerico, che gli domandai le prove delle sue affermazioni. Le prove mi furono date da circa sedici pazienti, che testimoniarono le loro condizioni al momento dell'arrivo a Kirksville e poi in seguito al trattamento. [...] Lasciatemi dire che per valutare l'osteopatia è necessario uno spirito limpido e senza pregiudizi. Se un uomo, un medico, viene a Kirksville e ascolta quello che ascolterà confrontandolo con quello che gli è stato insegnato in una scuola di medicina, la sola conclusione che può trarne è che l'osteopatia è una truffa e un'illusione, una gigantesca fesseria destinata a estorcere ogni mese centinaia di dollari ai malati e agli afflitti. Ma, se l'investigatore fa lo sforzo di affrontare la questione come se non ne sapesse niente (e quattro anni di sperimentazione dell'osteopatia mi permettono di affermare che i dottori non ne sanno un granché), senza dare nulla per scontato, senza accettare dichiarazioni a favore o contro l'osteopatia, ma si accontenta di interrogare una dozzina di pazienti considerandoli uomini e donne sensati, non isterici pronti per il manicomio o bugiardi patentati, allora, se è un uomo onesto, dovrà concludere, come feci io, che nell'arte di guarire esistono ancora cose che non sono conosciute dalla professione medica.»* (fonte: R. V. Schnucker, Early Osteopathy, p. 75.)

L'Osteopatia è anatomia, ancora anatomia, sempre anatomia

Compito dell'osteopata è ricercare la salute, tutti sono capaci di trovare la malattia

C'è un evidente rapporto fra il movimento e la salute

A.T. Still

I quattro principi chiave della filosofia osteopatica sono:

1. Il corpo è un'unità; la persona è un'unità di corpo, mente e spirito.
2. Il corpo è capace di autoregolazione, di autoguarigione e di conservazione della salute.
3. La struttura e la funzione sono in relazione reciproca.
4. Una terapia razionale poggia sulla comprensione dei principi base dell'unità del corpo, dell'autoregolazione e dell'interrelazione di struttura e funzione.

Medicina Osteopatica (MO):

la MO è una branca della scienza medica, che è eseguita da medici osteopatici e osteopati.

la MO è basato sulla filosofia e i principi del Dr. AT Still. La MO combina questi principi con le norme generali vigenti in medicina.

la MO sottolinea l'interrelazione tra struttura e funzione del corpo e riconosce la capacità del corpo di auto ripristino e mantenimento della salute.

la MO comprende una valutazione manuale, la diagnosi e la terapia e prevenzione delle disfunzioni somatiche del sistema muscolo-scheletrico (parietale), degli organi interni (viscerale) e del sistema nervoso centrale e periferico (cranio-sacrale).

la MO è una estensione e completamento del sistema di medicina ufficiale nel contesto di una cura al paziente integrata, che si focalizza su entrambi i principi della medicina dell'evidenza e della medicina centrata sul paziente.

Disfunzione somatica (DS):

Disfunzione somatica (DS) è una funzione compromessa o alterata delle componenti interattive del sistema somatico, del parietale, viscerale e / o regioni cranio-sacrale del corpo.

le DS interessano le disfunzioni all'interno del sistema muscolo-scheletrico, nonché gli elementi connessi vascolari, linfatici, viscerali
e neurali.

I criteri diagnostici di una DS sono delle anomalie nella struttura e tensione dei tessuti, un'asimmetria e una modifica qualitativa e quantitativa nella gamma dei movimenti.

SUMMARY

It is through the summation of both quantitative and qualitative findings that one obtains an indication of the nature and age of the underlying dysfunction. Several mnemonics have appeared over recent years that attempt to summarize the findings in somatic dysfunction; none of these is complete, but they are useful as aides-mémoire.

TART[2]
Tissue texture abnormality
Asymmetry
Range of motion abnormality
Tenderness.

STAR[6]
Sensibility changes
Tissue texture abnormality
Asymmetry
Restricted range of motion.

PRATT
Pain
Range of movement abnormality
Asymmetry
Tissue changes
Temperature.

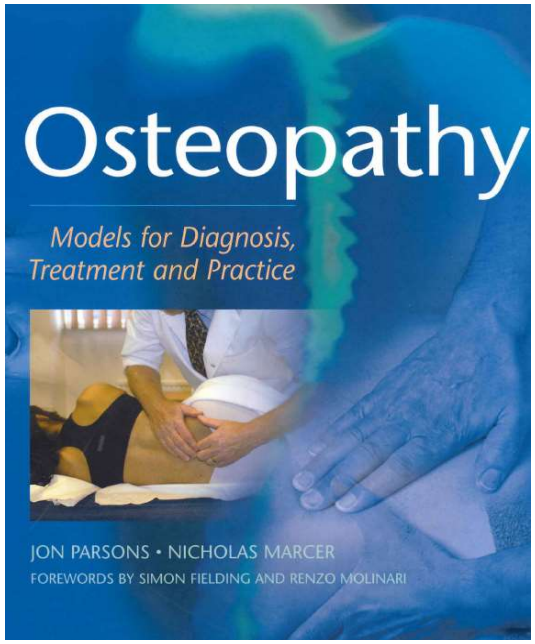


Table 2.1 A comparison of tissue changes in an acute and chronic somatic dysfunction

	Acute	Chronic
Skin	Inflammatory response: oedema, vasodilatation, hot, red, increased sweat gland activity	Skin is pale, cold, dry with signs of trophic changes such as spots, increased skin pore size
Subcutaneous tissues	'Boggy' feel	Indurated and atrophied
Muscles	Acute reactive muscle spasm, contraction, leading to hypertrophy	Atrophy ± fibrotic insertions, leading to fibrosis 'Ropey' or 'stringy' feel
Neural reflexes	Initially may not be apparent	Somaticosomatic and somaticovisceral reflexes
Pain	Tenderness or acute pain	Slight or absent tenderness

Outpatient Osteopathic SOAP Note—Follow-up Form

Usage Guide

Published by

American Academy of Osteopathy

Modulo Osteopatico Ambulatoriale di annotazione SOAP – Follow-up

Introduzione:

Il seguente modulo osteopatico ambulatoriale "SOAP" è stato sviluppato dal comitato di Ricerca dell'Accademia americana di Osteopatia "Louisa Burns" nell'ambito di una borsa di studio dell' American Osteopathic Association. Si raccomanda tale modulo standardizzato, valido e di facile utilizzo, per la ricerca e la formazione nella professione osteopatica.

Istruzioni per l'uso:

Tutta la stampa o la scrittura devono essere leggibili a chiunque, altrimenti la registrazione è inutile. Annerire le caselle opportune. I dati possono essere raccolti e analizzati da un computer. Il modulo può essere ulteriormente integrato. Lasciare vuoto lo spazio o compilare la casella "non eseguito", se non sono stati raccolti i dati per una certa sezione. Tutte le definizioni sono state ottenute dal libro CPT (Current Procedural Terminology – Terminologia Procedurale Corrente) e il Glossario di terminologia osteopatica. I titoli sono presentati e organizzati come appaiono sul modulo, cominciando dall'angolo superiore sinistro e continuando in basso a destra. Il testo in grassetto in questo Manuale d'uso, corrisponde a quello presente nel modulo. .

VALUTAZIONE DELLA DISFUNZIONE SOMATICA
CRITERI DIAGNOSTICI

Sezione II: Dati Obiettivi (continuazione): Tabella Sistema Muscolo-Scheletrico

Parametri utilizzati: Tracciare una linea obliqua attraverso la casella che indica i parametri utilizzati pe l'esame (T, A, R, T). Incluso nella definizione di questi componenti sono i criteri necessari alla codifica in ogni zona del corpo.

- **TTT:** Indica che tutti i criteri TART sono stati utilizzati per esaminare una regione.
- **T:** Cambiamento Tissutale, compattezza, lassità, versamenti, tono.
- **A:** Asimmetria, disallineamento, crepitii, difetti, masse .
- **R:** Range-of-motion, grado di movimento, contrattura.
- **T:** Alterata sensibilità (tenderness).

DIAGNOSI DELLA SEVERITA' DELLA DISFUNZIONE SOMATICA

Annerire il rettangolo corrispondente, per ogni regione in esame. Per le regioni che non sono state valutate, lasciare il rettangolo vuoto.

Se un rettangolo **non è segnato** in una regione, si presume che quella regione **non è stata esaminata**. Per le regioni esaminate, la scala è la seguente:

0 Nessuno	No disfunzione somatica presente o silente.
1 Lieve	Più che silente, elementi minori di TART.
2 Moderato	TART evidenti, in particolare Range di movimento (R) e/o cambiamento del Tessuto (T), può essere o non essere apertamente sintomatico.
3 Severo	Ci sono lesioni osservabili, significative, sintomatiche; spiccano elementi di R e/o T individuabili con una ricerca minima o provocazione.

(Nella parte superiore della tabella c'è una legenda **Livello di Gravità**, di rapida consultazione)

LE TECNICHE DI OMT

Metodo di Trattamento: Qui elencati ci sono le abbreviazioni delle tecniche del trattamento manipolativo osteopatico approvate dalla professione ed incluse nel Glossario della Terminologia Osteopatica per il trattamento delle disfunzioni somatiche elencate in precedenza. Cerchiare la sigla che corrisponde alla tecnica usata per trattare ogni regione.

ART:	tecniche articolatorie
BLT:	bilanciamento delle tensioni legamentose
CR:	craniale
CS:	counterstrain (tecnica di Jones)
DIR:	diretta

HVLA:	alta velocità / bassa ampiezza (thrust)
IND:	indiretta
INR:	rilascio neuromuscolare integrato
ME:	energia muscolare
MFR:	rilascio miofasciale
ST:	trattamento tessuti molli
VIS:	viscerale

VALUTAZIONE DEL TRATTAMENTP OMT

Risposta: Compila uno di questi rettangoli per ogni regione disfunzionale trattata con OMT. Questa è la percezione dell'osteopata di come le disfunzioni somatiche di ogni regione hanno risposto al Trattamento Osteopatico immediatamente dopo il trattamento. I rettangoli indicano ciò che segue:

R:	La disfunzione somatica è completamente Risolta come se non fosse mai stata presente.
M:	La disfunzione somatica è Migliorata ma non completamente risolta.
I:	La disfunzione somatica è rimasta Invariata o uguale a come era prima del trattamento.
A:	La disfunzione somatica è peggiorata o Aggravata subito dopo il trattamento.

JAOA

ORIGINAL CONTRIBUTION

Outpatient Osteopathic SOAP Note Form: Preliminary Results in Osteopathic Outcomes-Based Research

Sandra L. Sleszynski, DO
Thomas Glonek, PhD

Outcomes-Based Research Questions

1. What is the incidence in women and men?
2. What is the incidence of severity (scale = 0 [lowest], 1, 2, 3 [highest]) of somatic dysfunction in each region of the musculoskeletal table?
3. What is the incidence of somatic dysfunction in each designated body region?
4. What is the incidence of osteopathic manipulative treatment (OMT) by body region?
5. What is the incidence of specific osteopathic manipulative (OM) techniques used?
6. What is the incidence of responses (resolved, improved, unchanged, and worse) by body region following OMT?
7. What is the incidence of physician's evaluation before OMT for first visit: resolved, improved, unchanged, and worse?
8. What is the incidence of diseases by *ICD-9* code?
9. What is the incidence of OMT performed and recorded for 1 to 2, 3 to 4, 5 to 6, 7 to 8, and 9 to 10 musculoskeletal body regions?
10. What is the most frequently recommended follow-up time?
11. What is the average age of patients treated?
12. What is the average visit duration?
13. What was the average number of regions evaluated and/or treated with OMT?
14. Was there a correlation between disease entity and specific OM techniques used?
15. Is there a correlation between severity of somatic dysfunction and the response to treatment?
16. Is there a correlation between disease entity and the top 4 most severe body regions for somatic dysfunction?
17. What are the most frequently diagnosed and treated regions among providers?

Table 5
SOAP Note Form* Outcomes Research: Incidence of Somatic Dysfunction Resolved with OMT by Body Region (N=3908)

Region Treated	No. (%)	Rank†	Within-Region Group	
			Treated, No.	Resolved,%
■ **Head and Face**	756 (19.3)	7	1933	39.2
■ **Cervical (Neck)**	730 (18.7)	8	2176	33.6
■ **Thoracic**				
□ T1 to T4	832 (21.3)	5	2016	41.3
□ T5 to T9	880 (22.5)	4	1687	52.2
□ T10 to T12	949 (24.3)	3	1547	61.3
■ **Ribs**	826 (21.1)	6	1589	52.0
■ **Lumbar**	970 (24.8)	2	2015	48.1
■ **Sacrum**	948 (24.3)	3	1995	47.5
■ **Pelvis**	1023 (26.2)	1	1871	54.7
■ **Abdomen**	314 (8.0)	9	1052	29.9
■ **Extremities, Upper**				
□ Right	260 (6.7)	11	799	32.5
□ Left	306 (7.8)	10	753	40.6
■ **Extremities, Lower**				
□ Right	231 (5.9)	13	869	26.6
□ Left	242 (6.2)	12	789	30.7
Total	**9267**‡		**21,091**§	**42.2**//

* *SOAP Note Form* indicates Outpatient Osteopathic SOAP (Subjective, Objective, Assessment, Plan) Note Form; *OMT*, osteopathic manipulative treatment.
† Data for two regions (ie, *T10 to T12* and *Sacrum*) indicated that they have the same frequency and percentage of somatic dysfunction that resolved with OMT. Therefore, both regions are ranked third.
‡ When the total number of cases resolved with OMT (9267) is divided by the number of regions treated (14), results indicate that there was an average of 661.9 cases resolved per region. In other words, for each patient, 16.9% of somatic dysfunctions in each region were resolved after treatment.
§ The total treated (21,091) is larger than the total number of cases (3908), indicating that an average of 5.3 regions were treated with OMT in each patient visit.
// The percentage of somatic dysfunction resolved, as reported, is an average value.

Table 6
SOAP Note Form* Outcomes Research: Incidence of Somatic Dysfunction Improved with OMT by Body Region (N=3908)

Region Treated	No. (%)	Rank†	Within-Region Group	
			Treated, No.	Improved, %
■ **Head and Face**	1169 (29.9)	2	1933	60.6
■ **Cervical (Neck)**	1434 (36.7)	1	2176	65.9
■ **Thoracic**				
□ T1 to T4	1170 (29.9)	2	2016	58.0
□ T5 to T9	793 (20.3)	6	1687	47.0
□ T10 to T12	587 (15.0)	10	1547	38.0
■ **Ribs**	748 (19.1)	7	1589	47.1
■ **Lumbar**	1027 (26.3)	4	2015	51.0
■ **Sacrum**	1040 (26.6)	3	1995	52.1
■ **Pelvis**	841 (21.5)	5	1871	45.0
■ **Abdomen**	735 (18.8)	8	1052	69.9
■ **Extremities, Upper**				
□ Right	528 (13.5)	12	799	66.1
□ Left	437 (11.2)	13	735	58.0
■ **Extremities, Lower**				
□ Right	622 (15.9)	9	869	71.6
□ Left	538 (13.8)	11	789	68.2
Total	**11,669‡**		**21,091§**	**57.0//**

* *SOAP Note Form* indicates Outpatient Osteopathic SOAP (Subjective, Objective, Assessment, Plan) Note Form; *OMT*, osteopathic manipulative treatment.
† Data for two regions (ie, *Head and Face* and *T1 to T4*) indicate that they have the same frequency and percentage of somatic dysfunction that improved with OMT. Therefore, both regions are ranked second.
‡ When the total number of cases improved with OMT (11,669) is divided by the number of regions treated (14), results indicate that there was an average of 833.5 cases resolved per region. In other words, for each patient, 21.3% of somatic dysfunctions in each region improved after treatment.
§ The total treated (21,091) is larger than the total number of cases (3908), indicating that an average of 5.3 regions were treated with OMT in each patient visit.
// The percentage of somatic dysfunction improved, as reported, is an average value.

Table 7
SOAP Note Form* Outcomes Research: Incidence of Somatic Dysfunction Unchanged with OMT by Body Region (N=3908)

Region Treated	No. (%)	Rank†	Within-Region Group	
			Treated, No.	Unchanged, %
■ **Head and Face**	8 (0.2)	4	1933	0.2
■ **Cervical (Neck)**	12 (0.3)	3	2176	0.5
■ **Thoracic**				
□ T1 to T4	13 (0.3)	3	2016	0.6
□ T5 to T9	14 (0.4)	2	1687	0.8
□ T10 to T12	11 (0.3)	3	1547	0.7
■ **Ribs**	15 (0.4)	2	1589	0.9
■ **Lumbar**	18 (0.5)	1	2015	0.9
■ **Sacrum**	7 (0.2)	4	1995	0.4
■ **Pelvis**	7 (0.2)	4	1871	0.3
■ **Abdomen**	3 (0.1)	5	1052	0.2
■ **Extremities, Upper**				
□ Right	11 (0.3)	3	799	1.4
□ Left	10 (0.3)	3	735	1.4
■ **Extremities, Lower**				
□ Right	15 (0.4)	2	869	1.7
□ Left	9 (0.2)	4	789	1.1
Total	**153‡**		**21,091§**	**0.8//**

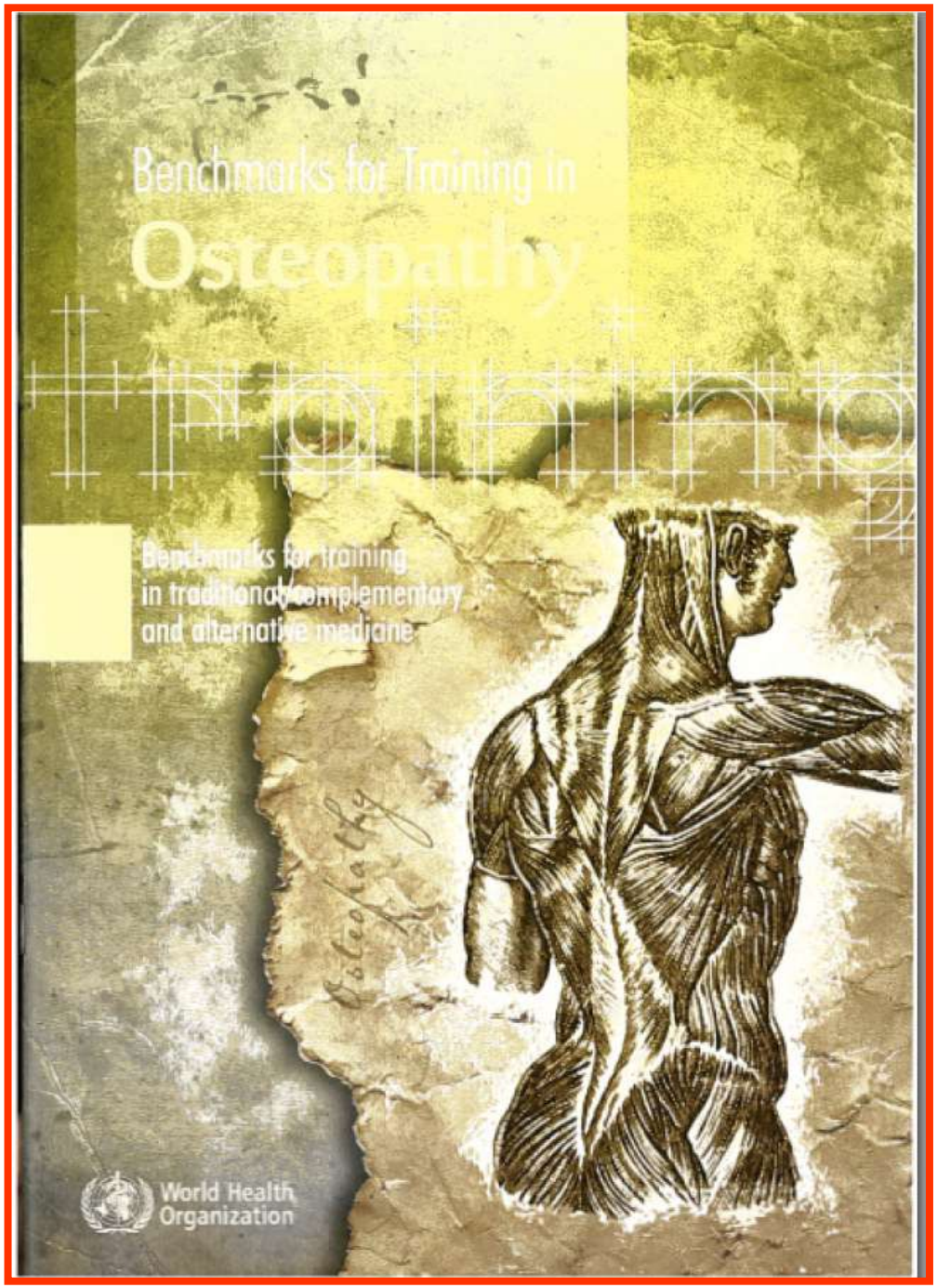
* *SOAP Note Form* indicates Outpatient Osteopathic SOAP (Subjective, Objective, Assessment, Plan) Note Form; *OMT*, osteopathic manipulative treatment.

† Data for three regions (ie, *T5 to T9*, *Ribs*, and *Lower Extremity, Right*) indicate that they have the same frequency and percentage of somatic dysfunction that was unchanged with OMT. Therefore, all three regions are ranked second. In addition, data for five regions (ie, *Cervical (Neck)*, *T1 to T4*, *T10 to T12*, and both *Upper Extremities*) have the same frequency and percentage and were all ranked third. Finally, data for four regions (ie, *Head and Face*, *Sacrum*, *Pelvis*, and *Lower Extremity, Left*) have the same frequency and percentage and were all ranked fourth.

‡ When the total number of cases unchanged with OMT (153) is divided by the number of regions treated (14), results indicate that there was an average of 10.9 cases unchanged per region. In other words, for each patient, 0.3% of somatic dysfunctions in each region were unchanged after treatment.

§ The total treated (21,091) is larger than the total number of cases (3908), indicating that an average of 5.3 regions were treated with OMT in each patient visit.

// The percentage of somatic dysfunction unchanged, as reported, is an average value.



Parametri di riferimento per la formazione in medicina tradizionale / complementare e alternativa

Parametri di riferimento per la formazione in osteopatia

World Health Organization

Appendice I: Convegno OMS sull'osteopatia, Milano, Italia, 26 – 28 Febbraio 2007: elenco dei partecipanti

L'OMS è in debito di gratitudine con più di 300 revisori, compresi esperti e autorità nazionali, nonché organizzazioni professionali e non governative, di più di 140 paesi, che hanno fornito commenti e suggerimenti alla bozza del testo.

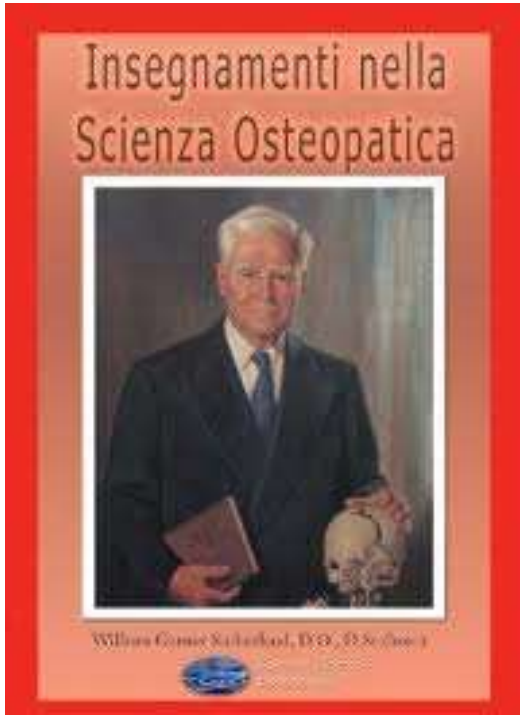
2.2. Competenze essenziali

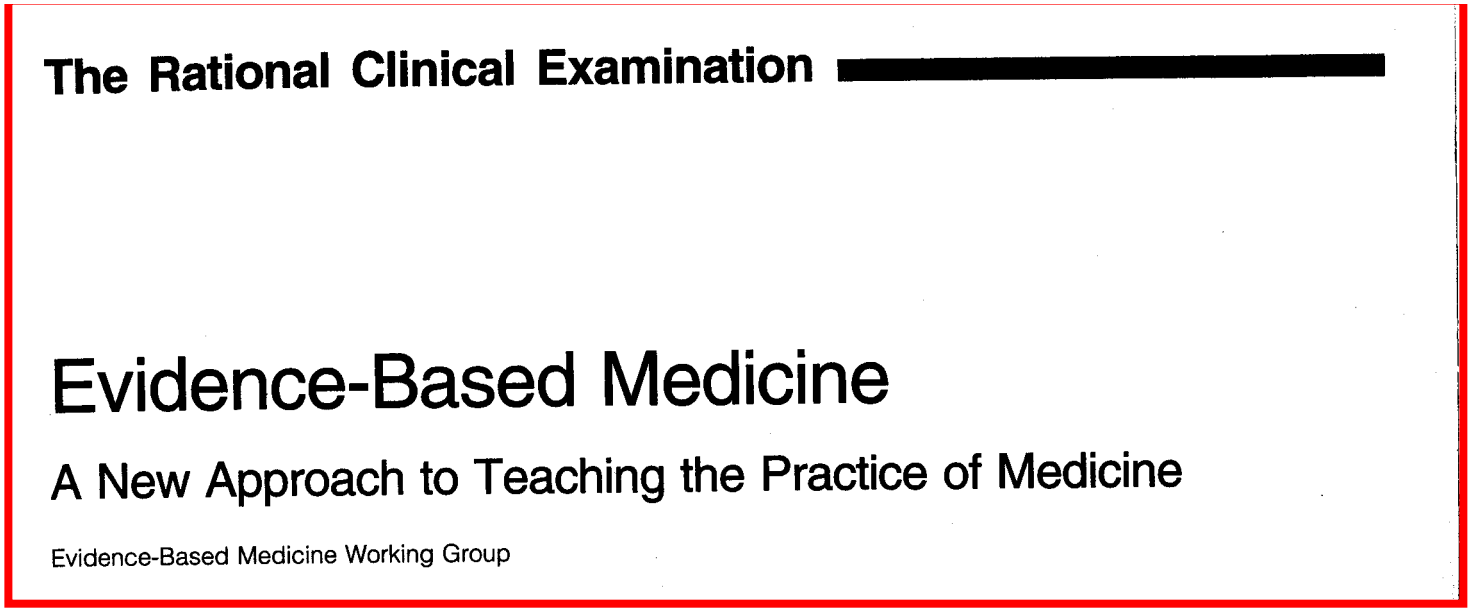
- la capacità di valutare con senso critico la letteratura specializzata medica e scientifica, e di incorporare nella pratica clinica eventuali informazioni desunte da essa;

La diagnosi di disfunzione somatica, di competenza esclusivamente osteopatica,
è codificata all'interno dell'International Classification of Diseases.

Al settore XIII Malattie del sistema osteomuscolare e del tessuto connettivo codice M99 Lesioni biomeccaniche non classificate altrove dell'ICD-10).

2. L'OSTEOPATIA BASATA SULLE EVIDENZE





JAMA 1992

Un medico rileva una crisi di grande male in un uomo di 43 anni e si chiede la prognosi di una prima crisi… consulta un data-base e trova 25 articoli…

L'EBM sostiene che la valutazione dell'evidenze scientifiche aiuta a prendere una decisione in ambito medico

DEFINIZIONE EBM (I)

La medicina/fisioterapia basata sulle evidenze "è il coscienzioso, esplicito e accorto uso delle migliori evidenze disponibili per decidere l'assistenza sanitaria da fornire. La pratica dell'EBM implica l'integrazione dell'esperienza clinica individuale con le migliori evidenze disponibili ricercate in modo sistematico"

La pratica medica basata sull'EBM richiede quindi l'integrazione delle evidenze scientifiche con l'esperienza clinica e con le preferenze del paziente.

Iovine e Morosini 2005

Published in final edited form as:
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Educating osteopaths to be researchers – what role should research methods and statistics have in an undergraduate curriculum?

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Evidence-based medicine (EBM) involves using research data to enhance the diagnosis and treatment of clinical disorders. Somatic dysfunction and osteopathic manipulative treatment (OMT) are two unique aspects of osteopathy that will benefit from a greater emphasis on scientific evidence. Most evidence in osteopathy is based on expert opinions, case reports, case series, and observational studies. Only one systematic review of randomized controlled trials, involving OMT for low back pain, has been published. Although this study demonstrates the efficacy of OMT for low back pain, other clinical trials are needed to expand the evidence base in osteopathy. Undergraduate osteopathy curricula should ensure that students acquire the tools necessary to become knowledgeable consumers of the research and statistics presented in biomedical journals. Such curricula need to be supplemented with graduate training programs and research funding mechanisms to ensure that young osteopathic researchers are able to produce the research needed to practice and advance evidence-based osteopathy in the future.

JAOA

MEDICAL EDUCATION

Inclusion of Evidence-based Medicine in Colleges of Osteopathic Medicine and Suggestions for Implementing Evidence-based Medicine Into Osteopathic Medical School Curricula

Alan D. Cundari, DO, MS
Nathan Ker, DO

JAOA • Vol 103 • No 11 • November 2003 •

The authors investigated the extent to which colleges of osteopathic medicine include evidence-based medicine education in their curricula. Information was obtained through a questionnaire survey, including a Likert scale. The survey was sent to 19 colleges of osteopathic medicine for completion. Twelve responses were received within the time limits of this cross-sectional study, yielding a 63% response rate.

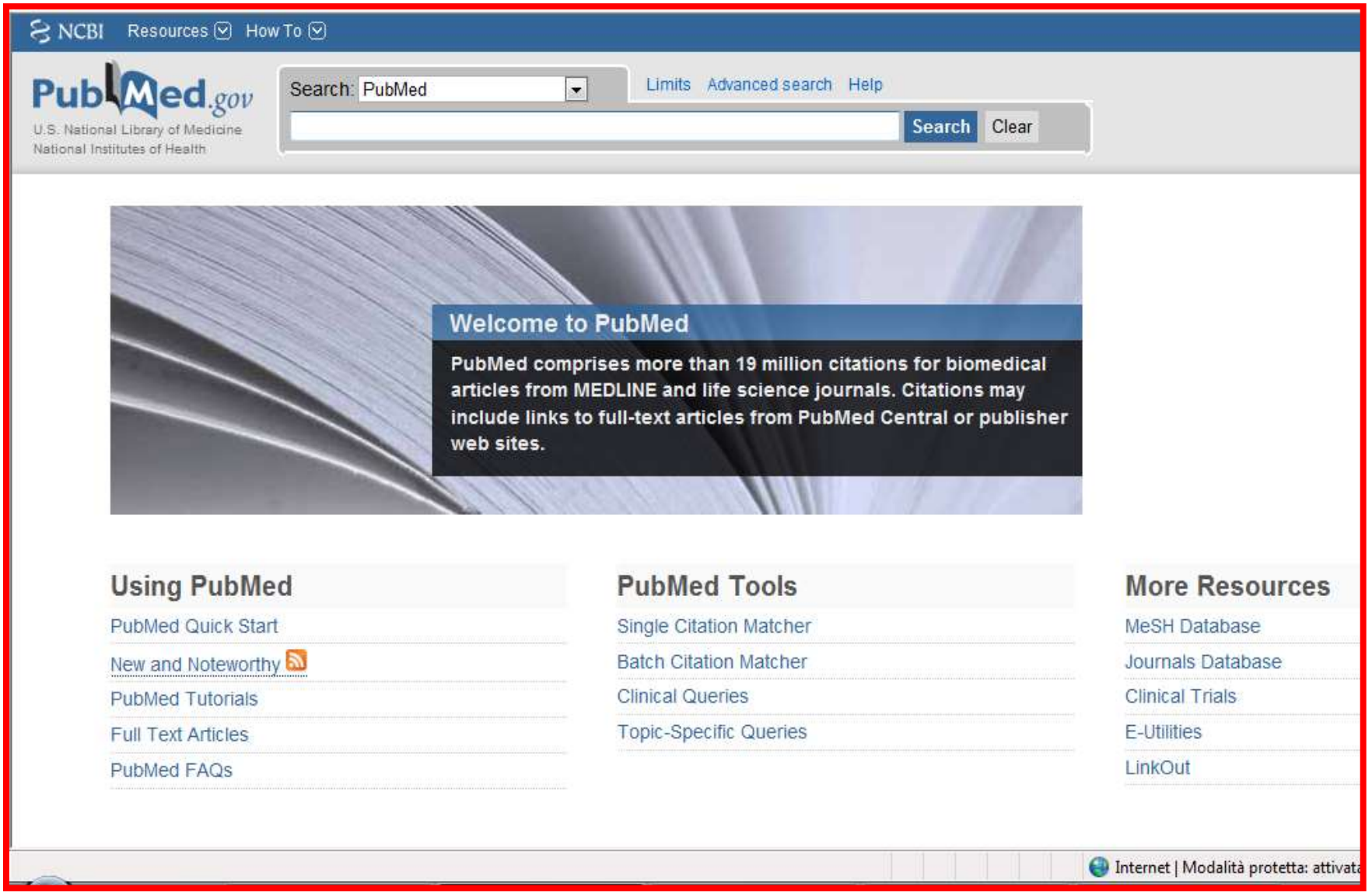
Four colleges of osteopathic medicine report that they currently teach evidence-based medicine within their education programs. Variations among the programs included the type of faculty delivering the evidence-based medicine course, the years in which instruction occurs, the number of hours of instruction, and assessment methods used. Seven additional schools have plans to implement evidence-based medicine into their educational programs.

Suggestions for the design of an evidence-based medicine course and an evidence-based medicine–based curriculum are discussed in relation to the survey results.

CARATTERISTICHE DEL METODO SCIENTIFICO

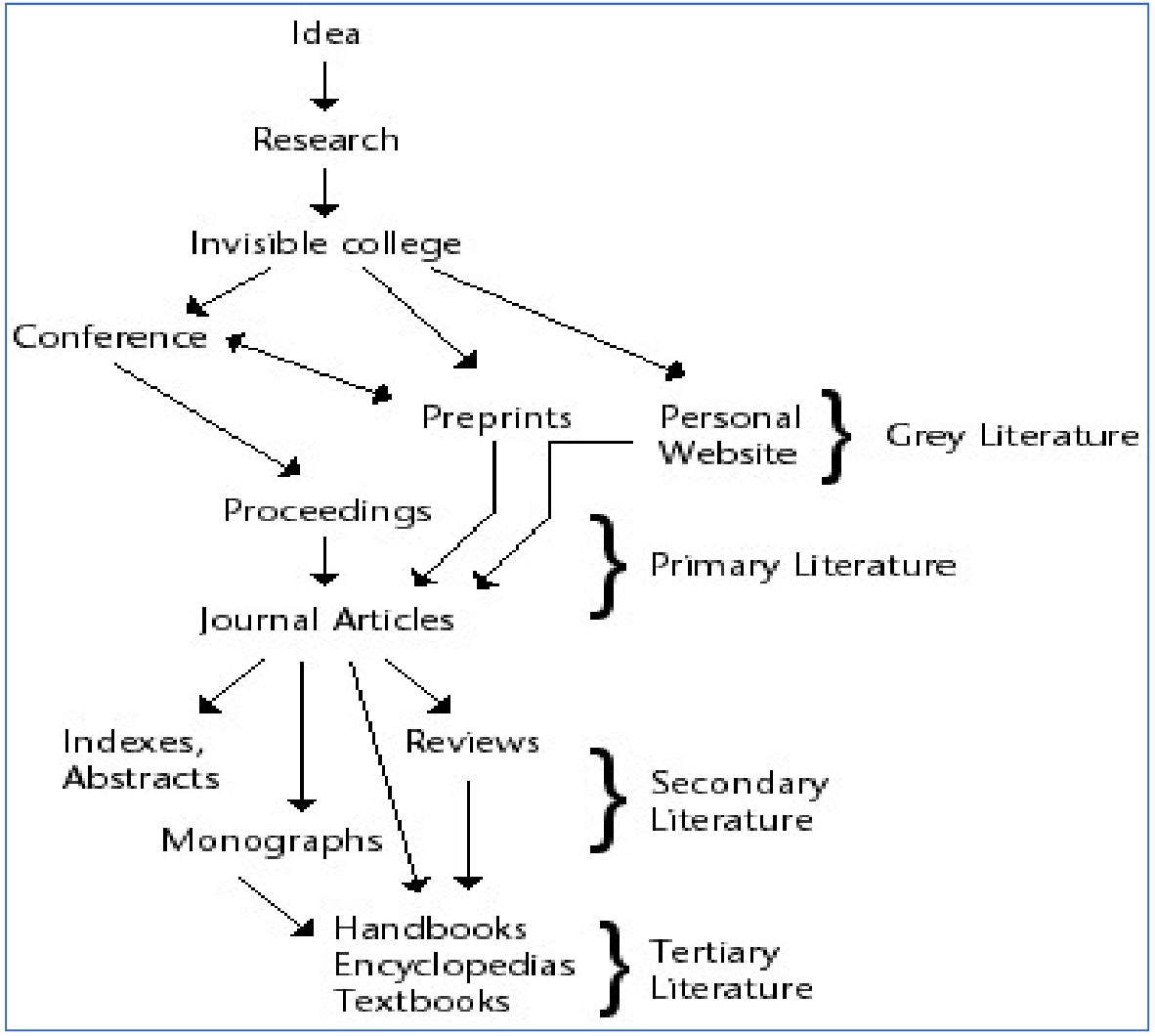
- Impresa collettiva
- Indagine progressiva
- Aspetti e fenomeni riproducibili
- Trasmissibilità e coerenza interna
- Giustificare, prevedere e costruire

(Boncinelli 2004)


NCBI
Resources
How To
PubMed.gov
U.S. National Library of Medicine
National Institutes of Health
Search: PubMed
Limits
Advanced search
Help
Search
Clear
Welcome to PubMed
PubMed comprises more than 19 million citations for biomedical articles from MEDLINE and life science journals. Citations may include links to full-text articles from PubMed Central or publisher web sites.
Using PubMed
PubMed Quick Start
New and Noteworthy
PubMed Tutorials
Full Text Articles
PubMed FAQs
PubMed Tools
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Topic-Specific Queries
More Resources
MeSH Database
Journals Database
Clinical Trials
E-Utilities
LinkOut
Internet | Modalità protetta: attivata

RIVISTE BIOMEDICHE

- Più di 20.000 riviste esistenti
- Quasi 6.300 riviste biomediche con Impact Factor



The New England Journal of Medicine

A COMPARISON OF OSTEOPATHIC SPINAL MANIPULATION WITH STANDARD CARE FOR PATIENTS WITH LOW BACK PAIN

GUNNAR B.J. ANDERSSON, M.D., PH.D., TRACY LUCENTE, M.P.H., ANDREW M. DAVIS, M.D., M.P.H., ROBERT E. KAPPLER, D.O., JAMES A. LIPTON, D.O., AND SUE LEURGANS, PH.D.

November 4, 1999

TABLE 1. BASE-LINE CHARACTERISTICS OF THE STUDY PARTICIPANTS.*

CHARACTERISTIC	OSTEOPATHIC-TREATMENT GROUP (N=83)	STANDARD-CARE GROUP (N=72)
Age — yr†	28.5±10.6	37.0±11.0
Sex — no. (%)		
Male	34 (41)	32 (44)
Female	49 (59)	40 (56)
Leg pain — no.		
Above knee	30	23
Below knee	9	10
Visual-analogue pain score — mm‡	49.0±23.6	45.0±20.6
Median Roland–Morris questionnaire score§	7	7
Oswestry questionnaire score¶	25.0±12.2	23.1±11.8
Flexion — degree	31.9±22.5	33.0±17.1
Extension — degree	7.2±7.8	6.9±7.8
Straight-leg raising — degree	75.5±9.8	75.4±9.3
Onset of pain — no. (%)		
Gradual	44 (53)	34 (47)
Sudden	37 (45)	36 (50)
Unknown	2 (2)	2 (3)

*There were no statistically significant differences between the groups. For all scales and questionnaires, the score increases with the severity of the pain or disease. Plus–minus values are means ±SD.

†The P value for age was 0.091.

‡The visual-analogue pain scale was scored from 0 to 100.

§The Roland–Morris questionnaire was scored from 0 to 24.

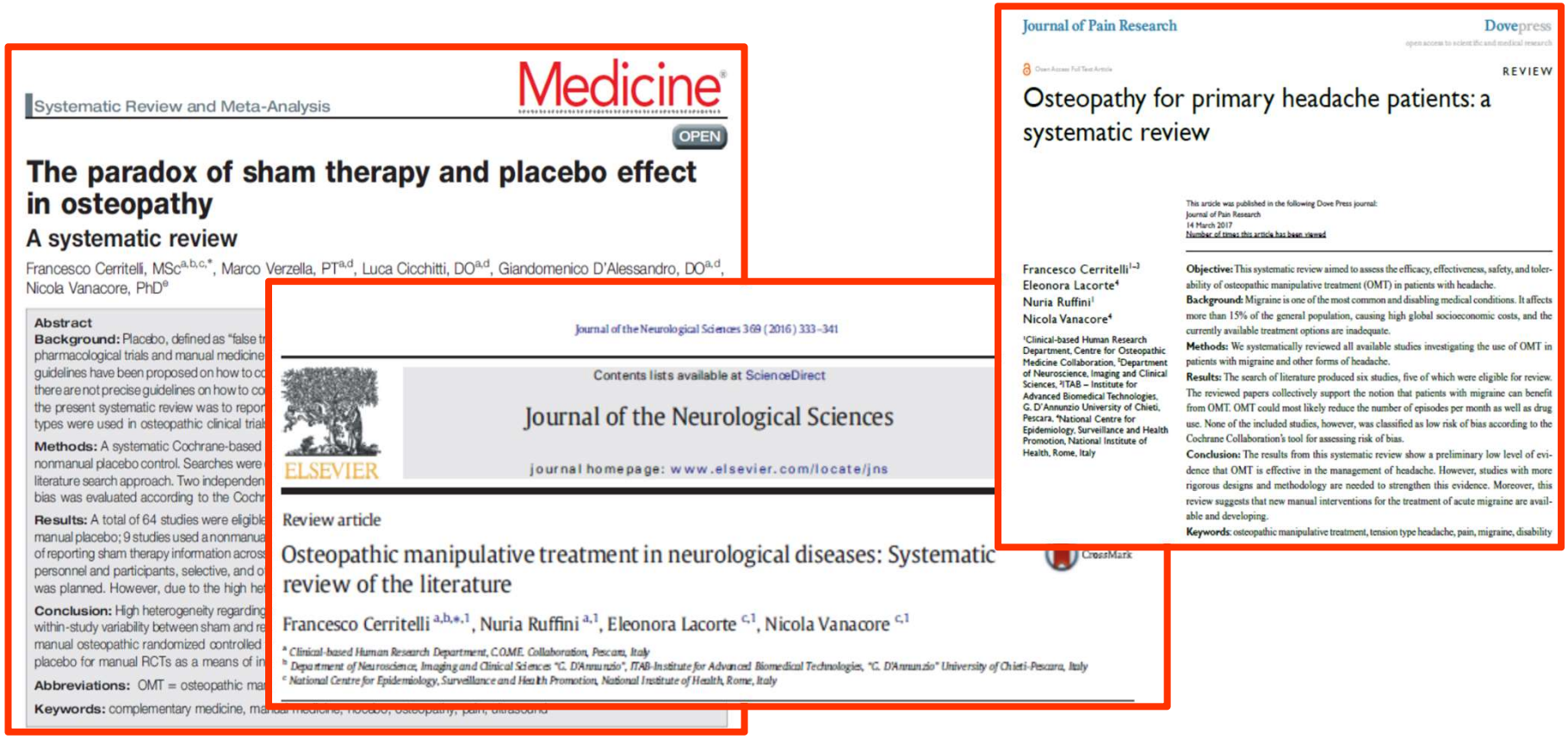
¶The Oswestry questionnaire was scored from 0 to 50.

Ricerca della letteratura esistente in osteopatia (al 24 maggio 2017)

- **Osteopathic Medicine [MeSH]: 9333** citazioni
- **Osteopathic Manipulative Treatment (OMT): 1372** citazioni
- **Manipulative Treatment: 3980** citazioni
- **Chiropractic: 7126**
- **Musculoskeletal Manipulations [MeSH]: 14518**
- **Manual therapy: 33516** citazioni

Il contributo degli osteopati italiani

- **Osteopathic Manipulative Treatment (OMT):**
  50/1372 citazioni (3.6%)



Systematic Review and Meta-Analysis

Medicine

OPEN

The paradox of sham therapy and placebo effect in osteopathy

A systematic review

Francesco Cerritelli, MSc[a,b,c,*], Marco Verzella, PT[a,d], Luca Cicchitti, DO[a,d], Giandomenico D'Alessandro, DO[a,d], Nicola Vanacore, PhD[e]

Abstract

Background: Placebo, defined as "false t
pharmacological trials and manual medicine
guidelines have been proposed on how to co
there are not precise guidelines on how to co
the present systematic review was to repor
types were used in osteopathic clinical triab

Methods: A systematic Cochrane-based
nonmanual placebo control. Searches were
literature search approach. Two independen
bias was evaluated according to the Cochr

Results: A total of 64 studies were eligible
manual placebo; 9 studies used a nonmanua
of reporting sham therapy information across
personnel and participants, selective, and o
was planned. However, due to the high he

Conclusion: High heterogeneity regarding
within-study variability between sham and re
manual osteopathic randomized controlled
placebo for manual RCTs as a means of in

Abbreviations: OMT = osteopathic ma

Keywords: complementary medicine, ma

Journal of the Neurological Sciences 369 (2016) 333–341

Contents lists available at ScienceDirect

Journal of the Neurological Sciences

journal homepage: www.elsevier.com/locate/jns

ELSEVIER

Review article

Osteopathic manipulative treatment in neurological diseases: Systematic review of the literature

Francesco Cerritelli [a,b,*,1], Nuria Ruffini [a,1], Eleonora Lacorte [c,1], Nicola Vanacore [c,1]

[a] Clinical-based Human Research Department, C.O.M.E. Collaboration, Pescara, Italy
[b] Department of Neurosciences, Imaging and Clinical Sciences "G. D'Annunzio", ITAB-Institute for Advanced Biomedical Technologies, "G. D'Annunzio" University of Chieti-Pescara, Italy
[c] National Centre for Epidemiology, Surveillance and Health Promotion, National Institute of Health, Rome, Italy

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Journal of Pain Research

Dovepress

open access to scientific and medical research

REVIEW

Osteopathy for primary headache patients: a systematic review

This article was published in the following Dove Press journal:
Journal of Pain Research
14 March 2017
Number of times this article has been viewed

Francesco Cerritelli[1–3]
Eleonora Lacorte[4]
Nuria Ruffini[1]
Nicola Vanacore[4]

[1]Clinical-based Human Research Department, Centre for Osteopathic Medicine Collaboration, [2]Department of Neuroscience, Imaging and Clinical Sciences, [3]ITAB – Institute for Advanced Biomedical Technologies, G. D'Annunzio University of Chieti, Pescara, [4]National Centre for Epidemiology, Surveillance and Health Promotion, National Institute of Health, Rome, Italy

Objective: This systematic review aimed to assess the efficacy, effectiveness, safety, and tolerability of osteopathic manipulative treatment (OMT) in patients with headache.

Background: Migraine is one of the most common and disabling medical conditions. It affects more than 15% of the general population, causing high global socioeconomic costs, and the currently available treatment options are inadequate.

Methods: We systematically reviewed all available studies investigating the use of OMT in patients with migraine and other forms of headache.

Results: The search of literature produced six studies, five of which were eligible for review. The reviewed papers collectively support the notion that patients with migraine can benefit from OMT. OMT could most likely reduce the number of episodes per month as well as drug use. None of the included studies, however, was classified as low risk of bias according to the Cochrane Collaboration's tool for assessing risk of bias.

Conclusion: The results from this systematic review show a preliminary low level of evidence that OMT is effective in the management of headache. However, studies with more rigorous designs and methodology are needed to strengthen this evidence. Moreover, this review suggests that new manual interventions for the treatment of acute migraine are available and developing.

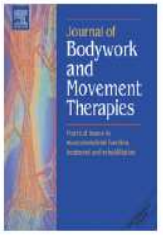
Keywords: osteopathic manipulative treatment, tension type headache, pain, migraine, disability

Journal of Bodywork & Movement Therapies (2010) 14, 309–311

available at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/jbmt



EDITORIAL

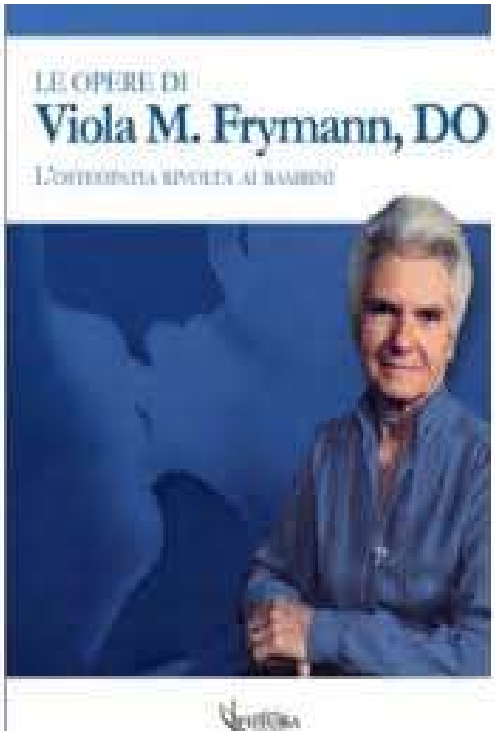
Italian osteopathy – An exciting European example

Dr Viola Frymann. Rome. June 2010

Some of the projects reported on by Italian osteopaths (see selection of summaries below), involved only small number of patients – making it impossible to draw definitive conclusions – however what seems at least as important as the results of such studies (and arguably far more important), is the fact that they are taking place at all.

A dynamic Italian osteopathic profession is emerging, with an enthusiastic desire to explore osteopathic efficacy in many areas of health concern. One result is a cohort of osteopaths, whose research skills are being refined, offering new insights as to the mechanisms and methods that osteopathic treatment can produce.

3. IL FUTURO DELLA RICERCA IN OSTEOPATIA



JAOA SPECIAL COMMUNICATION

A New Triadic Paradigm for Osteopathic Research in Real-World Settings

John C. Licciardone, DO, MS, MBA
Cathleen M. Kearns, BA

Clinical research is increasingly conducted in real-world settings. Osteopathic practices represent natural laboratories for studying the distinctiveness of osteopathic medicine. The Osteopathic Research Center (ORC) recently developed a triadic paradigm for research consisting of the Consortium for Collaborative Osteopathic Research Development (CONCORD), its affiliated practice-based research network (PBRN), and the patient-centered research (PCR) fellowship program. The CONCORD-PBRN was certified by the Agency for Healthcare Research and Quality in 2011. The inaugural PCR fel-

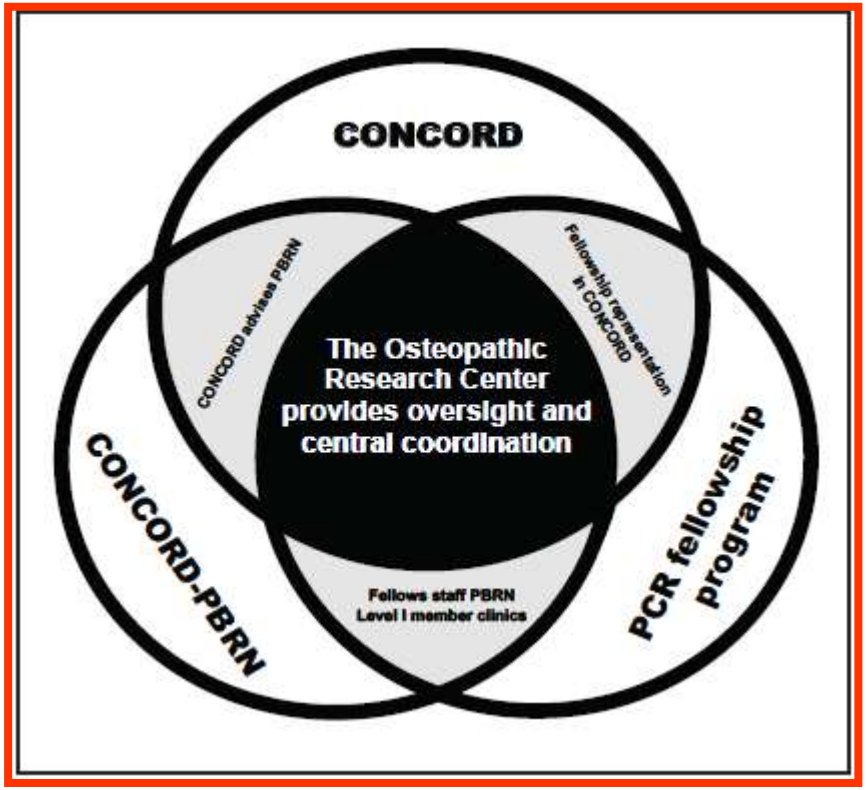


Figure 1. *Triad representing the interrelationships among The Osteopathic Research Center, the Consortium for Collaborative Osteopathic Research Development (CONCORD), the Consortium for Collaborative Osteopathic Research Development–Practice-Based Research Network (CONCORD-PBRN), and the patient-centered research (PCR) fellowship program.*

The CONCORD-PBRN: A Primary Care Research Network

Osteopathic physicians are widely recognized for contributions to primary care, particularly in the specialty of family medicine. Data from the National Ambulatory Medical Care Survey indicate that osteopathic physicians provide primary care during an estimated 217 million patient visits annually, representing about 10% of the nation's primary care services.[15] Further, osteopathic physicians are much more likely than allopathic physicians to provide primary care in the specialty area of family medicine.[15] For example, in

tomorrow." The triad provides the foundation for planning and implementing rigorous studies, including nested case-control studies, longitudinal studies, and clinical trials, which may be used to assess OMT benefits.[13] However, research need not be limited to studies assessing OMT efficacy or effectiveness. For example, studies could address the natural history and epidemiology of somatic dysfunction, thereby representing the "Osteopathic Framingham Study."[14] Other studies might explore the distinctive practice patterns of osteopathic primary care physicians.

EPIDEMIOLOGIA «osteopatica»

EPIDEMIOLOGIA DEI SERVIZI (PDTA)

Diagnosi	***Quanto accurati sono i test per identificare una disfunzione somatica ?***
Frequenza	***Quanto spesso si manifesta la disfunzione somatica?***
Rischio	***Quali fattori sono associati con una maggiore probabilità all'insorgenza di una disfunzione somatica ?***
Prognosi	***Quali sono le conseguenze derivanti dall'essere affetti da una disfunzione somatica?***
Trattamento	***Come cambia un OMT il decorso di una patologia?***
Prevenzione	***L'adozione di un OMT su soggetti sani previene l'insorgenza di una malattia?***

Come rispondere ai quesiti

Diagnosi	***cross-sectional***
Prevalenza	***cross-sectional***
Incidenza	***coorte***
Rischio	***coorte*** ***caso-controllo***
Prognosi	***coorte***
Trattamento/Prevenzione	***sperimentali***

Gerarchia delle prove di efficacia

SPECIAL COMMUNICATION

American Osteopathic Association Guidelines for Osteopathic Manipulative Treatment (OMT) for Patients With Low Back Pain

Task Force on the Low Back Pain Clinical Practice Guidelines

Richard J. Snow, DO, MPH, served as chair of the Task Force on the Low Back Pain Clinical Practice Guidelines. Additional Task Force members were Michael A. Seffinger, DO; Kendi L. Hensel, DO, PhD; and Rodney Wiseman, DO.

Disclaimer: Drs Seffinger and Hensel, *JAOA* associate editors, were not involved in the editorial review or decision to publish these guidelines.

Financial Disclosures: None reported.

Background: Osteopathic manipulative treatment (OMT) is a distinctive modality commonly used by osteopathic physicians to complement conventional management of musculoskeletal disorders, including those that cause low back pain (LBP). Osteopathic manipulative treatment is defined in the *Glossary of Osteopathic Terminology* as "The therapeutic application of manually guided forces by an osteopathic physician (U.S. Usage) to improve physiologic function and/or support homeostasis that has been altered by somatic dysfunction. OMT employs a variety of techniques" (*eAppendix*). Somatic dysfunction is defined as "Impaired or altered function of related components of the somatic (body framework) system: skeletal, arthrodial and myofascial structures, and their related vascular, lymphatic, and neural elements. Somatic dysfunction is treatable using osteopathic manipulative treatment."

These guidelines update the AOA guidelines for osteopathic physicians to utilize OMT for patients with nonspecific acute or chronic LBP published in 2010 on the National Guideline Clearinghouse.[1]

Table 1.
Levels of Evidence

Strength of Evidence	Type of Study	Comment
1a	Systematic review with homogeneity of randomized controlled trials	Individual trials should be free of substantial variations in the directions and magnitudes of results
1b	Individual randomized controlled trial with narrow confidence interval	Confidence interval should indicate a clinically important OMT effect
1c	Differential frequency of adverse outcomes	An adverse outcome was frequently observed in patients who did not receive OMT, but it was infrequently observed in patients who did receive OMT (equivalent to a small number needed to treat)
2a	Systematic review with homogeneity of cohort studies	Individual studies should be free of substantial variations in the directions and magnitudes of OMT effects
2b	Individual cohort study or low-quality randomized controlled trial	Low quality may be indicated by such factors as important differences in baseline characteristics between groups, lack of concealment of treatment allocation, and excessive losses to follow-up
3a	Systematic review with homogeneity of case-control studies	Individual studies should be free of substantial variations in the directions and magnitudes of OMT effects
3b	Individual case-control study	These should be free of substantial evidence of selection bias, information bias, or confounding variables
4	Case series and low-quality cohort and case-control studies	Low quality of cohort and case control studies may be indicated by such factors as important sources of selection bias, information bias, or confounding variables
5	Expert opinion without explicit critical appraisal, or based on physiology, bench research, or "first principles"	These generally will have limited empirical data relevant to OMT effects in human populations

Sito SNLG-ISS (dal 2006 ad oggi)

25 LG e 3 LG mal.rare
6 Consensus Conference
2 LG prevenzione

46 LG Regionali
(Emilia Romagna, Toscana Piemonte)

Cosa si intende per Linee Guida? *Definizione del 1990*

Clinical Practice Guideline

Definition:

"Clinical practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances."

(Institute of Medicine. National Academy Press, 1990)

"Indicazioni elaborate sistematicamente con lo scopo di supportare i medici e i pazienti a decidere le modalità di assistenza più appropriate in specifiche situazioni cliniche"

Cosa si intende per Linee Guida?

Definizione del 2011

Le LG sono dichiarazioni che includono raccomandazioni intese ad ottimizzare le cure, definite sulla base di una revisione sistematica delle evidenze e una valutazione dei benefici e rischi delle varie opzioni di cura.

Piuttosto che imporre un approccio di cura del tipo "taglia unica", le LG cliniche offrono una valutazione della qualità della letteratura scientifica rilevante e una valutazione dei probabili benefici e rischi di uno specifico trattamento.

Queste informazioni permettono ai professionisti sanitari di procedere secondo le indicazioni, scegliendo le migliori cure per ogni singolo paziente sulla base delle sue preferenze.

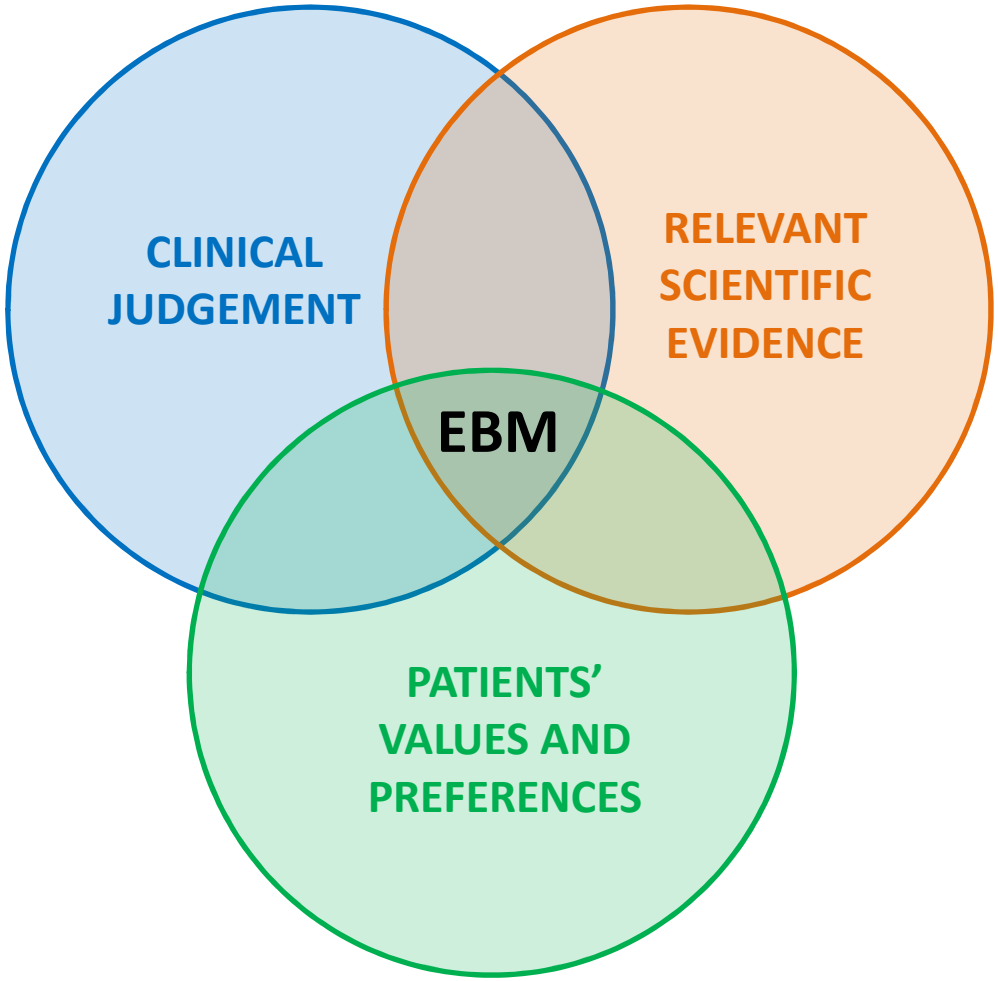
Clinical practice guidelines are statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options.

Rather than dictating a one-size-fits-all approach to patient care, clinical practice guidelines offer an evaluation of the quality of the relevant scientific literature and an assessment of the likely benefits and harms of a particular treatment.

This information enables healthcare providers to proceed accordingly, selecting the best care for a unique patient based on his or her preferences.

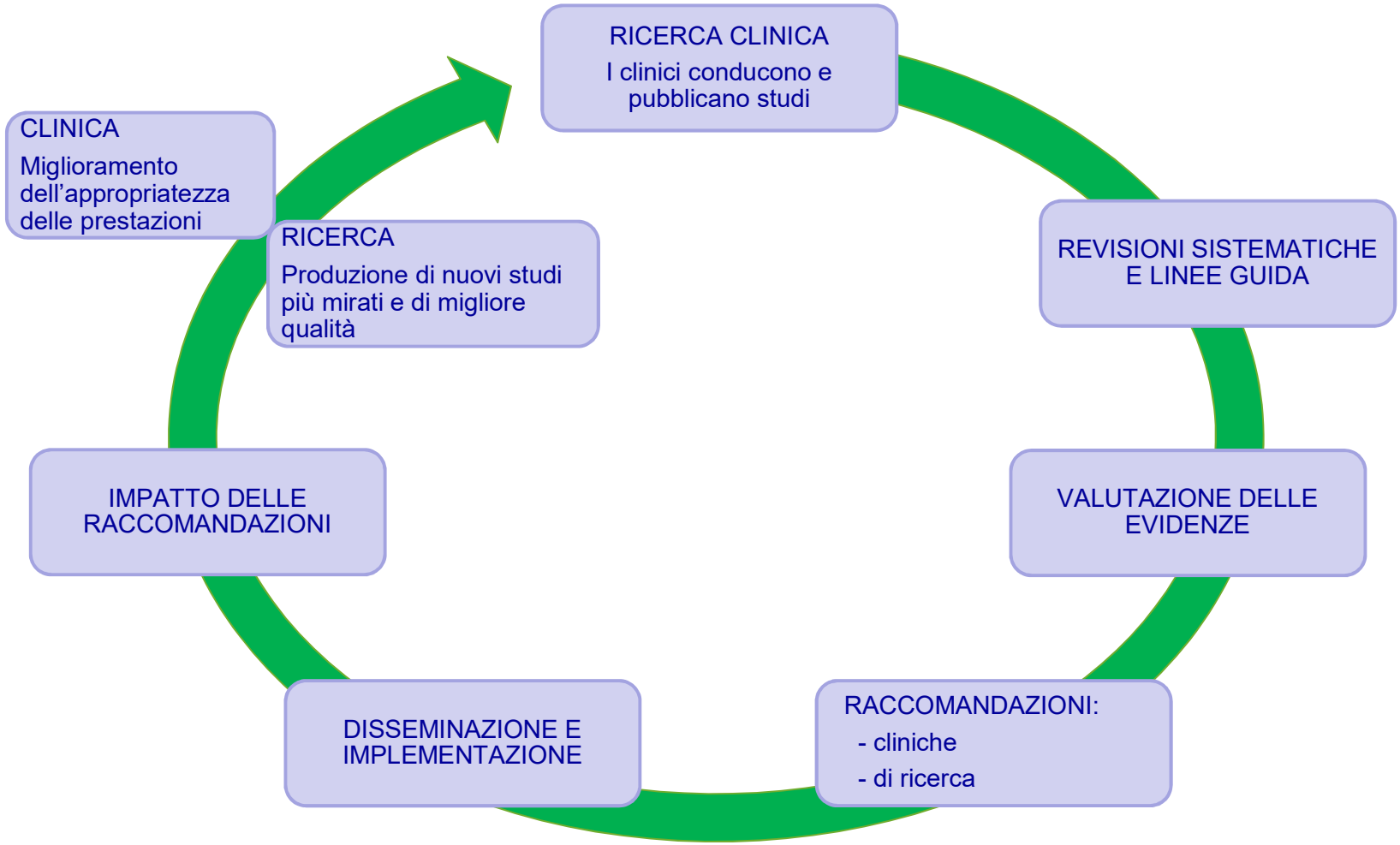
Institute of Medicine. Graham R et al, editor(s). Clinical practice guidelines we can trust. Washington (DC): National Academies Press; 2011.

Cosa si intende per documenti EBM?



Sackett DL et al. Evidence based medicine: what it is and what it isn't. BMJ. 1996 Jan 13;312(7023):71-2.

Funzione delle linee guida



Approvato dal Parlamento Il 17 gennaio 2017

Disposizioni in materia di sicurezza delle cure e della persona assistita, nonché in materia di responsabilità professionale degli esercenti le professioni sanitarie

Art. 5.

(Buone pratiche clinico-assistenziali e raccomandazioni previste dalle linee guida)

1. Gli esercenti le professioni sanitarie, nell'esecuzione delle prestazioni sanitarie con finalità preventive, diagnostiche, terapeutiche, palliative, riabilitative e di medicina legale, si attengono, salve le specificità del caso concreto, alle raccomandazioni previste dalle linee guida pubblicate ai sensi del comma 3 ed elaborate da enti e istituzioni pubblici e privati nonché dalle società scientifiche e dalle associazioni tecnico-scientifiche delle professioni sanitarie iscritte in apposito elenco istituito e regolamentato con decreto del Ministro della salute, da emanare entro novanta giorni dalla data di entrata in vigore della presente legge, e da aggiornare con cadenza biennale.

2. Nel regolamentare l'iscrizione in apposito elenco delle società scientifiche e delle associazioni tecnico-scientifiche di cui al comma 1, il decreto del Ministro della salute stabilisce:

a) i requisiti minimi di rappresentatività sul territorio nazionale;

b) la costituzione mediante atto pubblico e le garanzie da prevedere nello statuto in riferimento al libero accesso dei professionisti aventi titolo e alla loro partecipazione alle decisioni, all'autonomia e all'indipendenza, all'assenza di scopo di lucro, alla pubblicazione nel sito istituzionale dei bilanci preventivi, dei consuntivi e degli incarichi retribuiti, alla dichiarazione e regolazione dei conflitti di interesse e all'individuazione di sistemi di verifica e controllo della qualità della produzione tecnico-scientifica;

c) le procedure di iscrizione all'elenco nonché le verifiche sul mantenimento dei requisiti e le modalità di sospensione o cancellazione dallo stesso.

VALUTAZIONE STUDI E LG

	Valutazione qualità	Standard per il reporting
RCT	**Jadad score** **Cochrane risk of bias**	**CONSORT statement** *Consolidated Standards of Reporting Trials*
osservazionali	**Newcastle Ottawa Scale**	**STROBE statement** *Strengthening the Reporting of Observational Studies in Epidemiology*
prognostici	**QUIPS**	**STARD statement** *Standards for Reporting of Diagnostic Accuracy* **TRIPOD statement** *Transparent reporting of a multivariable prediction model for individual prognosis or diagnosis*
diagnostici	**QUADAS**	**STARD statement** *Standards for Reporting of Diagnostic Accuracy* **TRIPOD statement** *Transparent reporting of a multivariable prediction model for individual prognosis or diagnosis*
Revisioni sistematiche	**AMSTAR** *Assessing the Methodological quality of Systematic Reviews*	**PRISMA statement** *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* **QUOROM** *Quality of Reporting of Meta-analyses*
Linee guida	**AGREE II**	**Checklist for guideline development** (Schünemann 2014)

APPRAISAL OF GUIDELINES
FOR RESEARCH & EVALUATION
(AGREE)

CHECKLIST PER LA VALUTAZIONE DELLA QUALITA' DI LINEE-GUIDA PER LA PRATICA CLINICA

AGREE Collaboration

Settembre 2001

Versione italiana

Tradotta a cura di
Area di Programma Governo Clinico
Agenzia Sanitaria Regionale Emilia-Romagna
Viale Aldo Moro, 38
40127 Bologna
www.regione.emilia-romagna.it/agenziasan/

1. Struttura e contenuto di AGREE

AGREE consiste di 23 criteri (*item*) suddivisi in sei *aree*. Ciascuna area è rivolta ad uno specifico aspetto della qualità di una linea-guida.

Obiettivo e motivazione (item 1-3) riguarda gli obiettivi generali della linea-guida, gli specifici quesiti clinici affrontati e la popolazione di pazienti cui si rivolge.

Coinvolgimento delle parti in causa (item 4-7) riguarda la misura in cui la linea-guida rappresenta le opinioni dei suoi potenziali utilizzatori.

Rigore della elaborazione (item 8-14) si riferisce al processo utilizzato per identificare e sintetizzare le informazioni scientifiche, per formulare le raccomandazioni e per mantenerle aggiornate.

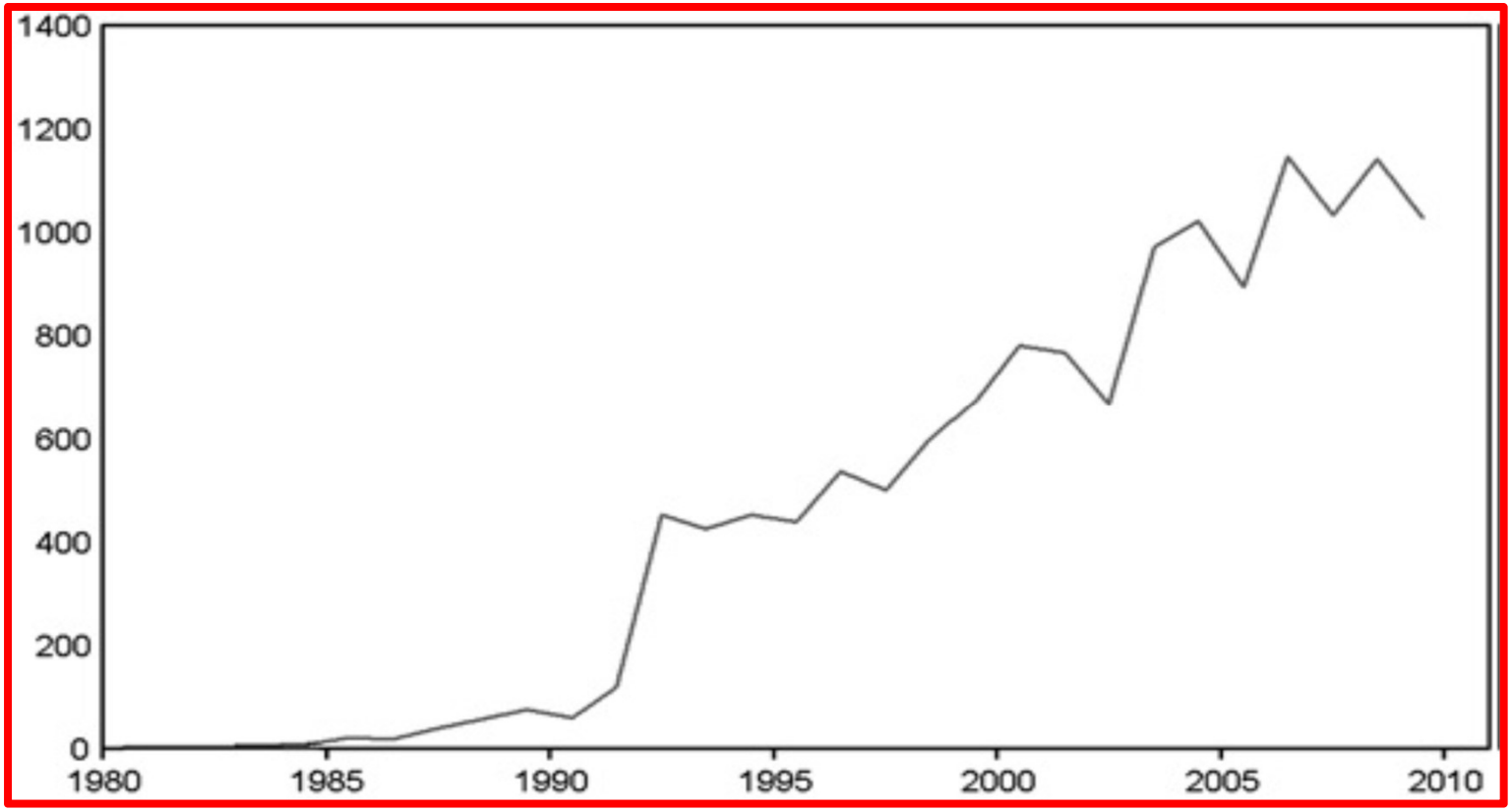
Chiarezza e presentazione (item 15-18) riguarda la formulazione ed il formato della linea-guida.

Applicabilità (item 19-21) si riferisce alle possibili implicazioni organizzative, economiche e sui comportamenti professionali attese dalla applicazione della linea-guida.

Indipendenza editoriale (item 22-23) riguarda l'indipendenza delle raccomandazioni e l'esplicito riconoscimento di possibili conflitti di interesse da parte del gruppo che ha elaborato la linea-guida.

The quality of clinical practice guidelines over the last two decades: a systematic review of guideline appraisal studies

Pablo Alonso-Coello,[1,2] Affan Irfan,[3] Ivan Solà,[1] Ignasi Gich,[1,2]
Mario Delgado-Noguera,[4,5] David Rigau,[1] Sera Tort,[1] Xavier Bonfill,[1,2] Jako Burgers,[6,7]
Holger Schunemann[8]



Results In total, 42 reviews were selected, including a total of 626 guidelines, published between 1980 and 2007, with a median of 25 CPGs. The mean scores were acceptable for the domain 'Scope and purpose' (64%; 95% CI 61.9 to 66.4) and 'Clarity and presentation' (60%; 95% CI 57.9 to 61.9), moderate for domain 'Rigour of development' (43%; 95% CI 41.0 to 45.2), and low for the other domains ('Stakeholder involvement' 35%; 95% CI 33.9 to 37.5, 'Editorial independence' 30%; 95% CI 27.9 to 32.3, and 'Applicability' 22%; 95% CI 20.4 to 23.9). From those guidelines that included an overall assessment, 62% (168/270) were recommended or recommended with provisos. There was a significant improvement over time for all domains, except for 'Editorial independence.'

ORIGINAL ARTICLE

Declaration and Handling of Conflicts of Interest in Guidelines

A Study of S1 Guidelines From German Specialist Societies From 2010–2013

Gisela Schott, Klaus Lieb, Jochem König, Bernd Mühlbauer, Wilhelm Niebling, Henry Pachl, Stephan Schmutz, Wolf-Dieter Ludwig

TABLE 1a

Information on conflicts of interest in S1 guidelines

Guidelines: *n* = 234*	Proportion	Percentage
Individual conflict of interest statement available	218/234	93%
Evaluation of conflicts of interest available	25/234	11%
Conflicts of interest led to consequence	1/234	0.4%
Guidelines for which an individual conflict of interest statement is available, *n* = 218		
Guidelines by authors with no conflicts of interest	5/218	2%
Guidelines by authors with nonfinancial conflicts of interest only	27/218	12%
Guidelines by authors with one or more financial conflict of interest	186/218	85%

*One guideline listed no authors and was excluded from these figures

10 years of NICE: still growing and still controversial

Peter Littlejohns, Sarah Garner, Nick Doyle, Fergus Macbeth, David Barnett, Carole Longson

The National Institute for Health and Clinical Excellence (NICE) will have existed for 10 years on April 1, 2009. Over the past decade, the institute's methodological approach to the development of guidance and assessment of the value of health-care interventions has received international interest and acclaim. Furthermore, individual decisions, in particular those made on new cancer drugs, have generated enormous controversy. An early example was the appraisal of irinotecan and oxaliplatin for colorectal cancer in 2002. In 2003, NICE described the rationale behind its decision making. The 10th anniversary of the institute provides an opportunity to review some of the key issues affecting cancer appraisals and to explain the development of other NICE guidance programmes relevant to the provision of cancer services.

Lancet Oncol 2009; 10: 417–24

See Keynote Comment page 306

See Reflection and Reaction page 315

National Institute for Health and Clinical Excellence, London, UK (P Littlejohns FRCP,

The National Institute for Health and Clinical Excellence (NICE) is the independent organisation that provides national guidance on promotion of good health and prevention and treatment of ill health in England and Wales. The institute was established as a special health authority on April 1, 1999, to offer NHS health-care professionals advice on how to provide patients with the highest attainable standards of care and to reduce variation in quality of care (figure). Since its inception,

NICE has 280 full-time staff with an annual budget of £33 million and offices based in London and, since 2005, Manchester. However, development of guidance is supported through a series of directly commissioned national collaborating centres and academic units based in universities that are funded through the National Institute for Health Research. More than 2000 individuals, excluding our stakeholders, are involved in the development of guidance at any one time. Following

4. CONCLUSIONI

1.studi di validità e di reliability

International Journal of Osteopathic Medicine 14 (2011) 43–47

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journal homepage: www.elsevier.com/ijos

Masterclass

Diagnostic reliability in osteopathic medicine

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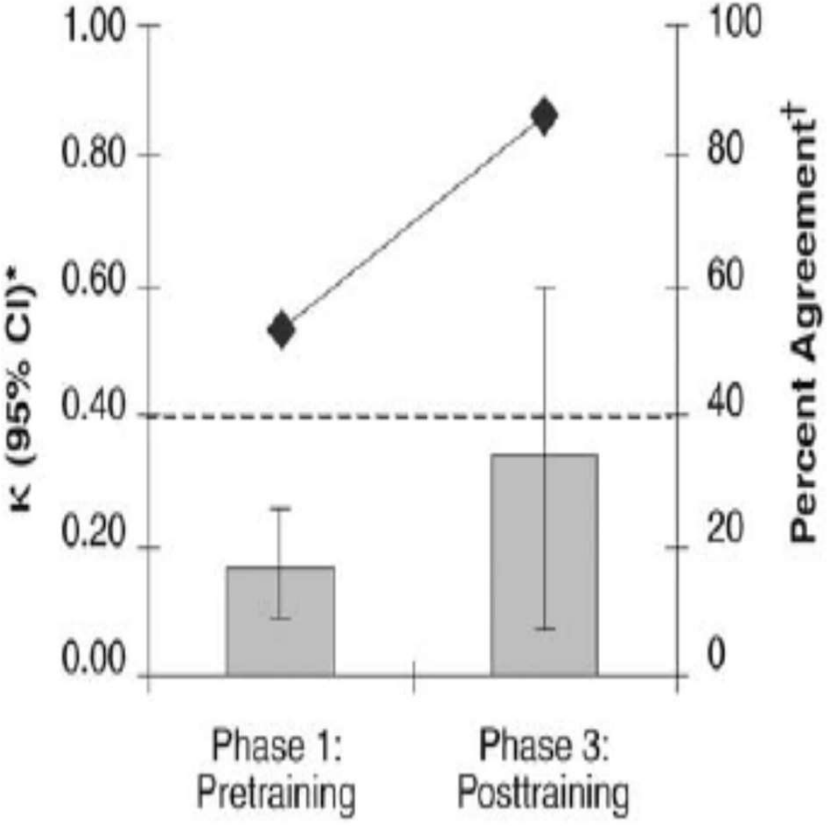
ABSTRACT

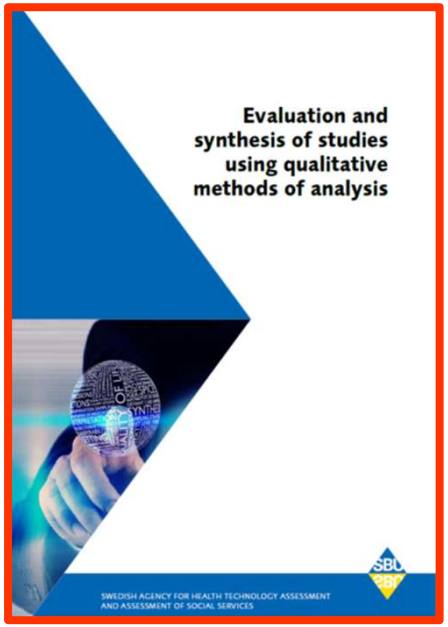
In order to apply an effective treatment we must first know how to identify those who will and will not likely respond to that treatment. Determining the accuracy and reliability of diagnostic tests used in osteopathy is therefore a high priority. Diagnostic research in osteopathy is far reaching, as diagnosis impacts treatment choice, prognosis, referral, and patient monitoring. The accuracy and reliability of diagnostic tests also impacts the selection of patients for participation clinical trials and can be an source of misclassification bias. This masterclass provides a brief overview of diagnostic research and then explains in more detail the methodology, statistical analysis and quality appraisal of diagnostic reliability studies.



* Dotted horizontal line marks the clinically acceptable kappa level (κ) when analyzing reliability of physical findings.

† Line with diamonds represents percent agreement among examiners.

2.Integrazione della ricerca quantitativa e qualitativa



	Quantitative research	Qualitative research
Approach	• Reductionist • Study design is predetermined • Understanding of a phenomenon from the researcher's perspective • Focus on objective measurement	• Holistic • Study design can be flexible, allowing exploration of ideas which emerge during the study • Understanding of a phenomenon from the subject's perspective • Focus on subjective meaning, understanding and process
Context	• The importance of the context varies but contextual factors are often eliminated in controlled experimental studies	• The context is important in formulating meanings and explanations • The research is undertaken in natural settings
Research instrument	• Validated instrument, measure, rating scale or questionnaire	• The primary research instrument is the researcher
Sampling	• Random or probability sampling • Representative of population • Predetermined by power calculations	• Purposeful or theoretical sampling • Reflects the population's diversity • Flexible enough to be propelled by emerging theory • In the ideal case the size of the sample is determined by data saturation
Data	• Numbers	• Words and images
Analysis	• Statistical analysis • Variables are the units of analysis • Analysis after collection of data	• Non-statistical analysis • Themes are the units of analysis • Analysis and data collection can be undertaken concurrently
Output	• Descriptive statistics • Statistical evidence of correlation or difference between groups • Prediction of the effect of independent variable on an outcome variable	• Detailed "thick" description • Classifications • Typologies • Understanding
Generalisation	• Based on probability • Inferential	• Representational • Inferential • Theoretical

3. Ricerca biologica

CellPress

Cell Metabolism

Perspective

Systems Biology of Metabolism: A Driver for Developing Personalized and Precision Medicine

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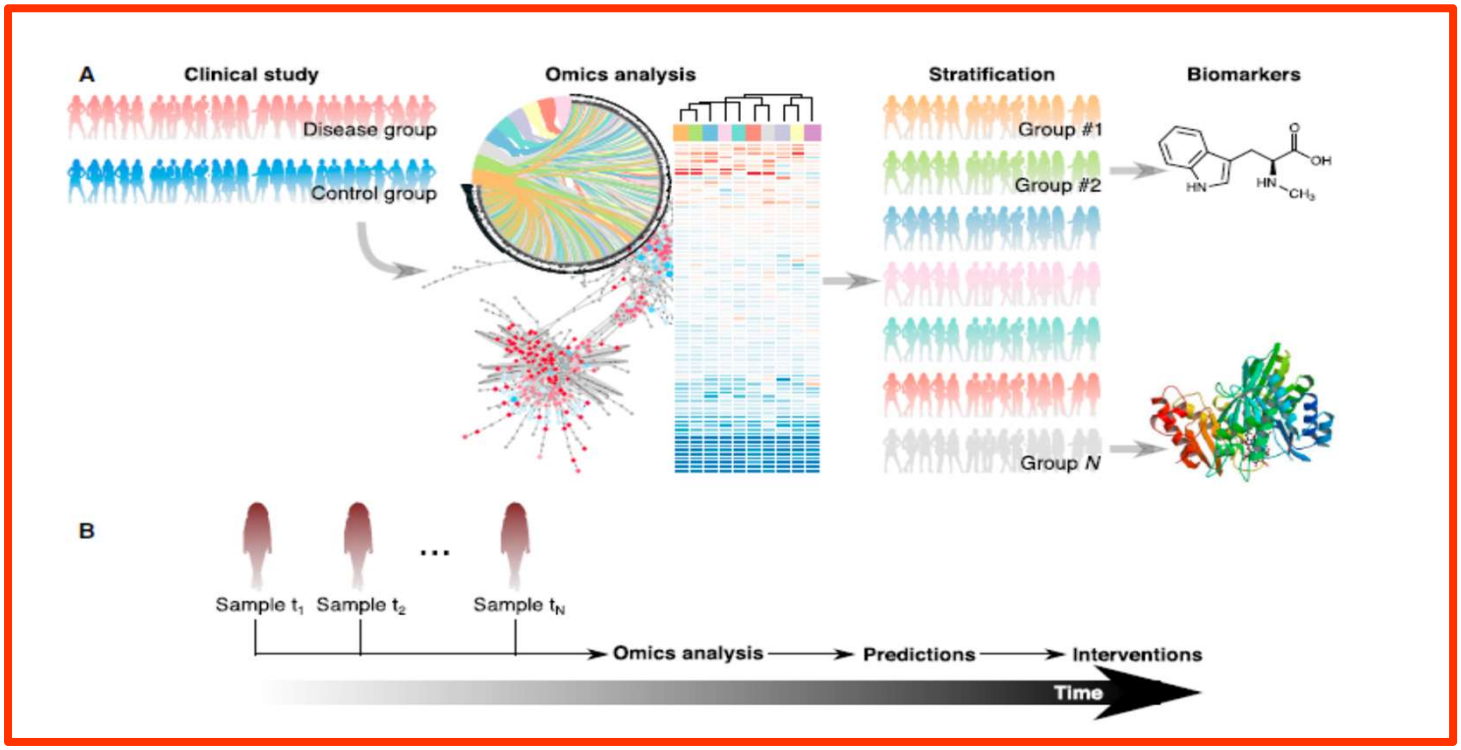

4. Costruire percorsi formativi specifici per la diffusione della cultura basata sulle evidenze o cultura basata sulla valutazione

Benché la formazione in osteopatia debba concentrarsi su quelle materie e quelle competenze che costituiscono la base dell'approccio osteopatico, per poter praticare con competenza la professione di operatore sanitario di base è necessario possedere una conoscenza e una comprensione di base dei comuni trattamenti medici allopatici dei quali possono avvalersi i pazienti. Inoltre, l'operatore di osteopatia deve comprendere la logica che sta dietro i comuni protocolli terapeutici, la modalità con cui il corpo risponde a tali trattamenti, e in quale modo tali protocolli possono influire sulla scelta e sulla somministrazione del trattamento osteopatico.