

# Evidence-based practices published in Brazil: identification and analysis studies about human health prevention

PRÁTICAS BASEADAS EM EVIDÊNCIAS PUBLICADAS NO BRASIL: IDENTIFICAÇÃO E REFLEXÃO NA ÁREA DA PREVENÇÃO EM SAÚDE HUMANA

PRÁCTICAS BASADAS EN EVIDENCIAS PUBLICADAS EN BRASIL: IDENTIFICACIÓN Y ANÁLISIS ESTUDIOS ACERCA DE LA PREVENCIÓN EN SALUD HUMANA

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## ABSTRACT

Integrative review of Brazilian studies about evidence-based practices (EBP) about prevention in human health, published in Web of Science/JCR journals, between October 2010 and April 2011. The aim was to identify the specialties that most accomplished these studies, their foci and methodological approaches. Based on inclusion criteria, 84 studies were selected, mainly published in public health journals, focusing on primary care and also addressing clinical issues and different specialties. Prevention foci and methodological approaches also varied, with a predominance of systematic reviews without meta-analysis. The results indicate that there is no single way to conceptualize and practice EBP in the field of prevention, and that its application may not only serve to obtain indisputable evidence to equip intervention actions. This endless knowledge area is under construction, with a view to the analysis and further understanding of health phenomena.

## DESCRIPTORS

Evidence-based practice  
Evidence-based nursing  
Review  
Meta-analysis

## RESUMO

Revisão integrativa de estudos brasileiros sobre práticas baseadas em evidências (PBE) acerca da prevenção em saúde humana, publicados em periódicos Web of Science/JCR, de outubro de 2010 a abril de 2011. O objetivo foi identificar as especialidades que mais realizaram estes estudos, seus enfoques e abordagens metodológicas. A partir de critérios de inclusão, foram selecionados 84 trabalhos publicados majoritariamente em periódicos de saúde pública, focalizando a atenção primária e abrangendo também questões clínicas e diversas especialidades. Variaram também os enfoques de prevenção e as abordagens metodológicas, predominando a revisão sistemática sem metanálise. Os resultados indicam que não há uma única maneira de conceituar e praticar a PBE na prevenção e, sua aplicação pode não ser apenas para obtenção de prova irrefutável para instrumentalizar ações de intervenção. Constitui um campo infundável de conhecimentos, em construção, para análise e maior compreensão de fenômenos em saúde.

## DESCRIPTORIOS

Prática clínica baseada em evidências  
Enfermagem baseada em evidências  
Revisão  
Metanálise

## RESUMEN

Revisión integradora de estudios brasileños sobre prácticas basadas en evidencias (PBE) acerca de la prevención en salud humana, publicados en periódicos Web of Science/JCR, de octubre del 2010 a abril del 2011. La finalidad fue identificar las especialidades que más desarrollaron estos estudios, sus enfoques y aproximaciones metodológicas. A partir de criterios de inclusión, fueron seleccionados 84 trabajos publicados en su mayoría en periódicos de salud pública, focalizando en la atención primaria y abarcando también cuestiones clínicas y diversas especialidades. Variaron también los enfoques de prevención y las aproximaciones metodológicas, predominando la revisión sistemática sin meta-análisis. Los resultados indican que no existe una única manera de conceptualizar y practicar la PBE en la prevención, y su aplicación puede servir no sólo para alcanzar prueba irrefutable para instrumentalizar acciones de intervención. Constituye un campo interminable de conocimientos, en construcción, para análisis y mayor comprensión de fenómenos en salud.

## DESCRIPTORIOS

Práctica clínica basada en la evidencia  
Enfermería basada en la evidencia  
Revisión  
Meta-análisis

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## INTRODUCTION

This paper is an integrative review of scientific literature about evidence-based practice (EBP) studies on human health prevention in Brazil. In a publication on EBP in general health in the last ten years, it was identified that prevention contributed to the majority (61.0%) of studies present in Web of Science/JCR journals, a result that motivated this review, so as to explore this healthcare area in further detail<sup>(1)</sup>.

This fact is no exception though. Originating in clinical medicine and expanding to various specialties and health care practices, and even to other activity sectors like education, EBP has been a rapidly growing international phenomenon as from the 21<sup>st</sup> century.

At the same time, both followers and critics have frequently discussed the phenomenon, considering or rejecting it as a new scientific health care practice paradigm, permitting tests and decisions free from errors<sup>(2-11)</sup>.

In this study, we ask: What does EBP seek in the human prevention area, as it originates in and is destined at clinical interventions? What has been investigated? What advances have been obtained?

## METHOD

An integrative review was accomplished, a method that can join primary or secondary studies, with different methods and/or theories and a wide range of implications<sup>(10)</sup>. In this review, a synthesis was developed of EBP studies, guided by the following question: *What types of EBP studies on human health prevention have been accomplished and published in Brazil?*

Inclusion criteria referred to studies about prevention, published in Brazilian scientific journals in health as from 2000, indexed in Web of Science and cited in Journal Citation Report (JCR), with a clearly expressed and developed literature review method. The search was accomplished between October 2010 and April 2011 in the databases LILACS and PubMed/MEDLINE and used the following keywords, either in combination or separately: evidence-based practice, systematic review, integrative review, narrative review, qualitative review, meta-analysis and metasynthesis. The publications found were previously selected based on the titles and abstracts and, when they complied with the inclusion criteria, the full articles were assessed. Once included, they were classified and analyzed in terms of specialty and/or themes involved, EBP methods used and prevention foci sought. For the latter, an arbitrary classification was used, related to: I) Prevalence or incidence studies on health problem events; II) Studies that identify and/or associate risk factors in the prevention or occurrence of health events; III) Studies that correlate interventions with prevention, prophylaxis or re-

duction of health events. The list of publications is identified and presented in the bibliographic references.

## RESULTS

Based on the previously defined keywords, 154 studies were obtained, 84 were included which complied with the inclusion criteria<sup>(12-95)</sup>, all of which were published in the first decade of the 21<sup>st</sup> century, mainly as from 2005, in the following Web of Science/JCR journals: *Cadernos de Saúde Pública* (37), *São Paulo Medical Journal* (4), *Revista Latino-Americana de Enfermagem* (7), *Revista de Saúde Pública* (9), *Jornal de Pediatria* (6), *Revista Brasileira de Psiquiatria* (1), *Arquivos de Neuro-Psiquiatria* (1), *Revista da Associação Médica Brasileira* (3), *Revista da Escola de Enfermagem da USP* (5), *Revista Brasileira de Fisioterapia* (4), *Arquivos Brasileiros de Endocrinologia e Metabologia* (1), *Clinics* (2), *Journal of Applied Oral Science* (2), *Brazilian Journal of Infection Disease* (1) and *Memórias do Instituto Oswaldo Cruz* (1).

Out of 20 health journals in the Web of Science/JCR database, during the search period, 15 contained articles included in this review, revealing the expansion and densification of studies on EBP in the prevention area. The majority (46-55%) was published in specific public health journals (*Cadernos de Saúde Pública*-37; *Revista de Saúde Pública*-9), an area predominantly focused on prevention. Two journals exclusively published journals of interest to Nursing.

Table 1 displays the distribution of the specialties the studies were executed in.

The expansion in the number of EBP studies on a wide range of health prevention issues is unquestionable, although relatively dispersed. Two, however, are predominant: Infectology and Hospital Infection and Child Health and Pediatrics, with eleven studies (representing 7.7% of the total each). On the opposite, in some specialties, there was only one study: anesthesiology<sup>(13)</sup>; asthma<sup>(16)</sup>; pain and analgesics<sup>(20)</sup>; diagnostic tests and evaluation<sup>(53)</sup>; wounds<sup>(61)</sup>; gender<sup>(32)</sup>; hematology<sup>(30)</sup>; immunology<sup>(17)</sup>; pulmonology<sup>(36)</sup>; and domestic violence<sup>(81)</sup>.

Table 2 displays the methodological approaches of EBP, as well as a classification of prevention focus types.

Studies in the Prevention II category represented 42.9% of the total, followed by Prevention III with 29.2%. The predominant methods were systematic review without meta-analysis (53.6%), followed by integrative review (19%) and systematic review with meta-analysis (16.7%). Only one study was a meta-synthesis. The predominant foci at prevention levels II and III indicate the search not only to survey the incidence and prevalence of health events and problems, but also of their causes and intervention possibilities.

What does EBP seek in the human prevention area, as it originates in and is destined at clinical interventions?

**Table 1** – Studies on EBP in prevention published in Brazilian scientific journals indexed in Web of Science/JCR according to identified specialties - São Paulo, 2011

Specialty/theme	Studies *	Total N	%
Alcoholism, smoking, drug addiction	64, 65,78, 83, 92	05	3.5
Anesthesiology	13	01	0.7
Asthma	16	05	3.5
Cardio-vascular	25, 53, 66, 84	04	2.8
Surgery	50, 55, 57, 91, 94, 95	06	4.2
Metabolic diseases	24, 26, 29, 34, 46, 89, 95	07	4.9
Pain and analgesics	20	01	0.7
Transmissible Diseases (TB and AIDS)	12, 17, 18	03	2.1
Diagnostic Tests and Evaluation	53	01	0.7
Family	33, 60	02	1.4
Wounds	61	01	0.7
Physiotherapy and physical exercise	35, 58, 72, 73, 74, 90	06	4.2
Gender	32	01	0.7
Geriatrics, Gerontology and elderly health	15, 32, 47, 77, 81,83, 85	07	4.9
Hematology	30	01	0.7
Immunology	17	01	0.7
Infectology and Hospital infection	28, 48, 50, 55, 62, 66, 70, 82, 86, 88, 91	11	7.7
Neonatology	20, 22, 37, 39, 43, 48, 52, 67	08	5.6
Neurology	59, 67	02	1.4
Nutrition/food disorder obesity	16, 21, 46, 51, 75, 76	06	4.2
Obstetrics	14, 22, 26, 37, 39, 45, 48, 91	08	5.6
Oncology	31, 44, 49, 79, 87	05	3.5
Otorhinolaryngology	19, 54	02	1.4
Pulmonology	36	01	0.7
Psychiatrics and mental health	22, 25, 33, 85	04	2.8
Quality of life	21, 29, 40, 56, 90	05	3.5
Oral health/Dentistry	42, 47, 68, 69, 71	05	3.5
Child Health and Pediatrics	16, 19, 29, 30, 34, 41, 51, 63, 84, 89, 92	11	7.8
Women's Health and Gynecology	31, 49, 50, 86	04	2.8
Adolescent Health	16, 24, 34, 92	04	2.8
Occupational Health	38, 54	02	1.4
Safety and adverse events	27, 28, 30, 94	04	2.8
Complementary therapies	23, 79, 93	03	2.1
Vaccination	16, 18, 80, 89	04	2.8
Domestic violence	81	01	0.7
<b>Total</b>	-	14	100

\*Some studies are compatible with more than one specialty, which is why the total figure obtained in this distribution is higher than the total number of studies included.

**Table 2** – EBP studies on health prevention, published in Brazilian scientific journals Web of Science/JCR, according to focus and methodological approach - São Paulo, 2011

Focus Approach	Prevention I		Prevention II		Prevention III		Total	
	N	%	N	%	N	%	N	%
Systematic review w/meta-analysis	83		25, 31,36, 44, 49		14, 33, 50, 54, 64, 65, 91, 94		14	(16.7)
Systematic review without meta-analysis	12,13, 27, 32, 48, 81, 84, 85, 86		16,19, 21, 22, 26, 28, 29, 30, 34, 35, 37, 38, 39, 41, 42, 59, 63, 66, 77, 78		15, 20, 51, 53, 55, 62, 70, 71, 72, 73, 74, 75, 76, 79, 80,82		45	(53.6)
Integrative review	45, 47, 67		24, 40, 52, 56, 57, 60, 61, 87,88, 95		46, 58, 69		16	(19.0)
Metasynthesis					23		1	(1.2)
Other*	90, 92		43		17, 18, 68, 89, 93		8	(9.5)
<b>Total</b>	15	(17.9)	36	(42.9)	33	(39.2)	84	(100)

I - Prevalence or incidence studies on health problem events

II - Studies that identify and/or associate risk factors in the prevention or occurrence of health events

III - Studies that correlate interventions with prevention, prophylaxis or reduction of health events.

## DISCUSSION

The results show the undeniable proliferation of EBP in human health prevention, going beyond the field where clinical medicine started, for diagnostic, prognostic or therapeutic purposes.

In this study, although predominantly published (55%) in specific public health journals, the papers are also present in general or specialized journals, covering a wide range of preventive aspects that are not only related to primary care, but also to eminently clinical actions. Some titles exemplify the first case: *BCG vaccine: efficacy and indications of vaccination and revaccination*<sup>(17)</sup>; *Quality of life and food disorders: a systematic review*<sup>(21)</sup>; *Alternative and complementary medicine: a metasyntesis*<sup>(23)</sup>; *Childhood poverty and abdominal obesity in adulthood: a systematic review*<sup>(29)</sup>; *The scientific study of happiness and health promotion: an integrative literature review*<sup>(56)</sup>. In the second case: *Mortality in anesthesia: a systematic review*<sup>(13)</sup>; *Systematic review and meta-analysis and antibiotics prophylaxis in abdominal hysterectomy*<sup>(50)</sup>; *Surgical positioning: evidence for nursing care*<sup>(57)</sup>.

Another aspect to highlight is the range of foci, which permitted the elaboration of a study classification, although arbitrary, so as to accomplish its purpose. Thus, there were studies that only focused on the prevalence or incidence of health problem events (I) <sup>(12-13,27,32,45,47-48,67,81,83-86,90,92)</sup>; others to identify and/or associate risk factors (II) <sup>(16,19,21-22,24-26,28-31,34-44,49,52,56-57,59-61,63,66,77-78,87-88,95)</sup>; and still others to correlate interventions with prevention, prophylaxis or reduction of events (III) <sup>(14-15,17-18,20,23,33,46,50-51,53-55,58,62,64-65,68-76,79-80,82,89,91,93-94)</sup>.

Finally, the use of different methodological approaches to EBP (systematic review with meta-analysis, systematic review without meta-analysis, integrative review and meta-synthesis) underlines two findings. One of them refers to mistakes in the application of the methods. To give an example, studies were found that define their method as a systematic review, while their development is compatible with an integrative review or a mixture of both<sup>(a)</sup>. These mistakes are due to the fact that the available approaches for EBP studies are recent, with consequent difficulties for its adequate adaptation, according to the intended foci. More recently, as a result of the creation of different EBP centers and efforts to develop specific protocols for its qualification, minimizing this difficulty will certainly be possible. In addition, in view of the dynamic nature of science, the creation of other approaches is not improbable.

Independently of this methodological approach difficulty, it was verified that it is possible to consider the polysemy of the term *evidences*, exactly because there was no single form of seeking it. Therefore, it should be asked: what is

<sup>(a)</sup> In the classification of these approaches, we decided to consider the approaches the authors themselves considered, and not the authors as they were actually developed.

*evidence* actually? What does one look for in the *evidence*? If there is no single route towards EBP, is EBP actually possible? And, in case of the present review: what is its place in the prevention area, also with regard to primary care?

According to one of the authors, who is a pioneer in evidence-based medicine (EBM) in Brazil, the term *evidence*, in English, means proof. This refers to decision-making based on scientific, valid and impartial evidence of what works and what does not work. When exemplifying what EBM is, however, referring to the interviewer's consideration that it relates to probability, the author contradictorily admits that medicine is not an exact science and that one does what has the best chance of working out. The difference is the reliability of EBM and its role of reducing uncertainty in decision-making. That is, from *proof*, evidence turns into *confidence*, *reduction of uncertainty*, according to the same author<sup>(2)</sup>.

The term *evidence*, as it has been used though, is inconsistent, as one calls something evidence when it does without proof or when it dispenses a justification<sup>(3)</sup>. Another author also reports his discomfort with this term as *scientific proof*, mainly if obtained through randomized controlled clinical trials or so-called meta-analyses:

Thus, its defenders intend to tell us two things: that evidence-based medicine establishes a clear border between what is and what is not evidence-based medicine; and that science has its own method that permits obtaining *evidence*.

Hence, clinical practice based on other aspects, such as physiological mechanisms of the body, disease signs and symptoms and drugs actions does not represent science, or at least that would permit safe knowledge for decision making<sup>(4)</sup>. In line with this discomfort, the first author reinforces that medicine, no matter how advanced it becomes, will always be a science that combines art, clinic and probabilities. Therefore, it deals with uncertainty, never concluded as a *fact*, as it has neither the benefits of mathematical exactness, nor does it intend to offer perfect and uniform answers. It is the most circumstantial of sciences, mainly in clinical care, in which the probable is never an abstraction, but something that ranges between the possible and the real, that is, the so-called *objective probability*<sup>(3)</sup>.

EBP in health in general, originating in EBM, does not constitute an original form of doing science, as it is but a new systemization of medical rationality, in which the technical model persists, privileging scientism in the search for objectification and *degrees of certainty*, with the decision sought in the joining and analysis of research results as the maximum level of evidence. And, in this search for a rationality *status* as a possibility to produce truths, clinical care and epidemiology are linked, which is called clinical epidemiology. In other words, if medicine and other health care practices are seen as science and art, EBP reinforces the science dimension to avoid error

risks in decisions based on intuitions that originate in accumulated experience, only granted through mastery in clinical arts<sup>(5-7)</sup>. This rests on the pioneer practitioners' definition of EBM: *process of systematically discovering, assessing and using research findings as the base for clinical decisions*<sup>(8)</sup>.

On the other hand, basically based on research results, it goes against some defenders' discourse that EBP constitutes a *link between good science and clinical practice*, by respecting other aspects, such as the patient's preference and professional experience<sup>(9)</sup>.

Some authors consider that the obsession with quantification disdains clinical skills and can transform the objective data from the anamnesis and the semiotic examination into data contaminated by statistical values, without admitting individual thought and action. And the most discouraging is that, the more complex the clinical situation, the less evidence is available for convincing decision-making. Another risk is that EBP reduces clinical practice to the disease even further, in which the overvaluation of objectifiable aspects, translated as disease, ignore comprehensive care to the patient as a person and to the subjective universe of suffering. If scientific and technological advances offer invaluable benefits, one cannot deny that science alone does not clarify all truths, but also contains limits to deal with multidimensional issues like health. In the overvaluation of the technological aspects of clinical practices and the concern with a possible certainty, there is a lack of practices that recommend care to fellow men, due to the professional's lack of subjectivity or lack of ability to consider intersubjectivity, through empathy and the ability to listen, which would offer equally rich or even more important material<sup>(3,6)</sup>.

On the other hand, as EBP derives from the evolution of clinical epidemiology, the curious metamorphosis that occurred in this process is cited, in which

... the adjective – clinical – turns into a broader substantive – medicine. In other words, the clinic is overvalued, in which its verification forms start to totalize medicine as a whole<sup>(6)</sup>.

This clinic, however, is more based on evidence bundles than on experience for decision-making.

Parameters, protocols, meta-analyses, epidemiological data, medical informatics are relevant in knowledge production, but it should be questioned whether the rush towards scientific evidence that is only based on these tools is not an attempt to metonymically transform parts of biomedicine into the whole. In addition, a large part of EBP defenders' proposals represent an evolution from a same ideal type, that is, a same medical rationality organized around the scientist nature, with a view to setting parameters for practice while maintaining the disease as a nosographic entity, as categorized in taxonomy manuals, as a diagnosis and intervention object, to the detriment of the valuation of the singularity of human health in its hypercomplexity<sup>(6)</sup>.

When distinguishing EBP from clinical practice, authors consider that they represent two different routes to answer intervention issues<sup>(10)</sup>. In case of EBP, which predominantly seeks evidence through clinical trial results, it seems to represent the shortest route, by previously establishing observations that are considered relevant for an original treatment question, in which parameters are sought for other patients with condition Y when a treatment X is administered. In the clinical practice approach, then, based on basic sciences, one can predict certain clinical parameters for patients with condition Y regarding treatment X. These predictions cover a very different set of observations, as it is the same that supports biochemical and physiological knowledge. Although they incorporate different approaches, however, this does not mean that they are conflicting: one needs the other, none of them can take place in isolation.

On the other hand, EBP, originally destined at clinical actions, seeks its evidence through epidemiology. Even if it is called clinical epidemiology, EBP uses instruments developed by classical epidemiology. Hence, it is epidemiological and not clinical knowledge, which is used to check evidence. In this case, EBP would not be exactly the preferred field of prevention, as it is predominantly practiced in primary care and mainly uses epidemiological knowledge as an instrument of *evidence*?

The matter, however, is not that simple. It is known that there has always been a strong inter-relation between clinical and epidemiological knowledge, whose origins are practically contemporaneous, starting in the 18<sup>th</sup> century. The first, in the attempt to interpret the normal and the pathologic, allows the second to identify health events and seek their causes. The second, due to the frequency of these events, supports differences between the normal and the pathologic, the objects of the first.

The reasoning of clinical knowledge is eminently deductive (from the disease to the concrete case, addressing the consequences or effect), while that of epidemiology is inductive (from the cases to the disease, addressing the causes). In classical epidemiology, many decisions are based on statistical data, in the attempt to create new evidence for preventive actions<sup>(3)</sup>. On the other hand, the problem of integrating EBP with each professional's clinical experience, knowledge and practice is highlighted, mainly because, in the EBP movement, it is not expressed that categories can be operated in biomedicine through eventually overlapping forms of reasoning, i.e. hypothetic-deductive, inductive and abductive, at different times in the clinical process. In addition, tension exists between primary and secondary care practices in dealing with EBP approaches. It is perceived that specialists would follow its protocols more easily<sup>(6)</sup>, perhaps because they are predominantly situated in clinical actions.

Due to all this, the expressive growth in EBP in the prevention area attracted our attention, the predominant stage of primary care and which deals with other types of knowledge and actions, besides the clinic and its specialties.

The fact is that the originally formulated EBP uses epidemiology to verify, fundamentally, the frequency of an event, preferably under controlled circumstances, and if it is statistically sufficient (meta-analysis). And there is also the claim on replicability in the same research conditions. When EBP also accomplishes internal validity analysis of the studies included, its contribution to their improvement cannot be denied, because the issue may not be a lack of studies, but their questionable quality. In these cases, evidence is defined as the best *available*, and not as the *best possible*<sup>(11)</sup>. This reveals yet another concept of evidence.

Thus, can one talk about evidence without high-quality studies or systematic reviews without meta-analysis? In these cases, would not the most appropriate evidence be that in which there is no evidence? And what about the integrative review, which joins not only research results, but also opinions, concepts and theories? It is clear that no single understanding exists about EBP, nor one and the same route to achieve it. This is already observed in the expansion of the EBP movement, through the creation of various evidence centers and the development of different methods that are not only based on the joining and statistical analysis of randomized controlled clinical trials. The prevention area, addressed here, strongly contributes to this finding. Perhaps because it is not destined at a specific area, it clearly shows the polysemy of the term evidence and the plurality of approaches, in which systematic reviews with meta-analysis represent a minority, while systematic reviews without meta-analysis and integrative reviews predominate, which include not only research results. And, concerning research, various reviews consider other study designs than randomized controlled clinical trials.

Even those who defend EBP and base evidence on research data question the dictatorship of clinical trials and the use of clinical epidemiology, arguing that, depending on the focus, there are circumstances in which other methods are more appropriate. That is, the expansion to other areas defends itself against the hegemony of the clinic and a single way of seeking evidence. In this case, the question remains: how are the other evidence and the methodological resources to obtain it defined? It seems that this has been constructed through a consensus among groups of researchers from evidence centers. Consequently, any and all evidence, like all science, even if it intends to establish unchangeable truths, permanently develops interested knowledge, i.e. loaded with intentionality. Similarly, there is always a risk of controls that are also interested in its use. It is known that scientific journals are already starting to define criteria to publish EBP studies and that health insurance providers hire *evidence providers* to justify cost and benefit in the use of resources. By selecting certain criteria, are they not rejecting other possible ones?

However, if there is no single way to develop EBP, do all of them have something in common? If, originally, EBP serves to obtain scientific proof for treatment, diagnostic and prognostic interventions, one may consider that, nowadays, all manners share the systemized joining of knowledge produced on a previously formulated health care issue, which seeks not just one or does not directly seek an intervention. This is clear in the results of this review, whose studies sometimes focus on the incidence or prevalence of health problem events, and other times on their risk factors, or on the correlation between interventions and their prevention or prophylaxis. Thus, they constitute approaches that can equip both intervention actions and the analysis and understanding of a given phenomenon, or ascertain whether available knowledge is sufficient or not.

According to a critical reflection on EBP, the author also consider that one can agree with the *evidence* if it serves to limit certain conducts in their ethical or deontological aspects, characterized by bad practice. In addition, in line with the same author, nobody in good sense can turn against or at least remain indifferent to the entire cultural background and technological contribution that is finding its place in health sciences and their struggle against illnesses and a better quality of life. One cannot give up intuition though, nor consecrated physio-pathological theories and personal clinical experiences, as there is neither methodological analysis nor scientific proof that do not start from experience and individual observation in professional practice. The ideal is always to associate scientific clinical research with permanent education, consecrated physio-pathological theories and each stakeholder's personal contribution<sup>(3)</sup>.

Finally, we highlight one study that attempted to understand conceptions and interests in changing the foundations of the daily practice of knowledge produced through experience by probabilistic epidemiological models. Through ethnographic observation of the round and clinical meetings at a cardio-intensive surgical care unit, the research revealed the consolidation of the trend to incorporate explicit cost-benefit criteria and the interests of distinct agents, including the medical category, governments, the medical-industrial complex, in the introduction of protocols. Practice, however, reveals to be ambivalent or polyvalent. Besides protocols or scientific studies, the physicians also made their options intuitively and pragmatically, based on clinical evidence. A certain degree of skepticism and inability was noteworthy in the doctors' use of tools to analyze the epidemiological thinking style, in which their patient was *their case* instead of a unit of that means. It can be affirmed that, today, a double scientific rationality takes place: the clinical and the epidemiological<sup>(5)</sup>.

## CONCLUSION

This review on evidence-based practice studies in human health prevention in Brazil, published in Web of Science/JCR journals, ascertained the expansion of this research mode beyond its original area: clinical medicine, in its expression of treatment, diagnosis and therapeutics. Although most studies were published in public health journals, they are not eminently restricted to primary care actions, also covering clinical issues and different specialties and themes. Likewise, the foci and methodological approaches vary. In addition, there is the fact that evidence-based practice in the prevention area, the predominant stage of primary care, deal with other types of knowledge

and actions than the clinical and its specialties, and contribute to disseminate the understanding that there does not exist a single way of conceptualizing and practicing EBP. Thus, the study permits arguing that, depending on the area of care practice and its foci, there are circumstances in which other methods can be applied, besides the hegemony of controlled clinical trials and the use of clinical epidemiology as the only valid form of evidence based practice. On the other hand, the possibility of this variation furthers the understanding of evidence-based practice not only as indisputable proof to equip intervention actions, but also as an endless knowledge area under construction, with a view to the analysis and further understanding of health phenomena.

## REFERENCES

- Lacerda RA, Nunes BK, Batista AO, Egry EY, Graziano KU, Angelo M, et al. Evidence-based practices published in Brazil: identification and analysis of their types and methodological approaches. *Rev Esc Enferm USP* [Internet]. 2011 cited 2012 Apr 15];45(3):777-86. Available from: [http://www.scielo.br/pdf/reeusp/v45n3/en\\_v45n3a33.pdf](http://www.scielo.br/pdf/reeusp/v45n3/en_v45n3a33.pdf)
- Atallah AN. Medicina não é uma ciência exata [entrevista]. *Tribuna do Norte* [Internet]. 2011 out. 2 [citado 2012 mar. 12]. Disponível em: <http://tribunadonorte.com.br/noticia/medicina-nao-e-uma-ciencia-exata/197920>
- França GV. Os riscos da medicina baseada em evidências. *Rev Âmbito Jurídico* [Internet]. [citado 2012 mar. 12]. Disponível em: [http://www.ambito-juridico.com.br/site/index.php?n\\_link=revista\\_artigos\\_leitura&artigo\\_id=3633](http://www.ambito-juridico.com.br/site/index.php?n_link=revista_artigos_leitura&artigo_id=3633)
- Veloso JB. Acerca da medicina baseada na evidência [Internet]. Lisboa: Centro de Filosofia das Ciências da Universidade de Lisboa; 2012 [citado 2012 mar 13]. Disponível em: <http://cfcul.fc.ul.pt/textos/textosdisponiveis.htm>
- Uchôa SAC, Camargo Junior KR. Protocolos e a decisão médica: medicina baseada em vivências e ou evidências? *Ciênc Saúde Coletiva*. 2010;15(4):2241-9.
- Castiel LD, Póvoa EC. Medicina baseada em evidências: novo paradigma assistencial e pedagógico? *Interface Comun Saúde Educ*. 2002;6(11):117-32.
- Sayd JD, Moreira MCN. Medicina baseada em evidências: ceticismo terapêutico, recorrência e história. *Physis Rev Saúde Coletiva* 2000;10(1):11-38.
- Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB. Evidence-based medicine: how to practice and teach EBM. 2<sup>nd</sup> ed. Edinburgh: Churchill Livingstone; 2000.
- Atallah NA, Castro AA. Revisão sistemática e metanálise: a melhor evidência para a tomada de decisão em saúde e a maneira mais rápida de atualização terapêutica [Internet]. [citado 2007 mar. 7]. Disponível em: <http://centrocochranebrasil.org.br/artigos/rls.htm>
- Sehon SR, Stanley DE. A philosophical analysis of the evidence-based medicine debate. *BMC Health Serv Res*. 2003;3(1):14.
- Muir-Gray JA. Evidence-based healthcare. 2nd ed. Edinburgh: Churchill; 2004.
- Bammann RH, Zamarioli LA, Pinto VS, Vásquez CMP, Litvoc MN, Klautau GB, et al. High prevalence of drug-resistant tuberculosis and other mycobacteria among HIV-infected patients in Brazil: a systematic review. *Mem Inst Oswaldo Cruz*. 2010;105(6):838-41.
- Braz LG, Braz DG, Cruz DS, Fernandes LA, Módolo NSP, Braz JRC. Mortality in anesthesia: a systematic review. *Clinics*. 2009;64(10):999-1006.
- Ruano R, Fontes RS, Zugaib M. Prevention of preeclampsia with low-dose aspirin: a systematic review and meta analysis of the main randomized controlled trials. *Clinics*. 2005;60(5):407-14.
- Coelho FGM, Galduroz RF, Gobbi S, Stella F. Atividade física sistematizada e desempenho cognitivo em idosos com demência de Alzheimer: revisão sistemática. *Rev Bras Psiquiatr*. 2009;3(2):163-70.
- Canilo DF, Ribeiro JD, Toro ADC, Baracat ECE, Barros Filho AA. Obesity and asthma: association or coincidence? *J Pediatr (Rio J)*. 2010;86(1):6-14.
- Barreto ML, Pereira SM, Ferreira AA. Vacina BCG: eficácia e indicações da vacinação e da revacinação. *J Pediatr (Rio J)*. 2006;82 Supl 3:45-54.

18. Succi RCM, Farhat CK. Vacinação em situações especiais. *J Pediatr (Rio J)*. 2006;82 Supl 3:91-100.
19. Lubianca Neto JFL, Hemb L, Silva DB. Fatores de risco para otite média aguda recorrente: onde podemos intervir? Uma revisão sistemática da literatura. *J Pediatr (Rio J)*. 2006;82(2):87-96.
20. Gaspardo CM, Linhares MBM, Martinez EE. A eficácia da sacarose no alívio de dor em neonatos: uma revisão sistemática de literatura. *J Pediatr (Rio J)*. 2005; 81(6):435-42.
21. Tirico PP, Stefano SC, BlySL. Qualidade de vida e transtornos alimentares: uma revisão sistemática. *Cad Saúde Pública*. 2010;26(3):431-9.
22. Araújo DMR, Vilarim MM, Sabroza AR, Nardi AE. Depressão no período gestacional e baixo peso ao nascer: uma revisão sistemática de literatura. *Cad Saúde Pública*. 2010;26(2):219-27.
23. Spadacio C, Castellanos MEP, Barros NF, Alegre SM, Tovey P, Broom A. Medicinas alternativas e complementares: uma metassíntese. *Cad Saúde Pública*. 2010;26(1):7-13.
24. Moraes ACF, Fulaz CS, Oliveira ERN, Reichert FF. Prevalência de síndrome metabólica em adolescentes: uma revisão sistemática. *Cad Saúde Pública*. 2009; 25(6):1195-202.
25. Gasperin D, Gopalakrishnan N, Dias-da-Costa JS. Effect of psychological stress on blood pressure increase: a meta-analysis of cohort studies. *Cad Saúde Pública*. 2009;25(4):715-26.
26. Dode MASO, Santos IS. Non classical risk factors for gestational diabetes mellitus: a systematic review of the literature. *Cad Saúde Pública*. 2009;25Supl 3:S341-59.
27. Cano FG, Rozenfeld S. Adverse drug events in hospitals: a systematic review. *Cad Saúde Pública*. 2009;25 Supl 3:S360-72.
28. Mello MJG, Albuquerque MFPM, Lacerda HR, Souza WV, Correia JB, Britto MCA. Risk factors for healthcare-associated infection in pediatric intensive care units: a systematic review. *Cad Saúde Pública*. 2009;25 Supl 3:S373-91.
29. González D, Nazmi A, Victora CG. Childhood poverty and abdominal obesity in adulthood: a systematic review. *Cad Saúde Pública*. 2009;25Supl 3:S427-40.
30. Pelissari DM, Barbieri FE, WanschFilho V. Magnetic fields and acute lymphoblastic leukemia in children: a systematic review of case-control studies. *Cad Saúde Pública*. 2009;25Supl 3:S441-52.
31. Santos MCL, Horta BL, Amaral JJF, Branco PFC, Fernandes PSC, Galvão CM, et al. Association between stress and breast cancer in women: a meta-analysis. *Cad Saúde Pública*. 2009;25 Supl 3:S453-63.
32. Rodrigues MAP, Facchini LA, Maia F. Gender and incidence of functional disability in the elderly: a systematic review. *Cad Saúde Pública*. 2009;25 Supl 3:S464-79.
33. Rodrigues MGA, Silva LK, Martins ACM. Meta-análise de ensaios clínicos de intervenção familiar na condição esquizofrenia. *Cad Saúde Pública*. 2008;24 (10):2003-18.
34. Adami F, Vasconcelos FAG. Childhood and adolescent obesity and adult mortality: a systematic review of cohort studies. *Cad Saúde Pública*. 2008;24Supl 4:S558-68.
35. Schlussek MM, Souza EB, Reichenheim ME, Kac G. Physical activity during pregnancy and maternal-child health outcomes: a systematic literature review. *Cad Saúde Pública*. 2008;24Supl 4:S531-44.
36. Brasil PEAA, Braga JU. Meta-analysis of factors related to health services that predict treatment default by tuberculosis patients. *Cad Saúde Pública*. 2008;24 Supl 4:S485-502.
37. Pacheco AHRN, Barreiros NSR, Santos IS, Kac G. Consumo de cafeína entre gestantes e a prevalência do baixo peso ao nascer e da prematuridade: uma revisão sistemática. *Cad Saúde Pública*. 2007;23(12):2807-19.
38. Silva MC, Fassa AG, Domingues MR, Kriebel D. Gonalgia entre trabalhadores e fatores ocupacionais associados: uma revisão sistemática. *Cad Saúde Pública*. 2007;23(8):1763-75.
39. Araújo DMR, Pereira NL, Kac G. Ansiedade na gestação, prematuridade e baixo peso ao nascer: uma revisão sistemática da literatura. *Cad Saúde Pública*. 2007; 23(4):747-56.
40. Santos SM, Chor D, Werneck GL, Coutinho ESF. Associação entre fatores contextuais e auto-avaliação de saúde: uma revisão sistemática de estudos multinível. *Cad Saúde Pública*. 2007;23(11):2533-54.
41. Martins EB, Carvalho MS. Associação entre peso ao nascer e o excesso de peso na infância: revisão sistemática. *Cad Saúde Pública*. 2006;22(11):2281-300.
42. Vettore MV, Lamarca GA., Leão AT, Thomaz FB, Sheiham A, Leal MC. Periodontal infection and adverse pregnancy outcomes: a systematic review of epidemiological studies. *Cad Saúde Pública*. 2006;22(10): 2041-53.
43. Scowitz IKT, Santos IS. Fatores de risco de recorrência do baixo peso ao nascer, restrição de crescimento intra-uterino e nascimento pré-termo em sucessivas gestações: um estudo de revisão. *Cad Saúde Pública*. 2006;22(6): 1129-36.
44. Botelho F, Lunet N, Barros H. Coffee and gastric cancer: systematic review and meta-analysis. *Cad Saúde Pública*. 2006;22(5):889-900.



45. Souza JP, Cecatti GC, Parpinelli MA. Revisão sistemática sobre mortalidade materna *near miss*. Cad Saúde Pública. 2006;22(2):255-64.
46. Sartorelli DS, Franco LJ, Cardoso MA. Intervenção nutricional e prevenção primária do diabetes mellitus tipo 2: uma revisão sistemática. Cad Saúde Pública. 2006;22(1):7-18.
47. Moreira RS, Nico LS, Tomita NE, Ruiz T. A saúde bucal do idoso brasileiro: revisão sistemática sobre o quadro epidemiológico e acesso aos serviços de saúde bucal. Cad Saúde Pública. 2005;21(6):1665-75.
48. Medeiros LR, Ethur ABM, Hilgert JB Zanini RR, Berwanger O, Bozzetti MC, et al. Vertical transmission of the human papillomavirus: a systematic quantitative review. Cad Saúde Pública. 2005;21(4):1006-15.
49. Pinho VFS, Coutinho ESF. Riskfactors for breastcancer: a systematic review of studies with female samples among the general population in Brazil. Cad Saúde Pública. 2005;21(2):351-60.
50. Costa RJM, Silva LK. Revisão sistemática e meta-análise da antibioticoprofilaxia na histerectomia abdominal. Cad Saúde Pública. 2004;20 Supl 2:S175-89.
51. Valle NJ, Santos IS, Gigante DP. Intervenções nutricionais e crescimento infantil em crianças de até dois anos de idade: uma revisão sistemática. Cad Saúde Pública. 2004;20(6):1458-67.
52. Silveira DS, Santos IS. Adequação do pré-natal e peso ao nascer: uma revisão sistemática. Cad Saúde Pública. 2004;20(5):1160-8.
53. Maranhão Neto GA, Lourenço PMC, Farinatti PTV. Equações de predição da aptidão cardiorrespiratória sem testes de exercícios e sua aplicabilidade em estudos epidemiológicos: uma revisão sistemática. Cad Saúde Pública. 2004;20(1):48-56.
54. El Dib RP, Atallah AN, Andriolo RB, Soares BGO, Verbeek J. A systematic review of the interventions to promote the wearing of hearing protection. São Paulo Med J. 2007;125(6):362-9.
55. Raimondi AM, Guimaraes HP, Amaral JLG, Leal PHR. Perioperative glucocorticoid administration for prevention of systemic organ failure in patients undergoing esophageal resection for esophageal carcinoma. São Paulo Med J. 2006;124(2):112-5.
56. Scorsolini-Comin F, Santos MA. O estudo científico da felicidade e a promoção da saúde: revisão integrativa da literatura. Rev Latino Am Enferm. 2010;18(3):188-95.
57. Lopes CMM, Galvão CM. Posicionamento cirúrgico: evidências para o cuidado de enfermagem. Rev Latino Am Enferm. 2010;18(2):287-94.
58. Spana TM, Rodrigues RC, Lourenço LB, Mendez RD, Gallani MC. Revisão integrativa: intervenções comportamentais para realização de atividade física. Rev Latino Am Enferm. 2009;17(6):1057-64.
59. Ferreira PC, Piai A, Takayanagui AM, Segura-Muñoz SI. Alumínio como fator de risco para a doença de alzheimer. Rev Latino Am Enferm. 2008;16(1):151-7.
60. Newman K, Harrison L, Dashiff C, Davies S. Relações entre modelos de pais e comportamentos de risco na saúde do adolescente: uma revisão integrativa da literatura. Rev Latino Am Enferm. 2008;16(1):142-50.
61. Ursi ES, Gavão CM. Prevenção de lesões de pele no perioperatório: revisão integrativa da literatura. Rev Latino Am Enferm. 2006;14(1):124-31.
62. Santos AM, Lacerda RA, Graziano KU. Evidência de eficácia de cobertura de sapatos e sapatos privativos no controle e prevenção de infecção do sítio cirúrgico: revisão sistemática de literatura. Rev Latino Am Enferm. 2005;13 (1):86-92.
63. Mekitarian Filho E, Carvalho WB, Troster EJ. Hiperglicemia e morbimortalidade em crianças graves: análise crítica baseada em revisão sistemática. Rev Assoc Med Bras. 2009;55(4):475-83.
64. Raimondi AM. Metanálise sobre o uso de glicocorticoide pré-operatório para a redução do risco de complicações após esofagectomia por carcinoma de esôfago. Rev Assoc Med Bras. 2007;53(2):158-61.
65. Jesus EC, Matos D, Castro AA. Drenagem profilática de rotina de anastomoses em cirurgia colorretal eletiva. Revisão sistemática da literatura e metanálise. Rev Assoc Med Bras. 2003;49(2):214-19.
66. Reis FJFB, Sousa TA, Oliveira MS, Dantas N, Silveira M, Braghiroly MIFM, et al. Is hepatitis C a cause of idiopathic dilated cardiomyopathy? A systematic review of literature. Braz J Infec Dis. 2006;10(3):199-202.
67. Poblano A, Arteaga C, Garcia-Sánchez G. Prevalence of early neurodevelopmental disabilities in Mexico: a systematic review. Arq Neuropsiquiatr. 2009;67(3A):736-40.
68. Estrela C, Sydney GB, Figueiredo JAP, Estrela CRA. Antibacterial efficacy of intracanal medicaments on bacterial biofilm: a critical review. J Appl Oral Sci. 2009;17(1):1-7.
69. Estrela C, Silva JA, Alencar AHG, Leles CR, Decurcio DA. Efficacy of sodium hypochlorite and chlorhexidine against *enterococcusfaecalis*: a systematic review. J Appl Oral Sci. 2008;16(6):364-8.
70. Burgatti JC, Lacerda RA. Systematic review of surgical gowns in the control of contamination/surgical site infection. Rev Esc Enferm USP [Internet]. 2009 [cited 2012 Apr 15];43(1):237-44. Available from: [http://www.scielo.br/pdf/reesp/v43n1/en\\_31.pdf](http://www.scielo.br/pdf/reesp/v43n1/en_31.pdf)

71. Coury HJCG, Moreira RFC, Dias NB. Efetividade do exercício físico em ambiente ocupacional para controle da dor cervical, lombar e do ombro: uma revisão sistemática. *Rev Bras Fisioter.* 2009;13(6):461-79.
72. Arantes PMM, Alencar MA, Dias RC, Dias JMD, Pereira LSM. Atuação da fisioterapia na síndrome da fragilidade: revisão sistemática. *Rev Bras Fisioter.* 2009;13(5):365-75.
73. Nascimento LR, Glória AE, Habib ES. Effects of constraint-induced movement therapy as a rehabilitation strategy for the affected upper limb of children with hemiparesis: systematic review of the literature. *Rev Bras Fisioter.* 2009;13(2):97-102.
74. Arantes NF, Vaz DV, Mancini MC, Pereira MSCl, Pinto FPI, Pinto TPS. Efeitos da estimulação elétrica funcional nos músculos do punho e dedos em indivíduos hemiparéticos: uma revisão sistemática da literatura. *Rev Bras Fisioter.* 2007;11(6):419-27.
75. Takito MY, Benício MHD, Neri LCL. Atividade física de gestantes e desfechos ao recém-nascido: revisão sistemática. *Rev Saúde Pública.* 2009;43(6):1059-69.
76. Caminha MFC, Batista Filho M, Fernandes TFS, Arruda IKG, Diniz AS. Suplementação com vitamina A no puerpério: revisão sistemática. *Rev Saúde Pública.* 2009;43(4):699-706.
77. Gama ZAS, Gómez-Canesa A. Factores de riesgo de caídas en ancianos: revisión sistemática. *Rev Saúde Pública.* 2008;42(5):946-56.
78. Oliveira AF, Valente JG, Leite IC. Aspectos da mortalidade atribuível ao tabaco: revisão sistemática. *Rev Saúde Pública.* 2008;42(2):335-45.
79. Spadacio C, Barros NF. Uso de medicinas alternativas e complementares por pacientes com câncer: revisão sistemática. *Rev Saúde Pública.* 2008;42(1):158-64.
80. Pereira SM, Dantas OM, Ximenes R, Barreto ML. Vacina BCG contra tuberculose: efeito protetor e políticas de vacinação. *Rev Saúde Pública.* 2007;41 Supl 1:59-66.
81. Espíndola CR, Blay SL. Prevalência de maus-tratos na terceira idade: revisão sistemática. *Rev Saúde Pública.* 2007;41(2):301-6.
82. Silveira MF, Santos I. Impacto de intervenções no uso de preservativos em portadores do HIV. *Rev Saúde Pública.* 2005;39(2):296-304.
83. Marinho V, Laks J, Coutinho ESF, Blay SL. Tobacco use among the elderly: a systematic review and meta-analysis. *Cad Saúde Pública.* 2010;26(12):2213-33.
84. Coelli AP, Nascimento LR, Mill JG, Molina MCB. Prematuridade como fator de risco para pressão arterial elevada em crianças: revisão sistemática. *Cad Saúde Pública.* 2011;27(2):207-18.
85. Fagundes SD, Silva MT, Thees MFRS, Pereira MG. Prevalence of dementia among elderly Brazilians: a systematic review. *São Paulo Med J.* 2011;129(1):46-50.
86. Ayres ARG, Silva GA. Prevalência de infecção do colo do útero pelo HPV no Brasil: revisão sistemática. *Rev Saúde Pública.* 2010;44(5):963-74.
87. Souza KW, Reis PED, Gomes IP, Carvalho EC. Prevention strategies for testicular and penile cancer: an integrative review. *Rev Esc Enferm USP [Internet].* 2011 [cited 2012 Apr 15];45(1):277-82. Available from: [http://www.scielo.br/pdf/reeusp/v45n1/en\\_39.pdf](http://www.scielo.br/pdf/reeusp/v45n1/en_39.pdf)
88. Neves LAS, Reis RK, Gir E. Compliance with the treatment by patients with the co-infection HIV/tuberculosis: integrative literature review. *Rev Esc Enferm USP [Internet].* 2010 [cited 2012 Apr 15];44(4):1135-41. Available from: [http://www.scielo.br/pdf/reeusp/v44n4/en\\_41.pdf](http://www.scielo.br/pdf/reeusp/v44n4/en_41.pdf)
89. Blank D. A puericultura hoje: um enfoque apoiado em evidências. *J Pediatr (Rio J).* 2003;79 Supl 1:13-22.
90. Dumith SC. Physical activity in Brazil: a systematic review. *Cad Saúde Pública.* 2009;25 Supl 3:S415-26.
91. Martins ACM, Silva LK. Revisões sistemáticas de antibioticoprofilaxia em cesarianas. *Cad Saúde Pública.* 2006;22(12):2513-26.
92. Ribeiro MO, Dias AF. Child-juvenile prostitution: a systematic literature review. *Rev Esc Enferm USP [Internet].* 2009 [cited 2012 Apr 15];43(2):465-71. Available from: [http://www.scielo.br/pdf/reeusp/v43n2/en\\_a29v43n2.pdf](http://www.scielo.br/pdf/reeusp/v43n2/en_a29v43n2.pdf)
93. Salles LF, Silva MJP. Iridologia: revisão sistemática. *Rev Esc Enferm USP.* 2008;42(3):596-600.
94. Sajid MS, Skakir AJ, Khatri K, Baig MK. The role of perioperative warming in surgery: a systematic review. *São Paulo Med J.* 2009;127(4):231-7.
95. Viégas M, Vasconcelos RS, Neves AP, Diniz ET, Bandeira F. Bariatric surgery and bone metabolism: a systematic review. *Arq Bras Endocrinol Metab.* 2010;54(2):158-63.