
CRITICAL ANALYSIS OF THE JOURNAL “*VOPROSY KURORTOLOGII FIZIOTERPII I LECHBENOI FIZICHESKOI KULTURY*” BY MEANS OF THE MEDICAL HYDROLOGY ARTICLES PUBLISHED IN THE LAST 5 YEARS

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Abstract

A recently published about investigation in Medical Hydrology stated that, according to the biomedical data base MEDLINE, the scientific publication with the greatest number of Medical Hydrology published works in the last five years was a Russian one, namely, the “*Voprosy Kurortologii, Fizioterapii i Lechebnoi Fizicheskoi Kultury*” (VKLF). The objective of the present work is to conduct a critical study of the articles on Medical Hydrology published by this journal in the last five years through a multifactor analysis of the quality of the scientific studies published. For the evaluation of the articles we use the RATS checklist modified by BioMed Central. The redaction of the papers is different than the usual practice, there is not a subtitles organization, but a continuous redaction, also the English abstracts are to plain, hardly given an introductory information. By other side the articles have a great content relevance, having a B-C Oxford: Centre for Evidence-Based Medicine (CEBM) recommendation grade and a quality levels scientific evidence quality created by the Agency of Evaluation in Medical Technology that flows from III to VII over IX. In conclusion with an English edition and a useful internal structure of the papers this journal will be important for the physicians that do balneology.

Key words: *Balneology, Balneotherapy, Crenotherapy, Vopr Kurortol Fizioter Lech Kult, Publishing/standards, Quality assurance*

Résumé

Analyse critique de la revue “Voprosy kurortologii fizioterpii i lechbenoi fizicheskoi kultury”. Étude des articles d’hydrologie médicale publiés au cours des 5 dernières années
Une publication récente sur la recherche en Hydrologie Médicale constate que, selon la base de données MEDLINE, la revue médicale avec le plus grand nombre de travaux publiés sur l’hydrologie médicale au cours des cinq dernières années est russe, à savoir “*Voprosy Kurortologii, Fizioterapii i Lechebnoi Fizicheskoi Kultury*” (VKLF). Le but de ce travail est de présenter une étude critique des articles traitant l’hydrologie médicale dans

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cette revue au cours des cinq dernières années au moyen d'une analyse multifactorielle de la qualité des études scientifiques publiées. Pour l'évaluation des articles, nous avons utilisé la liste de contrôle modifiée par BioMed Central. Les articles ne sont pas rédigés selon les conventions habituelles : il n'y a pas une organisation de sous-titres, mais une rédaction continue. Aussi, les résumés en anglais sont très succincts et n'offrent qu'une brève introduction. Cependant, du point de vue des contenus, ils s'avèrent être d'une grande pertinence : un score de recommandation B-C Oxford : Centre for Evidence-Based Medicine (CEBM) et un niveau de qualité d'évidence scientifique selon la Agency of Evaluation in Medical Technology qui varie de III à IV jusqu'à IX. En conclusion, une édition en langue anglaise avec une rédaction interne plus structurée, cette revue devrait sans doute acquérir une grande importance pour les médecins s'occupant de balnéologie.

Mots clés : Balnéologie, Balnéothérapie, Crénothérapie, Vopr Kurortol Fizioter Lech Kult, Édition/norme, Assurance de la qualité

Resumen

Análisis crítico de la revista “Voprosy kurortologii fizioterpii i lechbenoi fizicheskoi kultury” a partir de los artículos de Hidrología Médica publicados en los últimos 5 años
En una publicación reciente sobre investigación en Hidrología Médica, nos llamó poderosamente la atención que se destacara, cómo en la base de datos de artículos biomédicos MEDLINE, la publicación científica con mayor número de trabajos publicados sobre Hidrología Médica en los cinco últimos años era rusa, concretamente la revista “Voprosy Kurortologii, Fizioterapii i Lechebnoi Fizicheskoi Kultury” (VKLF). El objetivo de presente trabajos es realizar un estudio crítico sobre los trabajos de Hidrología Médica publicados en la citada revista durante el último lustro, a través del análisis multifactorial de la calidad de la investigación publicada. Para el análisis de los artículos hemos utilizado las directrices de revisión RATS modificadas por BioMed Central. La redacción de los trabajos difiere de la práctica habitual, pues no existe una ordenación clara con títulos y subtítulos, sino una redacción continua. También, los resúmenes en inglés resultan muy escuetos y apenas dan información introductoria. No obstante, desde el punto de vista de los contenidos, alcanzan gran relevancia con un grado de recomendación B-C Oxford: Centre for Evidence-Based Medicine (CEBM) y un nivel de calidad de evidencia científica según la Agency of Evaluation in Medical Technology que fluctúa del II al VI sobre IX. En conclusión, con una edición en inglés y una estructura interna más útil, esta revista deberá adquirir sin duda gran relevancia para los médicos dedicados a la balneología.

Palabras clave: Balneología, Balneoterapia, Crenoterapia, Vopr Kurortol Fizioter Lech Kult, Edición/normas, Aseguramiento de la calidad.

Introduction

We were greatly surprised when in a recently published work about investigation in Medical Hydrology [5], we find out that they emphasize that in biomedical data base MEDLINE, the scientific publication with more number of Medical Hydrology published papers in the last five years was a Russian one, specifically “*Voprosy Kurortologii, Fizioterapii i Lechebnoi Fizicheskoi Kultury*” (VKLF) Journal. Indeed as

the World Federation of Hydrotherapy and Climatology (FEMTEC) was announced it will be published from the next November as "Russian Journal of hydrotherapy, physiotherapy and manual therapy" in English edited by Professors Razumov and Solimene [3]. The objective of the present work is to execute a critical study about the articles on Medical Hydrology published by the mentioned journal in the last five years, through the multifactor analysis of the scientific studies quality.

Material and Methods

We carried out a PubMed research (2005-2009) whose limits were :

- Russian
- Vopr Kurortol Fizioter Lech Kult AND Balneotherapy OR Balneology
- With abstracts
- Published the last 5 years

We found 69 articles indexed. From all of them we excluded the articles without author, with no clinical content and cross referred papers from another publication (Figure 1).

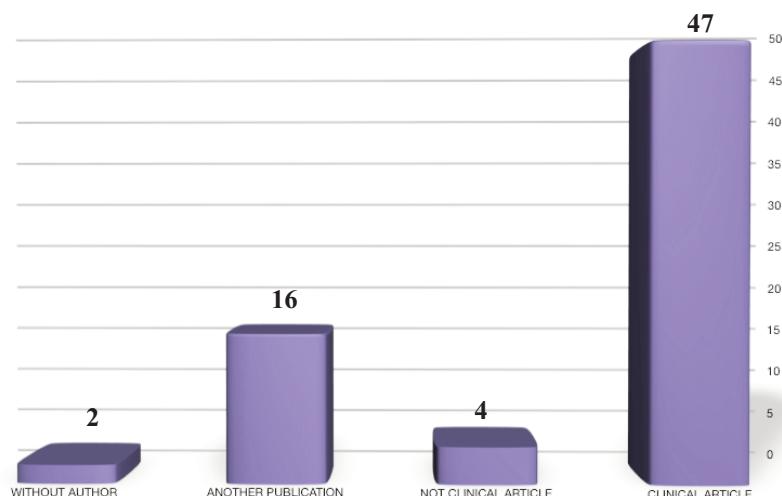


Figure 1. Articles reviewed

So we restricted to 47 papers totally (referred in annex). Subsequently we request the articles to the Complutense University, Faculty of Medicine, Interlibrary Service (the Library look for the articles in other Spain libraries, without success, so they must had to ask for the articles to another European concerted libraries, finding the articles in Germany), proceeding to their translation (the articles were give out to two translators in a randomized-double blinded way for avoid personal interests) and evaluation.

For the evaluation of the articles we look up scales of quality [6] and decided to use the RATS checklist modified by BioMed Central [1] from the work of Jocelyn Clark [Clark JP: *How to peer review a qualitative manuscript*. In Peer Review in Health Sciences. Second edition. Edited by Godlee F, Jefferson T. London: BMJ Books; 2003:219-235]. Once do the first contact with the articles, we give points to the different parameters of the RATS checklist, slightly modified for adjust to all the articles. We given 1 to 3 points

RATS PUNCTUATION	
R	1 not adequate 2 adequate but with faults 3 totally adequate
A	1 not adequate 2 adequate but with faults 3 totally adequate
T	1 not adequate 2 adequate but with faults 3 totally adequate
S	1 not adequate 2 adequate but with faults 3 totally adequate

Table 1 : Qualitative research review guidelines : RATS (modified)

to each RATS item, 1 point means not adequate, 2 points means adequate but with faults and 3 points means totally adequate (Table 1).

We also based on scientific evidence levels tables, specifically in the scientific evidence quality levels created by the Agency of Evaluation in Medical Technology [4] (AETM) and in the recommendation grade of the Based Medicine Centre of Oxford University [2]. Because all the data recollected were listed previously, there is not any difference between articles so no statistical management were needed.

Results-Discussion

The topics of the papers in order to the diseases treated and medical specialities are from greater to lower : 9 of reumatology (19,16 %), 6 of cardiovascular (12,76%), 6 of mixed pathology (12,76 %), 4 of pneumology (8,5 %), 4 of gastrointestinal (8,5 %), 4 of endocrinology (8,5 %), 3 of neurology (6,39 %), 3 of gynaecology (6,39 %), 2 of

urology (4,26 %), 2 of pediatrics (4,26 %), 2 of internal medicine (4,26 %), 2 of dermatology (4,26 %) (Figure 2).

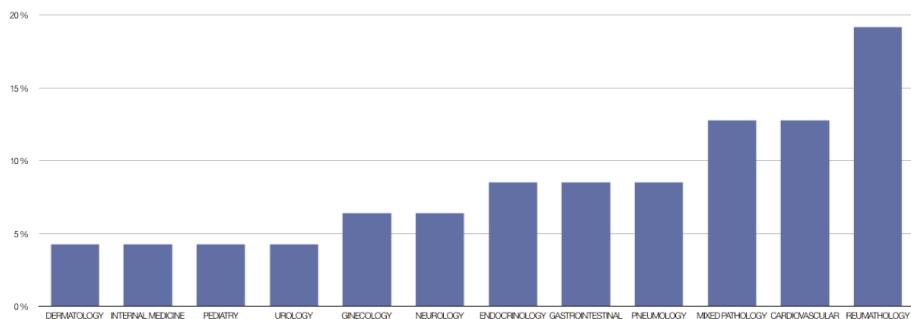


Figure 2. Speciality

In the RATS punctuation that we made, the minor result that can get the papers was 3 and the higher was 12. Almost 80 % of the articles obtain from 6 to 8 points. Five of the papers get 5 points, fifteen get 6 points, eleven get 7 points, ten get 8 points, five get 9 points and only one get 10 points (Figure 3).

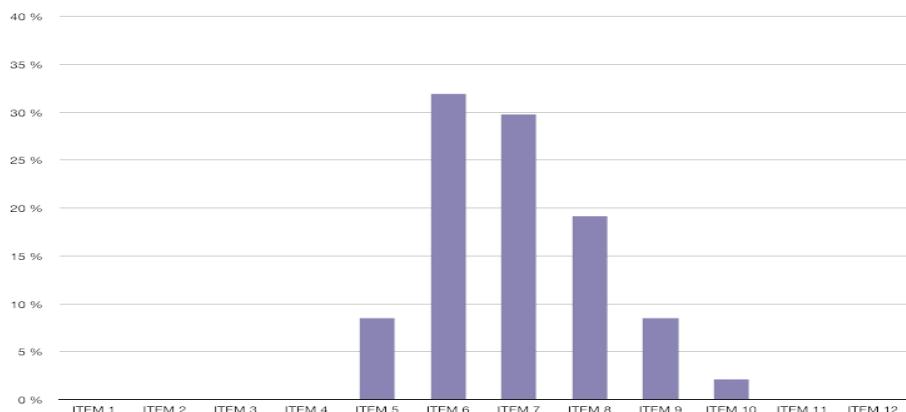


Figure 3. Punctuation

The principal fail in all the articles was in the T and the S items, in the sampling, recruitment and data collection also in the type of the analysis and the statistical interpretation. In the CEMB recommendations grade, practically all the articles have a great content relevance, having a B (63.17 %) or C (36.83 %) recommendation grade. No one had D recommendation grade (Figure 4).

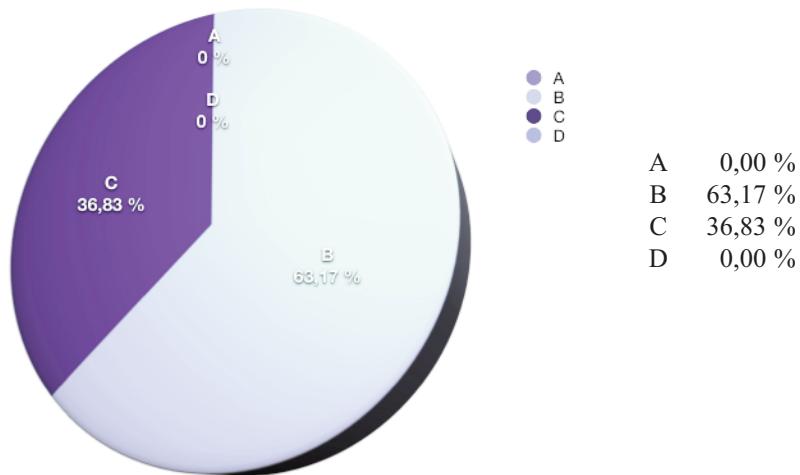


Figure 4. CEMB Recommendation grade

When we execute the scientific evidence quality levels of the AETM we see that the articles have a quality level that ranges from III to VII over IX so 3.40 % were very good (level III), 45.10 % were good (level IV), 41.90 % were regular (V-VI level) and 9.60 % were poor (level VII). These means that almost the half of the papers reviewed have good or very good quality (Figure 5).

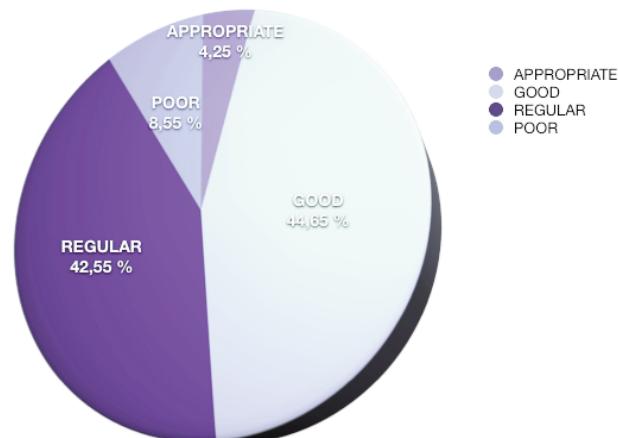


Figure 5. Evidence quality levels

We would like to point out two things : first, the style used in the Russian articles is somewhat different from that usually found in indexed similar scientific journals, particularly because there is no clear division in subtitles, but a continuous flow of written text. However, even though the usual division does not exist, all the items of a scientific publication are indeed included : Introduction, Objectives, Material and methods, Results, Discussion, Conclusions and Bibliography. Secondly, the English abstracts are too short and provide but mere introductory information. The majority of the articles evaluated were case control studies, but there were also cohort studies or clinical trial studies. We have observed deficiencies as regards the way recruitment was conducted, the description of data collection and the explanation of the statistical method used.

Conclusions

We may therefore conclude that the *VKLF Journal* has a good recommendation level and a good scientific quality, although it may be improved in certain points.

We consider that it is most important for physicians specialized in balneology to have access to the information provided by this journal. That will be more accessible when be edited in English.

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Annexe

The 47 papers from “*Voprosy Kurortologii, Fizioterapii i Lechebnoi Fizicheskoi Kultury*” (*VKLF*) Journal or *Vopr Kurortol Fizioter Lech Fiz Kult*

2009

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- Akhkubekova NK [Rehabilitation of the patients with polycystic ovary syndrome during sanatorium-and-spa treatment] 2009 Nov-Dec;(6):47-8.
- Sukhanov DS, Ivanov AK, Kovalenko AL, Dziuba EG, Andreeva MN, Romantsov MG. [Pathogenetic therapy of tuberculosis of respiratory organs during sanatorium-and-spa treatment] 2009 Nov-Dec;(6):34-7.
- Kašinova AS, Efimenko NV. [Correction of syndrome-associated metabolic disturbances in patients with erosive and ulcerative lesions in the gastroduodenal system] 2009 Nov-Dec;(6):17-9.
- Khodova TV, Shvedunova LN, Babina LM. [A new method of peloidotherapy for the rehabilitation of children living in environmentally unfavorable regions] 2009 Jul-Aug;(4):48-9.
- Bykov AT, Konovalova MP, Khodasevich LS. [Magneto-peloidotherapy and hydrogen sulfide baths for the correction of dyslipidemia and immune inflammation in patients with ischemic heart disease during resort treatment] 2009 Jul-Aug;(4):17-9.
- Krivosheev AB, Kuimov AD, Khavin PP, Morozova AA. [Non-medicamentous correction of metabolic and functional disorders in the biliary tract of patients with metabolic syndrome] 2009 Jul-Aug;(4):23-7.
- Badretdinov RR, Badretdinova LM. [Modern aspects of using unique natural therapeutic factors of the Iangan-Tau health resort] 2009 May-Jun;(3):42-4.
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