

GUIDELINES E PROFESSIONAL RESPONSIBILITY: CONSIDERATIONS ON QUALITY AND METHODOLOGY

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ABSTRACT

The medical responsibility is the no-adherence with the best techniques described in the scientific literature. In Italy, recently was drafted a law that binds the judgment of professional misconduct to the lack of adherence to guidelines.

The authors analyze the quality of the guidelines available in the literature.

Through a review conducted on Medline, were selected X articles that analyzed the quality of the guidelines by the AGREE instrument and was subsequently performed a linear correlation study between the methodological quality of guidelines with the year of publication and prestige of the journal that published the guidelines.

The results show a significant variability in the quality of the guidelines, with the most recent that have a greater degree of reliability. No correlation was verified with the prestige of the journal.

There is a risk that the evaluation of medical professional liability is based on scientific evidence without an acceptable methodological quality.

KEYWORDS: AGREE, Guidelines, Professional Responsibility

INTRODUCTION

In Italy as in other countries the professional responsibility for malpractice of the doctor is based on the Guidelines (GL) application: if the health care worker respect the GL is not responsible in the case of an adverse event leading to medical act.

However the law does not consider the problem of the complexity of international scientific literature and the significant variability in the quality of evidence-based medicine (EBM) of that the GL represent the best product.

The difficulty is to have a tool for quantitative assessment of the scientific quality of the product. The instrument considered "*guideline appraisal tool used most often internationally*"¹ is the AGREE (Appraisal of Guidelines for Research & Evaluation)².

This instrument consists of twenty-three items grouped into six areas: objectives and scope, stakeholder involvement, methodological rigor, clarity, applicability and editorial independence. Each item is rated by reviewers on a seven-point Likert scale from "strongly disagree" to "strongly agree" (1-7 respectively). For each of the six dimensions of the instrument a score is calculated by adding together all the scores of each reviewer for the items that compose the area. The obtained score is standardized as a percentage of the maximum possible score for that area (0-100%).

The authors propose a review of the literature verifying the utility of the commonly used criteria for the selection of quality research than the junk literature.

MATERIALS E METHODS

Scientific articles that have applied the AGREE in the evaluation of GL were selected using Medline database and Title's keywords "guidelines" and "AGREE". The results obtained were selected according to inclusion criteria: language (including only articles in English) and year (2014). All items not relate to the AGREE or not original articles were excluded.

After the area comparison of scores, it was made a study of the linear correlation of the score of area n. 3 ("Methodological rigor") with the year of publication and the Impact Factor (IF) of the journal which published the GL.

RESULTS

Three scientific articles³⁻⁵ have been selected for a total of twenty-six GL.

The score (Mean; Min-Max) reported for each area of AGREE are: scope and purpose (81,42; 0-100); stakeholder involvement (55,95; 14,8-83,33); rigour of development (63,25; 14-94,4); clarity of presentation (89,87; 56-100); applicability (41,19; 0-83,33); editorial independence (61,40; 4-100).

It is demonstrated a statistically significant correlation between quality and time of the publication of the GL (Figure 1).

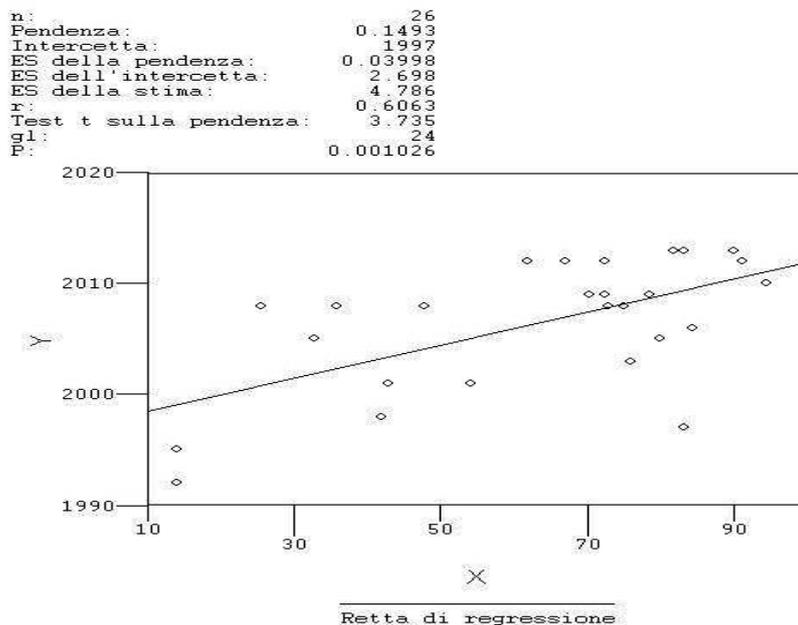


Figure 1: Correlation between Quality and Time of the Publication of the GL

Instead, a presumed correlation between IF (5,509; 0-19,970) and methodological rigor has not been proved (Figure 2).

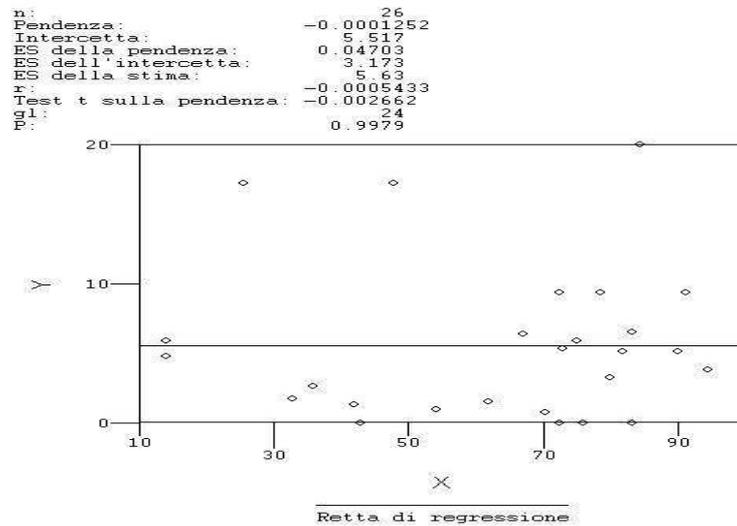


Figure 2: Correlation between IF and Methodological Rigor

DISCUSSIONS

Professional responsibility is a very complex judgment because the medicine is uncertain science⁶, affected by many factors of which the scientific literature is only one variable. More information is needed concerning the working environment (equipment of the health care facility, organization of work, singular competence of professional equipe, etc..), the uniqueness of the patient⁷ and, therefore, of the disease of this patient (genetic factors, comorbidities, complications, etc.), etc..

It is evident the availability for the doctor of considerable variability in the quality of research and this requires knowledge of the conceptual tools of evaluation to distinguish and reject the junk literature or simply that useless, also with high quality, but not relevant to the specific case.

The AGREE is certainly a valuable tool, but certainly not easy to use and time consuming. An alternative criterion is the time of the publication of scientific evidence: it is more recent and is more likely to be better. It is not useful to distinguish the scientific literature on the basis of a criterion that is not demonstrated. It's necessary to avoid being influenced in the judgment of the conduct of others by information not relevant to the method.

However this will only give an indication of the general character of scientific knowledge that will later be put into practice⁸. And it is at that moment that will be measured the doctor's ability to synthesize all the his resources to solve the problem (problem solving).

CONCLUSIONS

The clinician and the surgeon must take into important account the scientific literature that represents the essential cultural background, but they must not limited to it.

They must have the ability to apply scientific evidence to the case and going to take from the literature only what is useful in practice.

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