



Opinion

Copy Right@ Hamilton Lima Wagner

Quaternary Prevention and Good Science

Hamilton Lima Wagner*

Family and Community Medicine, Curitiba Health System Physician, Brazil

***Corresponding author:** Hamilton Lima Wagner, Family and Community Medicine, Curitiba Health System Physician, Curitiba, Brazil.

To Cite This Article: Hamilton Lima Wagner: Quaternary Prevention and Good Science. *Am J Biomed Sci & Res.* 2021 - 12(6). *AJBSR.MS.ID.001809*. DOI: [10.34297/AJBSR.2021.12.001809](https://doi.org/10.34297/AJBSR.2021.12.001809).

Received: 📅 May 08, 2021; **Published:** 📅 May 17, 2021

Opinion

In 1986, when the concept of quaternary prevention was proposed by the Belgian family doctor, Marc Jamoulle [1], the central idea was to avoid the excessive use of health tools, avoiding unnecessary damage and interventions. This concept has matured over the years and today has an interest group with the WONCA (Global Family Doctors Association) under the coordination of Uruguayan doctor Miguel Pizaneli.

But the need for care with medical practice, deserving of studies, has been justified daily. Authors have been publishing the difficulties in the published texts, and in a seminal article by John Ioannides [2] from 2005 it is exposed because the vast majority of medical texts are not valid. This particular article presents the basic flaws, in which the authors try to affirm their ideas, and design works to make this happen.

In parallel to these works, two books were published - *Bad Pharma* by Ben Goldrach [3] and *Deadly Medicines and Organized Crime* by Peter Gøtzsche [4] showing flaws in the construction of studies and how this can harm health care.

When studying these questions, it is essential to study alternatives for the development of good medical practice [5]. And the core is to understand that relevant medical research should focus on prolonging life and improving its quality [6,7]. But what appears in the studies is the effect on biological markers, in the comparisons without clinical expression of the effect of drugs - which often have very high prices, without this meaning an improvement in the result for patients.

Today's society is in a dilemma caused by information overload, which does not always offer clear and applicable answers in daily life. Within health care this is critical. Professionals have an endless demand for serving the population and the time available for studies is minimal [8]. This creates the need for more appropriate

and objective responses. But contrary to what was imagined in the past, clinical guidelines are not the best answer, since they end up being a consensus of specialists and almost always with a strong influence of interests - which takes away from them the search for improving quality and quantity of life. of people, and biological markers are sought without this being reflected in a real improvement in people's lives and leads to wear and tear between the health team and people, the target of their attention.

But not only do researchers need to improve the design of their studies, it is essential that studies with negative results are published - and this is a fundamental role of the editors [9]. When a study does not find relevance in a procedure or conduct, this must reach the clinicians to avoid the perpetuation of conduct that is not proven to be efficient.

It is essential that large studies have their protocols analyzed and corrected by research ethics committees, and that their publication is carried out regardless of the results found [5]. A perfect research design must exhaust the possibilities for the theory to be wrong, and only then conclude that it is admissible.

Research carried out in this format increases the relevance and strengthens the validity of the study. It is no longer tolerable to use makeup, or to torture data with different statistical studies, seeking to confirm a theory. The research protocol must, a priori, explain what and how it will be studied, and the statistical model to be applied must be known in advance. Only then will credibility in research be restored and improve people's health care.

References

1. Jamoulle M (1986) *Information et informatisation en medecine generale. Torisieme rounes de reflexion sur l'informatique*. Presses Universitaires de Namur, Belgium.
2. Ioannids JPA (2005) Why most published research findings are false. *PLoS Med*.

3. Goldacre B (2013) Bad pharma: how medicine is broken, and how we can fix it. Collins Publishers, London.
4. Gøtzche PC (2013) Deadly medicines and organized crime how does big pharma has corrupted health care. Radcliff, London.
5. Wagner HL (2015) Quaternary prevention and the challenges to develop a good practice. IJHPM 4(8) 557-558.
6. Shaughnessy AF, Slawson DC, Bennett JH (1994) Becoming an information master: a guidebook to the medical information jungle. Pennsylvania. J Fam Pract 39(5): 489-499.
7. Slawson DC, Shaughnessy AF, Bennett JH (1994) Becoming a medical information master: feeling good about not knowing everything. Virginia. J Fam Pract 38(5): 505-513.
8. Allery LA, Owen PA, Robling MR (2017) Why general practitioners and consultants change their clinical practice: a critical incident study. BMJ 314(7084): 870-874.
9. Every-Palmer S, Howick J (2014) How evidence-based medicine is failing due to biased trial and selective publication. J Eval Clin Pract 20(6): 908-914.