Editorial

Construction of Scientific Thinking, the Geometry of Research in the Multiproject Model, BAOJ Medical and Nursing and the Example of The Incorporation of Low-Dose Laser Therapy in the Treatment of Oral Mucositis

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What we are is a set of ourselves, a set of what we were. Each new moment brings the construction of the next moment, wrapped together with the previous moments. We are full of moments and essences. While some moments are hazy and obscure, others make us transparent and expose the translucency of the gem of the character. We accumulate substantial baggage for our development and for our personality. For sure, we see ourselves at certain times in unusual situations and we quickly need to develop and respond. On the way and in our travels, we leave things behind and remember that each one of them reminds us how we got here. However submerged the constructions of our self may be or are, they are still there, showing us how we are what we are. We may be alone in our most introspective thoughts; however, solitude only is what is accompanied by the only agent. Certainly, our construction of ourselves occurred with several people and in various situations, sometimes adverse situations.

At birth, we may be exposed to aggression from the environment that depends on knowledge and action in a timely manner for adequate assistance. The study by Chhetri et al. (2004) showed that as important as knowledge about neonatal sepsis, a relevant cause of mortality and morbidity worldwide, is making mothers aware of this knowledge, so that we can achieve greater success in identifying the problem and early treatment [1].

We make ourselves symbiotic with others, since conception and birth. A clear example is given by the study that measures maternal knowledge about neonatal sepsis [1], where we direct our search for new elements that make us what we are. We are always looking for something; when we look for one thing, sometimes we find others. When we search for a goal, we come across more goals and sometimes with the need for new research. There is a constant reinvention and reconstruction of ourselves. We are made up by all our “we’s.”

In addition, what if what we are is not, in fact, the question, but rather that from which we are differentiating ourselves. The question would not establish our identity or give us characteristics, but would spread these concepts for the benefit of others who we are.

In the daily shaping of who we are, we seek. In seeking what we want, we come across other desires and new “wants.” Every new scenario that we go through brings us new possibilities. The opening of doors leads us to interesting places and reflections on new perspectives. What we look at is not just what we look at; we look at what we find, we look at what we want and how we want it, but perhaps the most important thing is to look at how we construct our looking. When we understand that the initial object is only the initial triggering object and not more important than the final object, the core of our search, we realize that initiating the search is what matters.

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The word changes, changes us, changes the world, and for most positivists, we can say that the proof for that is at the moment when we stop to think and read the following: to be what we are and to add to what we will be, let us be prolific authors of our reality.

As we seek reality or truths about reality, we find questions and more questions about our observations of reality. Martin and coworkers (2018) reported on the experience of going beyond the classical study of anatomy and the incorporation of technologies for teaching. By transcending reality and seeking virtual reality (virtual dissection), the authors broadened the way students interact with the object of study [2].

However diverse the objects of study may be, we can classify research approaches in quantitative and qualitative terms. According to Minayo (2017), by listing the quantitative and qualitative approaches of the studies, we could conclude that both are necessary, but in many circumstances, insufficient to cover the whole observed reality. Therefore, they could and should be used in such circumstances as complementary, whenever research planning is in accordance. Since scientific knowledge is always the search for articulation between a theory and empirical reality, the method would be the guiding thread to formulate this articulation [3].

If we understand the method as the path of thought, it would be plausible to look at a research object to obtain different points of view and different results in the search for the center of the study question. Review studies such as that by Karcioglu (2018) have compiled information on different views on the use of therapeutic hypothermia. Each of the unexpected events and hypothermia therapy itself could constitute a research project [4].

What if we proposed a multiproject and not just a research project? It would be possible to list an initial strategy for the search for evidence, so that elements could be uncovered to deal with different objectives. These could be the experience of the individual in relation to care and the effectiveness of a given technology in the health of populations and the impact of the cost of this technology on health care.

Looking at the patient and through the patient and into the constitution and signification of his/her pain, illness and convalescence, makes it possible for us to see from this “periphery” around the center of the question of the treatment of a certain nosological entity. It is likely that by uncovering the objects of desire and control arranged in the patient’s view, beyond the complicated but more simplistic logic of how, when and how much do we “treat” it, we have more properties that can be referred to new truths.

With every moment that we reinforce the position in studying a problem made available to us, it is possible to identify new ways of searching for what is sought. There are new ways of studying anatomy, unlisted effects at the starting point of a therapy such as hypothermia and even the dissemination of knowledge in the search for a decrease in neonatal morbidity and mortality [1,2,4]. BAOJ Medical and Nursing has played this role of bringing diverse perspectives on the research, research point and the researcher.

From different aspects and moments, the vision between the point to be researched and the researcher changes, creating a research geometry, wide and changeable, but at the same time, reasonable and attainable in each perspective. If the principle is the question, at every step toward the answer, we move away from the question. In a way, we even make it disappear, so that the further we go, the closer we get to the question. Our return to the origin takes place in time, and then we never return and are never gone, even leaving, even looking for the answer (Figure 1).

Graphic influence takes on an explanatory language of thought, like that of Foucault, a language of our thinking, of the sense we give to things, to our experience and to the world [5]. If we look at Figure 1, we can notice that when leaving point A and going towards B, even in the logic of the question that leads us to that probable response B, a path opens, different from the first one toward C and, consequently, to D.

In this example the answer or question in B would be the way to the center of the question, D. We would most likely have several meanings and symbolisms for each path and question; and we could again quote Foucault when we would think that truths are invented by reason, and not discovered by it [5,6]; perhaps we could create a point E and so forth.

![Figure 1 – Geometry of research.](image)

Even if the question is not the scientific language, but the thought itself, we can proceed with various observations of an object in question. Having noted the problem situation to be studied, the first question is asked and...
we look for the problematization (point A).

Thus, in unfolding a vision of a scientific study, we can set this up in the geometry of research, the core and critical point of a theme that we present here to exemplify. The management of cancer patients, for example, often involves the use of radio- and chemotherapy. These therapies, however, have adverse effects, which sometimes translate into considerable harm to the health of the individual. Oral mucositis (OM) in this context is one of the most serious non-hematological adverse events.

OM is an inflammatory condition of the mucosa that manifests as erythema, ulceration, hemorrhage, edema and pain, and it causes various nutritional limitations in patients on radio- and chemotherapy, potentially resulting in secondary infections and fever [7]. The treatment of OM involves multidisciplinary evaluation for an adequate care of the oral mucosa. In this regard, opioid analgesics, specific oral hygiene protocols, antimicrobial agents, antiinflammatory drugs, cytoprotection agents (such as amifostine, sucralfate, misoprostol), biological response modifiers or physical therapies (cryotherapy and laser therapy) may be used. Low-dose laser therapy (LLLT) is a phototherapy that can stimulate tissue regeneration, reduce inflammation and control pain [8–11].

The above aspects of the effect of LLLT on the oral mucosa have been described in studies on the use of a laser in a prophylactic manner, when finding a good efficacy in reducing the risk of oral mucositis and pain due to lesions of the mucosa [12,13]. However, the use of LLLT as a curative treatment in mucositis still lacks robust evidence. Only a few systematic reviews have addressed the issue, but treating LLLT only as part of the review rather than the central object [11,13].

We would be at a point B or C, drawn by the answers and evidence sought in the initial question, i.e., point A, from a prophylactic approach of laser therapy in OM, to create a new thinking about the search for knowledge about the curative therapeutic aspects of LLLT. At this time, in the development of the next way of identifying the research, it seems appropriate to use quantitative parameters and, even if in an apparent way, to seek qualitative projections of the study and analysis. Accordingly, we developed a systematic review protocol for the analysis of the reported evidence to date on LLLT as a curative treatment of OM [14].

The biological plausibility and the evidence for the use of this technology in the prophylaxis of OM make it possible to project the effectiveness of LLLT when curative in mucositis. At this point, other knowledge and thoughts (and new demands) on LLLT technology and its incorporation into the day-to-day treatment of adverse events in patients undergoing cancer treatment will emerge now, and we will be in the forefront of a multiproject to give different forms to every rethinking, so starting the search is what matters.

References


