


# Health and operability in Defense Studies and Military Sciences

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The involvement of the Brazilian Armed Forces in war and/or peace operations can be attributed to the economic, social and political developments that have been observed in many nations throughout the twentieth and twenty-first centuries. Since World War II (1939-1945), when the Brazilian Expeditionary Force (FEB) took part in the conflict, there have been profound changes in the policy, strategies and characterization of conflicts. Even with these major changes, there is a perennial component: the military deployed on the ground. To them, the academic studies concerning peace and war have relegated, in our country, a space of lesser prestige.

The academic approach in the area of defense studies in Brazil originates in the 1990s, when social scientists began to problematize the area, seeking to understand the transformations in the national and international political contexts in the changing world. This origin has a strong connection with political science and international relations (MARQUES; FUCCILLE, 2015), which explains the fact that statements No. 1,295/2001 (BRASIL, 2001) and No. 147/2017 (BRASIL, 2017) place military sciences and defense, respectively, in the list of sciences studied in the country along with political sciences and international relations. However, more recent epistemological reflections recognize that studies on peace and war, notably pertaining to the area of defense, may be organized into networked knowledge structures, to which the studies of war materials belong; in technology, and military components; in administration and logistics (MEDEIROS, 2015). In addition, we may point out:

From these elements, we can also highlight another point of possible intersection from the war, linked to the processes. There are valid processes from the administrative and logistical point of view, but also those related to the formation of human resources, training, qualification, formation. Sectors of knowledge linked to education, pedagogy or andragogy reverberate in this field. But other fields

bordering this one are those of psychology and medicine, which are endowed by the needs of war, of human physical and psychological limits. These fields in turn are associated with those of sociology, with regard to the conflicts caused by ever human decisions, as well as the new faces of the defense exercise, in social sectors and support to the State. (MEDEIROS, 2015, p. 48, our translation, emphasis added)

Specifically, regarding the military sciences, Ordinance No. 734/2010 defines them as a “system of knowledge related to the art of warfare, obtained through scientific research, practices in the military sphere, experience and observation of the phenomena of wars and conflicts” (BRASIL, 2010), subordinated to the great area of defense knowledge. Along with this, 36 areas of study are established, including health, military instruction, human resources, military operations and physical education. Finally, it should be noted that:

the research and study of Military Sciences in the Brazilian Army have as their purposes the formulation of the Terrestrial Military Doctrine, the advancement of knowledge in Defense and the preparation of military leaders, researchers, planners and managers of the resources made available to the Institution for the fulfillment of its constitutional mission, in time of peace and war. (BRASIL, 2010, our translation, emphasis added)

Revisiting the definition of defense studies and military sciences as a mean for a reflection on its scope, we argue that the research themes in these areas do not limit themselves to high politics, geopolitics, logistics, defense economics and the like, as would address the most traditional approach in Brazil. In fact, a survey in the literature ratifies this argument, since there is, in the international scenario, substantial scientific production in the areas of defense and military sciences, either in the scope of tactical dimensions or of the operational dimensions.

Specifically with regard to the themes of health and operability of military personnel, the Scopus<sup>1</sup> platform catalogs 40,065<sup>2</sup> articles, books, book chapters and congress abstracts, in a continuous growth since 1943 – the date of the first two publications on the subject –, which is more accentuated from 2001 (Figure 1).

The journals that most publish scientific articles on the topics are precisely the military journals, and military agencies are also the largest funders of research on the themes of health and operability. Likewise, the researchers are mostly affiliated with military organizations (Figure 2, 3 and 4). Ergo, it is difficult not to infer that such topics are of interest to the Armed Forces, of military researchers or of military institutions, and are therefore legitimate in this context.

There is a marked predominance of North American institutes, organizations, journals and sponsors in the epistemological production. In turn, the Brazilian role has been

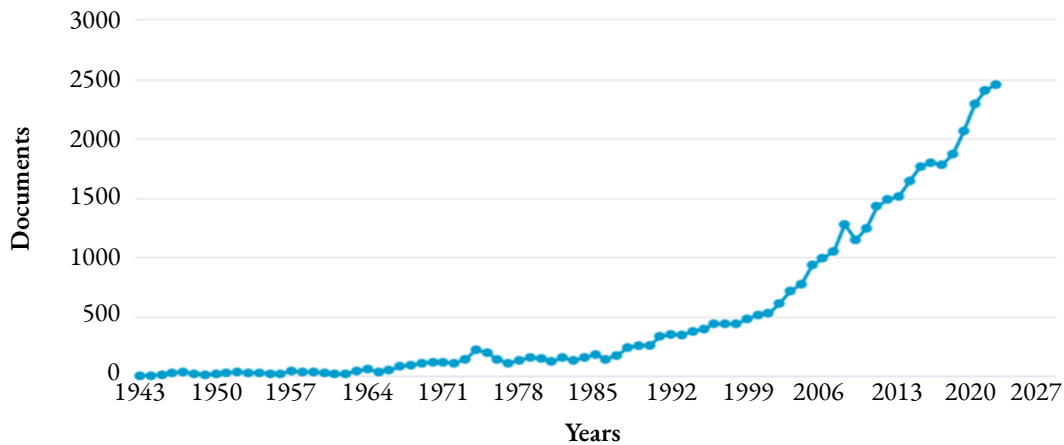
1 Scopus is a multidisciplinary search base that indexes five thousand publishers and more than 25 thousand scientific journals, books and chapters, review, notes, letters and conferences from the humanities, health sciences, earth sciences, biological sciences and exact sciences. Cf.: <https://www.elsevier.com/?a=69451>

2 Survey taken on May 22, 2023.

minimal, with 242 scientific productions in the said period (1943-2022), representing approximately 0.60% of the world publication.

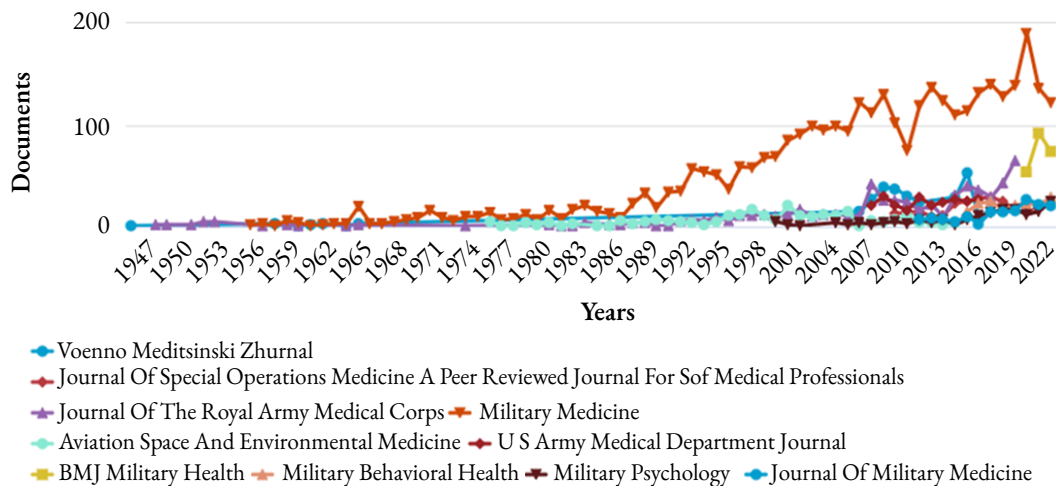
We do not ignore that the approach and characteristics of the current Brazilian academic production derive, to a large extent, from the direction of graduate courses dedicated to defense studies and military sciences – almost entirely linked to area 39 (political science and international relations) of the Coordination for the Improvement of Higher Education Personnel (Capes). Of all the courses and programs in civilian universities or military educational institutions, only one escapes the rule of studying military issues in the political-strategic perspective, directing its attention to operational human performance and being linked to area 21 of Capes (Physical Education). There is no criticism in this observation, it is a fact.

Figure 1 – Scientific documents published per year from 1943 onwards



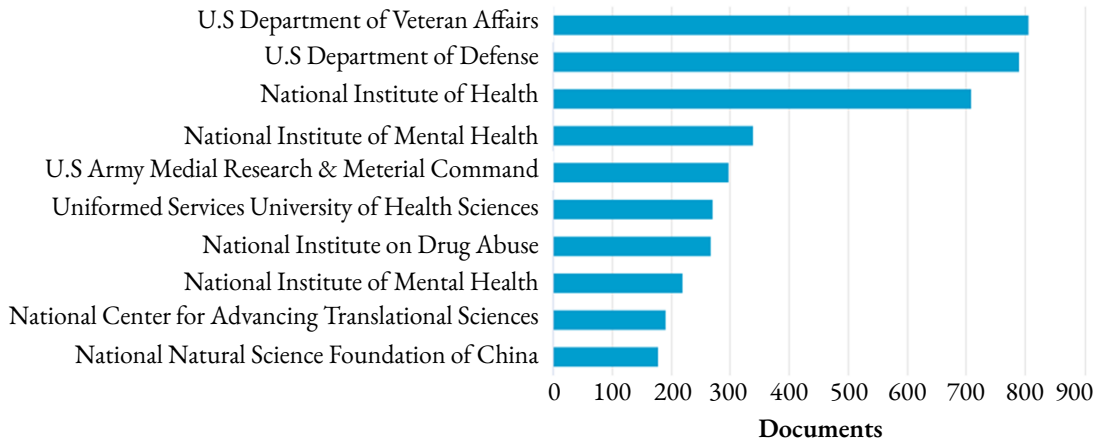
Source: Scopus, 2023

Figure 2 – The ten journals that most publish research articles on the subject



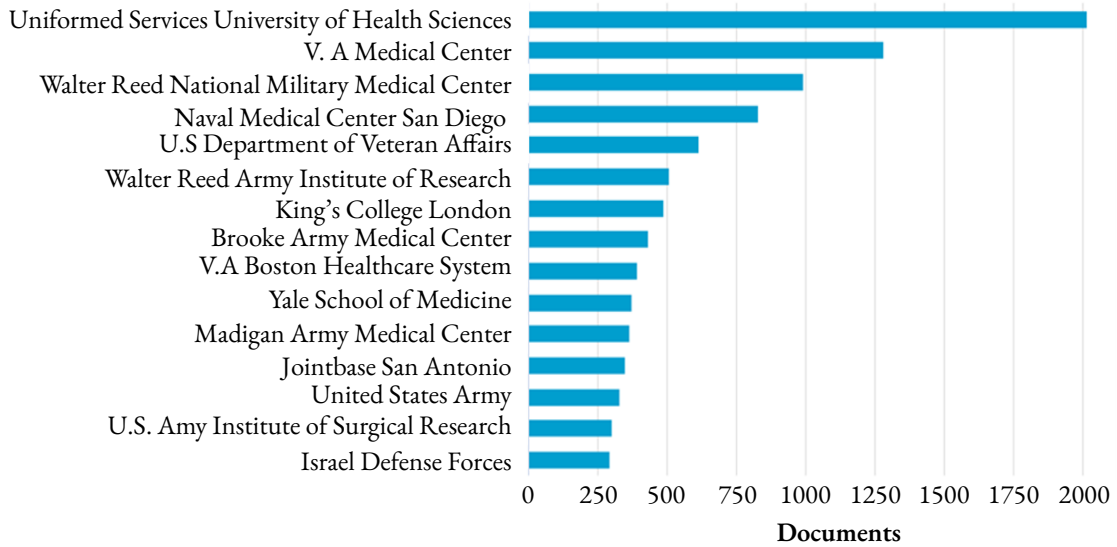
Source: Scopus, 2023

**Figure 3 – Number of documents per sponsor (15 largest sponsors of research on the subject)**



Source: Scopus, 2023

**Figure 4 – The 15 institutions/organizations that publish the most on the subject**



Source: Scopus, 2023

If Brazilian research in military sciences and defense studies starts adopting both the bottom-up and top-down perspectives to understand, analyze and suggest changes in the policy, strategy, preparation and employment of the troops, there is a possibility, with this, of expanding the exchange between researchers dedicated to the themes legitimately pertinent to the area. The recent changes caused by the covid-19 pandemic in the area of science have shown that the union of researchers from different backgrounds can bring great advances in less time. This movement alone could be a boost in our national production, and could strengthen military magazines for the defense area (FRANCHI, 2021).

The creation of this special issue was a move in this direction, that is, a call for the integration of perspectives in defense studies and military sciences. We sought, therefore, to present the readers of the Coleção Meira Mattos with other topics that are under debate and that are pertinent to the military sciences.

Finally, we emphasize that one should not overlook, especially in the study of military sciences and defense, the human dimension of the operational environment, since this would disregard a relevant part of the agents responsible for strategic and political decision-making. Therefore, it is necessary to bring the human dimension to the scope of research so that, during the planning and conducting of military operations, all levels – political, strategic, operational and tactical – are interconnected, generating a more accurate information framework for decision making. At the very least, one who does not know the troop may not deploy it well and, therefore, the best results are not achieved in the process of ensuring the sovereignty and effective presence of the State in the national territory.

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