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METHODOLOGICAL PROPOSAL FOR QUALITATIVE RESEARCH IN SEMIOLOGY: ADVANCED STUDIES

PROPOSTA METODOLÓGICA PARA PESQUISA QUALITATIVA EM SEMIOLOGIA: ESTUDOS AVANÇADOS

PROPUESTA METODOLÓGICA PARA LA INVESTIGACIÓN CUALITATIVA EN SEMIOLOGÍA: ESTUDIOS AVANZADOS

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ABSTRACT

Ethical clinical research is complex in its design, requires authorization from the Research Ethics Committee, and sometimes fails to achieve the expected value and recognition, given all the methodological effort involved. Such difficulties also arise in phytotherapy and homeopathy. This group of researchers, specializing in plant extracts and natural products predominantly of Brazilian origin, as well as ultra-diluted and dynamized solutions, relies on the participation of prescribing clinicians who opt for well-designed and consistent case series studies. For thirty years, methodologically organized observations in semiology have been developed, submitted to peers, and published. However, after encountering qualitative research methods, it became clear the potential for combining these methods to strengthen

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the investigations cited in this article, as they are capable of conferring greater consistency and value to the unique information collected through individual anamnesis and to the specific information identified through physical and complementary examinations, as well as to the spontaneously provided ethnobotanical information. The desire arose to communicate the possibility of designing a methodologically organized study by combining four qualitative research methodologies already used in a dissertation presented to the Graduate Program in Psychosocial Care at the Institute of Psychiatry of the Federal University of Rio de Janeiro. Adapted methodologies were qualitatively evaluated, enabling the future development of multicenter studies. Progress was made in deepening these generated studies, and then, based on the review of clinical records authorized by the Research Ethics Committee (REC), statistical analyses of the phenomena studied, expected (or unexpected) results, and the potential outcome of clinical participation, a complementary summation of these treatments and interventions. With this construct as a result, we discuss potential necessary assessments, which are urgent for the contemporary post-pandemic period. We recommend attention and critical reading of the methodologies used in clinical articles on homeopathy and phytotherapy, understanding their appropriate perspectives and understanding the aspects in which they need to be improved. Given the worrying predictions from INCA and other health agencies regarding the prevalence and incidence of cancer, new efforts and measures must be added to conventional medicine, aiming at the well-being of the population showing clear signs of having an established or developing cancer.

Keywords: Cancerinic State. Anamnesis. Phytotherapy. Method Studies in Qualitative Research. Robustness.

RESUMO

Pesquisas clínicas éticas são complexas em seus desenhos, precisam de autorização pelo Comitê de Ética em Pesquisa e, por vezes, não alcançam o valor e o reconhecimento esperados perante todo esforço metodológico desempenhado. Em Fitoterapia e em Homeopatia, tais dificuldades também ocorrem. Este grupo de pesquisadores, de extratos vegetais, de produtos naturais predominantemente de origem brasileira, além de soluções ultradiluídas e dinamizadas, conta com a participação de clínicos prescritores que optam pelo estudo de série de casos bem delineado e consistente. Há trinta anos vêm-se desenvolvendo observações metodologicamente organizadas em Semiologia, submetidas aos pares e publicadas. Contudo, a partir do encontro com métodos de pesquisa qualitativa, foi possível perceber o potencial de associação destes métodos fortalecendo as investigações, citados no presente artigo, como então capazes de conferir maior consistência e valor às informações singulares coletadas à anamnese individual e à aquelas peculiares, identificadas ao exame físico e complementar, bem como às informações etnobotânicas espontaneamente fornecidas. Surgiu o desejo de comunicar esta possibilidade de se desenhar um trabalho metodologicamente organizado pela associação de quatro metodologias de pesquisa qualitativa, já utilizadas em dissertação apresentada ao Programa de Pós-graduação em Atenção Psicossocial do Instituto de Psiquiatria da Universidade Federal do Rio de Janeiro. Metodologias adaptadas, avaliando-se qualitativamente, oportunizando-se, inclusive, a futura elaboração de estudos multicêntricos. Avanço no aprofundamento destes estudos gerados, para a seguir, a partir da revisão de prontuários clínicos autorizada por Comitê de Ética em Pesquisa (CEP), estabelecer assim a elaboração de análises estatísticas dos fenômenos estudados, de resultados esperados (ou inesperados), quanto ao potencial desfecho de participação clínica somatória complementar destes tratamentos efetuados, das intervenções efetuadas. Com este

constructo como resultado, discute-se potenciais avaliações necessárias, prementes para o período contemporâneo pós-pandêmico, recomenda-se atenção e leitura crítica quanto às metodologias utilizadas em artigos clínicos de Homeopatia e de Fitoterapia, compreendendo sob quais perspectivas elas são adequadas, e entendendo sob quais aspectos precisam progredir. Perante as preocupantes previsões do INCA e outra agência de saúde quanto à prevalência e à incidência de câncer, novos esforços e medidas devem ser somados à medicina convencional, visando-se ao bem estar da população que apresenta evidentes sinais de estar em Estado Cancerínico instalado ou em instalação.

Palavras-chave: Estado Cancerínico. Anamnese. Fitoterapia. Estudos Métodos em Pesquisa Qualitativa. Robustez.

RESUMEN

La investigación clínica ética es compleja en su diseño, requiere la autorización del Comité de Ética de la Investigación y, en ocasiones, no alcanza el valor ni el reconocimiento esperados, dado el esfuerzo metodológico que implica. Estas dificultades también surgen en la fitoterapia y la homeopatía. Este grupo de investigadores, especializado en extractos de plantas y productos naturales predominantemente de origen brasileño, así como en soluciones ultradiluidas y dinamizadas, cuenta con la participación de médicos prescriptores que optan por estudios de series de casos bien diseñados y consistentes. Durante treinta años, se han desarrollado observaciones semiológicas organizadas metodológicamente, se han presentado a pares y se han publicado. Sin embargo, tras el encuentro con métodos de investigación cualitativos, se hizo evidente el potencial de combinarlos para fortalecer las investigaciones citadas en este artículo, ya que son capaces de conferir mayor consistencia y valor a la información única recopilada mediante la anamnesis individual y a la información específica identificada mediante exámenes físicos y complementarios, así como a la información etnobotánica proporcionada espontáneamente. Surgió el deseo de comunicar la posibilidad de diseñar un estudio metodológicamente organizado mediante la combinación de cuatro metodologías de investigación cualitativa ya utilizadas en una disertación presentada al Programa de Posgrado en Atención Psicosocial del Instituto de Psiquiatría de la Universidad Federal de Río de Janeiro. Las metodologías adaptadas se evaluaron cualitativamente, lo que posibilitó el desarrollo futuro de estudios multicéntricos. Se avanzó en la profundización de estos estudios generados y, posteriormente, con base en la revisión de historias clínicas autorizadas por el Comité de Ética en Investigación (CEI), se realizaron análisis estadísticos de los fenómenos estudiados, los resultados esperados (o inesperados) y el posible resultado de la participación clínica, una suma complementaria de estos tratamientos e intervenciones. Con este constructo como resultado, discutimos posibles evaluaciones necesarias, que son urgentes para el período pospandémico contemporáneo. Recomendamos la atención y la lectura crítica de las metodologías utilizadas en artículos clínicos sobre homeopatía y fitoterapia, comprendiendo sus perspectivas apropiadas y entendiendo los aspectos en los que necesitan ser mejoradas. Ante las preocupantes predicciones del INCA y otros organismos de salud sobre la prevalencia e incidencia del cáncer, se deben sumar nuevos esfuerzos y medidas a la medicina convencional, apuntando al bienestar de la población que muestra signos claros de tener un cáncer establecido o en desarrollo.

Palabras clave: Estado del Cáncer. Anamnesis. Fitoterapia. Métodos de Estudio en Investigación Cualitativa. Robustez.

1 INTRODUCTION

Homeopathy has been a medical specialty in Brazil since 1980 (CFM, 1980; Pustiglione et al., 2017) while Phytotherapy, not yet recognized as a specialty, although there are Study and Research Groups in the regional headquarters of the State Councils of Medicine, about their physiological effects have being discussed and investigated through various models for decades, since from basic, toxicological research up to clinical research, by groups of isolated researchers (Bellavite et al., 1997; Khuda-Bukhsh, 2003; Bellavite et al., 2005), triggering the formation of new respectable groups, with several health professionals investigating both at a multidisciplinary and interdisciplinary level in the country and around the world (Teixeira, 2008; 2023).

The analysis of the epidemiological profile of outpatient clientele seeking herbal medicines, varying by region of the country (Antonio et al., 2013), was supplemented by a study conducted by FIOCRUZ, which identified a prevalence of medicinal plant use in primary health care and herbal medicine prescriptions of 2.6% in the last 12 months in the Brazilian population. The prevalence was higher in the North region, among women, people aged 60 or older, those with higher incomes, and those with chronic diseases (Castilhos et al., 2023).

While the profile of users of the Homeopathy Service at Hospital Santa Casa do Rio de Janeiro identified the user who seeks homeopathic care in Rio de Janeiro, whose predominant intellectual background is at secondary and higher education level, also helping to dispel socio-cultural myths (Resende et al., 2024).

Regarding the evaluation of the use of homeopathic medicines for host immune modulation, in times of emerging diseases, and also for the reduction of cancer pain, among several cited in ethnobotany, those that stand out both in materia medicas and in repertories around the world, and also in the Brazilian Homeopathic Pharmacopoeia, are *Euphorbium resinifera* and *Euphorbium officinarum* (Gayer et al., 2025).

In ethnopharmacology, *Euphorbium resinifera* is the plant species with the most experimental support, including clinical trials for pain, as well as in vitro/in vivo studies demonstrating antitumor and immunomodulatory effects. *Euphorbium officinarum*, on the other hand, presents in vitro data and some in vivo results on immunomodulation. A study in mice demonstrated that latex has a potent pro-inflammatory effect (Lata; Saxena, 2003).

Well-known in the international literature, diterpene compounds of the genus Euphorbia (whose species share similar chemical structures and biological activities) exhibit

cytotoxic activity against different tumor cell lines, always associated with immunomodulatory potential. *Euphorbia tirucalli* from the garden of the IPPN campus Ilha do Fundão of the Federal University of Rio de Janeiro most notably exhibited modulation of tumor necrosis factor alpha and interleukin 6 (Santa Clara Jr., 2008).

It is well known that diterpenes can modulate inflammatory and apoptotic pathways involved in immune and antitumor processes. Diterpenes isolated from *E. officinarum* latex showed significant cytotoxic activity against human breast cancer (MCF-7) and leukemia (HL-60) cell lines. Crude latex stimulated nitric oxide (NO) production in macrophages, suggesting activation of inflammatory pathways (Abdellaoui; Bergaoui; Ben Salah, 2011), and latex extracts exhibited moderate antioxidant activity in specific tests (DPPH and ABTS - Abdelaaty; Mohamed; Soliman, 2017).

Weight extracts of *E. resinifera* latex contain resiniferanoid compounds such as resiniferatoxin, which have cytotoxic and immune modulatory activity. Their antitumor potential in MCF-7 (human breast adenocarcinoma), U87 (glioblastoma), and A549 (lung adenocarcinoma) cell lines is statistically significant. Resiniferatoxin (RTX) was able to suppress inflammatory mediators in immune cells and induce apoptosis in these tumor cell lines via activation of TRPV1 (Transient Receptor Potential Vanilloid 1), leading to programmed cell death by an immunological mechanism (Appendino; Szallasi, 1997).

The immunomodulatory potential of *E. tirucalli* latex from the IPPN garden of Ilha do Fundão/UFRJ campus, was also investigated *in vitro* through stimulation of murine macrophages, as well as analysis of sera from mice subjected to classical acute toxicology tests (LD50 and acute toxicity observed for 1 week), having preliminarily evoked the production of cytokines (Interleukins - IL) such as IL-6, IL-10 and Tumor Necrosis Factor alpha (TNF-α) predominantly (Santa Clara Jr., 2008).

Subsequently, chronic toxicology was also evaluated through oral use and in MCF7 and Melan A lines, repeating the result of cytokine detection, although no cytotoxicity occurred for both lines, attributed to the seasonal variation in the concentration of diterpenoids in the raw latex (Santa Clara Jr. et al., 2017, Nagamatsu et al., 2017).

It is known that the receiverthermal-chemicalof transient vanilloid potential type 1 is the activation pathway of TRPV1being expressed mainly in primary afferent sensory neurons,being fundamental in the perception of pain, especially thermal and inflammatory pain. TRPV1 is activated by stimuli such as heat, capsaicin, and harmful chemicals (eicosanoids, protons and peptide toxins). Its activation takes to the opening of the ion

channel, allowing the entry of calcium into cells, triggering a series of events that result in the transmission of pain signals to the brain, which can also increase sensitivity to pain (hyperalgesia) and lead to the release of inflammatory substances becausecan lead to vasodilation and nerve sensitization, and may therefore become a target for analgesic medications such as TRPV1 channel blockers (Szallasi, 2006; Janigro; Szallasi, 2009).

Resiniferatoxin (RTX) has also been evaluated in murine models of neuropathic pain and cancer. In mice, it has also been shown to induce selective apoptosis in tumor cells and reduce cancer-associated pain. Therefore, RTX has already been evaluated in phase I and II clinical trials for the treatment of pain in advanced cancer due to its ability to desensitize nerve endings (Clinical Trials NCT In Szallasi, 2006; Janigro; Szallasi, 2009).

Vanilloid receptors (TRPV1) and cannabinoid receptors (CB1 and CB2) are different types of receptors that play distinct roles, although both are involved in signal transduction and the perception of pain and inflammation. The main difference between them lies in their natural ligands and tissue distribution. Vanilloid receptors, such as TRPV1, are activated by their ligands capsaicin (present in chili peppers), temperature (heat), acidic pH, and chemical irritants. Vanilloid receptors (TRPV1) are located primarily in peripheral sensory neurons, but also in other tissues, including immune cells.(Clinical Trials NCT In Szallasi, 2006; Janigro; Szallasi, 2009).

Cannabinoid receptors, such as CB1 and CB2, are activated by endocannabinoids and phytocannabinoids (present in cannabis). Part of the endocannabinoid system plays a role in regulating several physiological functions, including pain, mood, appetite, sleep, and immune function. The CB1 cannabinoid receptor is located primarily in the central nervous system (brain and spinal cord), but also in peripheral tissues such as the liver, muscle, and adipose tissue. The CB2 cannabinoid receptor is found primarily in the immune system and peripheral organs such as the spleen and intestine.

Endocannabinoids Ligands are anandamide (AEA) and 2-arachidonoylglycerol (2-AG), the main endocannabinoids produced by the body. Phytocannabinoid ligands are the compounds THC and CBD found in cannabis. THC activates CB1, causing psychoactive effects such as euphoria and altered perception. CBD's activation of CB2 can modulate the immune response and reduce inflammation.

E. tirucalli in acute and chronic toxicology assays, it exhibited both peripheral neurological and behavioral effects, suggesting a central action whose metabolic pathways involved in membrane lipid peroxidation and the increase in free serum T4 were discussed

(Varricchio, 2008; Varricchio et al., 2008). However, they may also involve the participation of vanilloid receptors in both toxicological effects and analgesic effects. The studies carried out by Nagamatsu et al. (2019), Hobaica et al. (2020) and Andrade et al. (2022) were those that drew the most attention to the interest based on investigating the action of *E. tirucalli* preparations involving cannabinoid receptors, since changes in perception and sleep were described (Nagamatsu et al., 2017; 2019; 2024). In addition to behavioral variations (reduction of fear, anxiety and aggression) and sleep pattern in animals (Hobaica et al., 2020), in addition to probable mood stabilization in patients with dysthymia without the use of other specific medications during that period of use (Andrade et al., 2022).

For all species studied here, despite their potential effects on cancer and immunity, the toxicity of the extracts and latex is substantial, which prevents their indiscriminate use. Further studies on safety and efficacy are necessary for those interested in this topic. *E. officinarum* is known to have established protocols for antioxidant, cytotoxic, and inflammatory activity in vitro/in vivo. However, *E. resinifera* is the most advanced botanical species in translational research, reaching multicenter clinical trials for cancer pain in Africa, Asia, and the Far East - Japan and China (Bouyahya et al., 2018). This information increases interest in investigating diverse preparations in basic research (Gayer et al., 2025).

In addition to broadening and deepening the issue of clinical research with herbal medicines and natural products conducted by prescribing clinical professionals, this chapter aims to reflect on a model for initial qualitative clinical investigation of this intervention through the semiological findings obtained through the individualized anamnesis. Given the coherent use of the Henry Bernard-Martiny semiological classification, which can be used by any clinical professional recognized by the specific Councils, the consistency of the results will be discussed in light of the pathophysiological reasoning of Homeopathy and Phytotherapy, correlating it with the biotypological pattern and diathesis involved in chronic illness (Varricchio, 2010).

Therefore, a qualitative research evaluation can be initiated in this way, consistently employing instruments used daily by clinicians.

2 METHODOLOGY

Qualitative case study, the phenomenon in progress (Ventura, 2007). In other words, here, semiological research associated with the bibliographic review to rethink this phenomenon, which is descriptive, thus discussing the methodological model proposed for

qualitative analysis, based on the model used by Varricchio (2023) which corresponded to the association of robust qualitative methodologies to confer scientific consistency and coherence.

3 RESULTS

Firstly, a description of the combined methodologies employed to carry out the qualitative research advocated will be presented, followed by the discussion relevant to this article (Varricchio, 2023).

This combination of chosen methodologies has already been presented in a dissertation, as a final requirement for obtaining a master's degree in psychosocial care from the Postgraduate Program in Psychosocial Care of the Institute of Psychiatry of the University of Brazil/Federal University of Rio de Janeiro before a select panel of researchers from national and international universities (Varricchio, 2023):

“Qualitative, descriptive study, with data collection conducted through documentary analysis in audiovisual material produced with urban ethnic leaders and representatives, in a location identified as an existential territory by the leaders participating in the study.

YouData producers were Roma and Indigenous men and women, over 18 years of age. The initial plan was to analyze statements from three (03) to five (05) urban Indigenous people and three (03) to five (05) urban Roma. Finally, according to the available and authorized material, their voices were analyzed.

The inclusion criteria were (i) having recorded and authorized the use of their audiovisual/video material onExperiences, challenges and possibilities of urban leaders and ethnic groups in times of Covid 19(ii) beleader or appointed by his/her urban ethnic leadership; (ii) be locatable; (iii) speak/understand Portuguese; (iv) live in the City of Rio de Janeiro and/or Greater Rio de Janeiro.

The exclusion or selection criteria for authors of the audio and video recordings were (i) not having a cognitive impairment type of dementia; (ii) not suffering from deep depression; and (iii) having lived in an urban area for less than a month.

The material analyzed was a series of videos and audios recorded between 2020 and 2022.

Initially, the method selected to guide this study was ethnography, widely used in anthropology for data collection (Haguette, 1992; Cardano, 2017). However, for the purposes of this study, we invited and requested permission from the participants who produced this

specific material. This characterized, but was not limited to, the use of ethnographic elements in the analysis of data collected from available archives and documents. In this case, the proposal was to make an analytical cut through audiovisual archives where the deponents were protagonists. This involved the descriptive material recording of the intangible assets of these ethnic groups, their sociocultural characteristics during the time and context of the COVID-19 pandemic.

In the context of the internal variability of authorized documents used as data sources and the necessary robustness in their analysis, the research team selected elements of Grounded Theory (GT) (Glase, Strauss, Strutzel, 1968; Strauss 2017; Charmaz, 2017) for free coding and identification of subcategories and categories.

The technique chosen to recruit participants who were protagonists in the study's audiovisual material was the "snowball" method (Haguette, 1992; Cardano, 2017), based on information from ethnic leaders and designated representatives who recorded videos and interviews. Personal testimonies recorded on smartphones also served as data collection sources. The recruitment technique was necessary to request authorization to use the material for professional-academic research purposes. At the time of the request, ethnic leaders submitted requests for content inclusions, all of which were granted. They were/are reference persons, whose authorization to access members of their ethnic group is, in fact, a legal prerequisite (Brasil, 2000).

The instrument for collecting and analyzing audiovisual files as a data source was a script with semi-structured questions (Manzini, 2008) provided as the initial guiding thread, which preceded the selection of sources and data analysis.

The audiovisual material produced by each of the ethnic groups was transcribed using the website applicationhttps://transkriptor.com ®, when the voice file was uploaded and then processed. The resulting text was copied and saved for sentence checking.

The reviewed material was then processed, numbered, organized, coded, and analyzed line by line, separately. Then, it was compared and contrasted with each other and with other documents.

The organization of the data analysis resulted in five (05) categories with subcategories that emerged from the use of numbering elements and line-by-line coding (Strauss, 2017; Charmaz, 2017). Once the categories were organized, according to the cultural nature of the subcategories, the material was analyzed in depth (Ferrari, 2010; Frankham and Macrae, 2015), followed by textual description and discussion. The

participants had their testimonies collected from material produced involving the Covid-19 pandemic. After being transcribed, treated, analyzed and discussed.

In a preliminary critical observation, the absence of corresponding codes between Roma and Indigenous people does not indicate the absence of occurrence or experience within the aforementioned ethnic group and its culture. Thus, specific content not addressed or identified for coding in the material consulted and analyzed may have been a common reality and present both similarities and cultural specificities.

Along these lines, the emerging cross-cutting categories were five: Isolation, Challenges, Strategies, Successes, and Expectations. And the subcategories with cultural specificities were eight: Grief, Culture and Society, History, Culture of Care and Mental Health, Occupational and Work, Prejudice, Neglect, and Leadership and Activism, as shown below at Tabla 1.

Table 1

Ethnic Groups, Categories and Subcategories

Ethnic Group	Gypsies	Indigenous people
CATEGORY 01	SUBCATEGORIES	SUBCATEGORIES
Isolation	• Culture and Society	• Culture and Society
	• Culture and Society / History	
	• Cultural Care and Mental Health	• Culture of Care and Mental Health
Ethnic Group	Gypsies	Indigenous people
CATEGORY 02	SUBCATEGORIES	SUBCATEGORIES
Challenges	• Occupational and work	
	• Culture and Society	• Culture and Society
	• Grief	• Grief
	• Culture of Care and Mental Health	• Culture of Care and Mental Health
	• Prejudice	
	• Neglect/ Activism	

Ethnic Group	Gypsies	Indigenous people
CATEGORY 03	SUBCATEGORIES	SUBCATEGORIES
Strategies	• Grief	• Grief
	• Culture and Society	• Culture and Society
	• Culture of Care and Mental Health	• Culture of care and Mental Health
	• Leadership and Activism	• Leadership and Activism

Ethnic Group	Gypsies	Indigenous people
CATEGORY 04	SUBCATEGORIES	SUBCATEGORIES
Successes	• Leadership and Activism	• Leadership and Activism
	• Culture and Society	
	• Culture of Care and Mental Health	• Culture of care and mental health

Ethnic Group	Gypsies	Indigenous people
CATEGORY 05	SUBCATEGORIES	SUBCATEGORIES
Expectations	• Leadership and Activism	• Leadership and Activism
	• Culture and Society	• Culture and Society
	• Culture of Care and Mental Health	• Culture of Care and Mental Health
	• Occupational and Work	

Source: The Authors. Adapted from Varricchio et al. (2025).

The example of methodology presented above, together with Table 1 generated, which exemplifies its usefulness, will serve as a backdrop for the proposal of a simplified model on pain to be discussed for homeopathic and phytotherapeutic anamnesis that values and signifies unique qualitative aspects of an individual and populations.

Therefore, after verifying the intra-group consistency of semiological aspects, clinical research on the effect of the therapeutic intervention may continue, using another methodology: meta-analysis. Meta-analysis aims to integrate the results of different studies, usually addressing the same research question, to obtain a more accurate and robust estimate of the effect size or the relationship between variables (Lovatto et al., 2007).

Among the variables, one could investigate publications on the statistical correlation between disease patterns in patients with progressive malignant neoplasms, investigating whether there is a significant correlation and the type of pathophysiological association between exacerbated cell proliferation and insufficient oxygenation, leading to the destructive tissue pattern. Another possibility could be to establish a statistical correlation between the presence of at least three persistent symptoms of the clinical syndrome known as the Cancerinic State (Vannier, 1931) over the previous five years, which generally

precedes the onset of cancer (Varricchio, 2010), through a committee-authorized ethics review of clinical records.

Are there any symptoms or signs that suggest this pathophysiological process before the onset of the clinical picture? Which are the most prevalent? Will there be differences in the prevalence of symptoms across regions of the country? Are there concomitant clinical diseases that contribute to the onset of permanent cellular oxidative stress, which triggers the clinical syndrome Cancerous State?

Using this organized and validated qualitative information, proceed to the meta-analysis study. For a meta-analysis to be valid, the included studies must be considered similar in terms of population, study design, and outcome measures. Meta-analysis research is understood to be a statistical technique that combines the results of several independent studies, usually on the same topic, to generate a more comprehensive conclusion with greater statistical power. (Lovatto et al., 2007).

In other words, it is the "analysis of analyses", where the results of different studies are analyzed and combined to obtain a more precise and powerful estimate of the effect of a treatment, intervention or phenomenon (Lovatto et al., 2007). Meta-analysis involves several steps, such as:

a) **Identification and selection of studies:** Search and selection of relevant studies in databases and bibliographies.
b) **Data extraction:** Extraction of results from selected studies, such as effect measures, sample sizes and standard deviations.
c) **Statistical analysis:** Use of statistical models to combine study results and obtain an overall estimate.
d) **Interpretation of results:** Evaluation of the results of the meta-analysis, considering the heterogeneity between studies and other factors.

As for the benefits, the Meta-analysis increases statistical power, allows us to identify trends and patterns in the results of different studies, and can provide more robust evidence for decision-making. It is frequently used in areas such as health, psychology, education and social sciences to provide more robust evidence for decision-making in public policy formulation (Lovatto et al., 2007).

4 DISCUSSION

In homeopathic anamnesis, the integrality that makes up the multidimensionality of the Harmonic Unity of Being (body, mind, spirit endowed with reason, all permeated by vital energy) is considered, activating its detoxification mechanisms and, in this way, mitigating accumulations in vacuoles and intertissue spaces, avoiding destructive tissue oxygenation and consequent demineralization, as occurs in the case of the sulfur metabolic pathway, potent in hepatic detoxification, via superoxidodismutase (Apolinário et al., 2000).

The literature indicates that among the known mechanisms of oncogenesis, the dysregulated cell cycle can be studied through mechanisms existing in the nucleus, while others occurring in the cytoplasm are involved with the extracellular matrix. Cellular memory is also considered, as Professor Leon Vannier (1931) had already proposed using diluted and dynamized sodium chloride (*Natrum muriaticum*). This medication is also involved in some of the mechanisms that cause recurrent and difficult-to-control hypertensive peaks, clinically observable, which often comprise the Cancerinism syndrome, detailed in Table 2, which precedes the onset of cancer in patients with hereditary or acquired tendencies to cellular hyperproliferation (Vannier, 1931).

It is worth noting that if the syndrome is not identified, it may also lead to the outbreak of other clinical diseases related to the biochemical patterns of chronic illness.(Varricchio, 2010):

Table 2

Symptoms and signs common to the Cancerinic State

Constipation vs. Diarrhea; # Hardening and swelling; # Skin-trophic disorders, excessive sweating, glandular imbalance; # Myalgias, arthralgias, undetermined and recurrent bone pain; # Restlessness, anguish, conflict, distrust; # Slowness, negligence, fatigue; # Weight loss, exhaustion; # Changes due to humidity, temperature, atmospheric pressure.

Source: Vannier (1931) In Varricchio (2010).

Another related mechanism involves several signaling pathways in the cell membrane, one of which is the protein kinase C (PKC) pathway, capable of activating its different isoforms on the membrane surface depending on the greater or lesser hydrophobicity (or even hydrophilicity) of the molecule that binds to the membrane, and thus diacylglycerol (DAG) may co-participate as a second signal “turning on” cell proliferation or, on the contrary, turning it off”, suggesting the potential mechanism of action that explains at the cellular level the proposal of the Law of Similarity in a certain botanical genus investigated (Varricchio, 2008; 2010).

As previously proposed for basic research in homeostasis model by Bellavitte et al. (1997; 2005), investigations into the biological effects on the metabolic-immunological response of this signaling, which in pharmacognosy, may represent similarity in weight dose, were carried out, among others, with preliminary evidence of modulation of tumor necrosis factor alpha, Interleukin 10 and Interferon gamma (Santa Clara Jr. et al., 2017; Nagamatsu et al., 2017).

At the invitation of the infectious disease service, complementary therapy was carried out by a pulmonologist/phthisiologist from UFRJ with a specialization in Homeopathy, Professor Ezemar Marques de Andrade (MSc) together with the team of infectious disease specialists (2002) who prescribed a high ultradiluted and dynamized sucussioned solution (HDS) using the classic Hahnemannian method of multiple vials to a selected group of patients from the PAIPA/HESFA/UFRJ Service, becoming the first clinical observation to be revisited and rediscussed regarding homeopathic pathophysiology (Andrade et al., 2022).

There was intraspecific consistency in the semiological and pathophysiological model by which the hypothesis of the French school of Homeopathy was evaluated. While the semiological classification of Henry Bernard-Martiny discussed by the homeopathic orthopedist, Professor Romeu Carillo Jr. (1997; 2000), corresponded to the semiological basis used to evaluate the metabolic profile of this group of patients with Acquired Immunodeficiency Syndrome (AIDS) who were resistant, intolerant, or had some other contraindication to the use of antiretrovirals of the time (Andrade et al., 2022).

The World Health Organization, considering the relevance of a well-taken clinical history, is estimated to be around 70% of the value for clarifying/correcting a clinical diagnosis. This calculation emphasizes the period from patient identification to the end of the History of Present Illness (which includes a review of devices and systems characterized and modalized according to the individual's perceptions), and is confirmed by bedside analysis

through an accurate physical examination. Furthermore, the beauty and usefulness of the modalization of homeopathic and phytotherapeutic anamnesis is evident, as it not only listens but also listens and pays attention to the peculiar symptoms that highlight the uniqueness of the individual (perhaps of a population group and the epidemic genius experienced at the time of this collection), as proposed by Samuel Hahnemann in 1810 (Pustiglione; Carillo Jr., 1994).

The identification of qualitatively assessed symptoms through anamnesis (Bentes Lopes et al., 2023) will lead to a scaling similar to that shown in the methodological description above: Individual statements can be written down using Transkriptor. The transposition of these sentences can be organized by category and even subcategory. From there, they will be scored in descending order (from most to least commonly used medication) or according to their constant and repeated mention in traditional herbal medicine books.

The semiological classification developed by Henry Bernard-Martiny (Carillo, 2000) for the Constitution encompasses biotypology, Hippocratic humor, and temperament. This classification is extremely useful for assessing patients' metabolic and immunological profiles, as well as their psychological distress profile, which will indicate the use of a high-quality herbal extract containing active ingredients in a concentration suitable for the desired pharmacological action. Therefore, based on ethnobotanical information from diverse groups, there are many possibilities for research into Brazilian biodiversity.

In semiology, the constitutions (biotypologies) were noted and counted numerically. Mood stabilization was observed through the improvement of dysthymia, with a predominance of action on neutral sulfuric substances, while other characteristics were verified by domains, based on the WHOQOL Quality of Life Self-Assessment Questionnaire – ABBREVIATED – Adapted In Fleck et al., 1999; 2000 (Andrade et al., 2022).

It is known that the centrifugal nature of sulfur, which predominated as a therapeutic response in the sulfuric constitution, usually favors eliminations through glutathione, detoxifying the patient and, consequently, reducing drug intolerances, as previously hypothesized by Apolinário et al. (2000), resulting in the resumption of treatment with antiretrovirals (Andrade et al., 2022). In parallel, the effect on the serum lipid profile was observed in a chronic toxicology assay for SUD 30CH of the mother tincture (TM) of *E. tirucalli* prepared by the Professor José de Barros School Pharmacy in healthy Swiss mice, administered over 18 weeks, making it interesting to investigate the role of this preparation

in mitigating Plurimetabolic Syndrome by the same mechanism, via the glutathione pathway (Nagamatsu et al., 2024).

In most cases observed during a previous study (Andrade et al., 2002), bioenergetic redistribution occurred, with patients maintaining a better nutritional profile, in addition to increased appetite, work capacity, and physical fitness. This was also due to improved hydration and coloration of the skin and mucous membranes, as well as stabilization of mood and sleep. Furthermore, the temporal spacing of intercurrent infections, especially painful herpes manifestations, suggested a psychoneuroimmune modulation mechanism (Andrade et al., 2022).

It was also suggested that it may act via endothelial signaling, through a psychoneuroimmuneendocrine pathway (Gomes et al., 2024; Hobaica et al., 2025). At the weight level, the endothelial injury triggered by the neoplasm may justify the hypertensive peaks and/or the established Systemic Arterial Hypertension. A similar mechanism for action on the endothelium was proposed by Varricchio (2008) based on the findings of the toxicological study for *E. tirucalli* from the IPPN garden, Ilha do Fundão campus/UFRJ.

In vivo studies (of healthy mouse serum) also suggested that both SUD 30CH preparations of *E. tirucalli* (latex grinding and mother tincture) were capable of evoking the production of TNF-alpha, interleukin-10, and interferon-gamma (Santa Clara Jr. et al., 2017; Nagamatsu et al., 2017). Noteworthy, the organization of activated lymphocytes in well-distributed splenic germinal centers capable of fixing the dyes used suggested lymphocyte activation (Varricchio, 2008; Nagamatsu et al., 2024; Gomes et al., 2024) and allowed for further theoretical investigations (Ximenes Lins et al., 2024; Gayer et al., 2025) aiming at new benchtop assays.

Based on the biological actions shared by the same botanical genus and the articles already published, it can be preliminarily hypothesized that Euphorbium could be useful in the study of the modulation of chemical mediators of dysthymic phenomena, which accompany symptoms of anxiety, depression, aggressive, and even violent moods. Perhaps it could be investigated to perverse acts, deliberate misrepresentations of situations to conceal others, infantilization, belligerence, among other evidences. Pay attention and observe with a “clinical eye”, diagnosis, as each or all of these individuals may be exhibiting chronic encephalitis or even early stages of dementia (including those derived from chemical addictions).

These neuropsychiatric conditions evolve either mediated by the effect on mitochondrial activity that induces the neurosecretion of polypeptides (Zhan; Kaplan, 2018) induced by bad mental habits or by the elevation of protein kinase C isoform alpha by different types of environmental exposures with central nervous system inflammation (Hansel-Martins et al., 2023), what may also include the symptoms of anxiety and depression due to Covid-19 (Grelle et al., 2023). Both mechanisms of action have also been described for the genus Euphorbia (Koivunen et al., 2024), therefore this study suggestion is necessary and promising.

With the current worrying increase in vascular events, especially thromboembolic ones, species of the genus Euphorbia, whose produce either reflex vasoconstriction or hemolysis (Valadares et al., 2006 In Varricchio, 2008) are still of great interest for basic research. And as the profile established since the Covid-19 pandemic period is understood in an evolutionary way, also in the neuropsychiatric aspect due to concomitant encephalitis, from parasitic, bacterial and viral origins it shall be investigated (Gayer et al., 2025; Hobaica et al., 2025; Wasim et al., 2025).

Therefore, since it participates in mitigating clinical symptoms in all diatheses and constitutions, the question arises as to whether all species of the genus Euphorbia can act as phyto-adaptogens (Varricchio, 2008), making it worth investigating their action on natural killer cells, due to their organic spread distribution.

Therefore, after understanding the sum of the rapid and secure information generated and the potential contribution of qualitative research via anamnesis data and its meta-analysis, the clinical-pathophysiological view is returned to, since according to the French school of Homeopathy, the best individualized homeopathic anamnesis modalizes general, local and mental symptoms; All are usually investigated through meta-analysis studies.

The organized and systematized participation of homeopathic and phytotherapists clinical doctors working in complementary medicine highlights the power of Semiology, during the characterization of modalized symptoms, aiming at the action of phytotherapeutic extracts, described according to the different cultures that use them, for their confirmation.

For example, the analysis of the questionnaire test for the Delphi Method was prepared in light of the increased risk of passive smoking during the pandemic period of social isolation. Therefore, understanding how to use this method of qualitative data analysis by health professionals could help in the organization of multicenter clinical studies (Wasim et al., 2025), giving continuity in new lines of action by any other group that proposes it.

Empirically, it is observed that the Cancerinic State, with all its belligerence, intolerance, invasiveness, and reactivity, has been growing exponentially in society. For such clinical intervention with homeopathic medicines, some of which belong to the Euphorbia genus, in addition to *Nitric acid*, *E. officinarum* and *E. resinifera* are suggested (Mwine; Van Damme, 2011;Gayer et al., 2025; Wasim et al., 2025).

Among the phytotherapeutics (which are also homeopathic medicines described in the FHB, 2003), with immune modulatory and homeostatic action (Bellavite et al., 2007) for this post-pandemic period, the indication for the use of *Echinacea purpurea* (Echinacea) stands out, *Punica granatum* (Pomegranate) and *Calendula officinalis* (Calendula)(Ximenes Lins et al., 2024) for rational methodological evaluation.

Considering chemopreventive action, for more severe manifestations of neoplasms, they may also be good indicators of reducing the prevalence of re-emerging diseases and the high incidence of disease outbreaks, especially in light of the still-unknown consequences of the COVID-19 pandemic, considering the entire potential therapeutic arsenal available in the country with the greatest biodiversity on the planet and a proposal for therapeutic complementarity. However, special care must be taken in patients undergoing immunotherapy (Qdaisat et al., 2023), when dialogue with the professionals involved should precede any action.

The National Cancer Institute (INCA) estimates that Brazil will register approximately 704,000 new cases of cancer annually by the end of 2025. The South and Southeast regions account for approximately 70% of neoplasm cases, representing more than 2 million cases in the period, justifying the present study fully. Epidemiological studies also need to be conducted, including clarifying the percentage of patients who actually have access to diagnostic tools and, after confirmation of this diagnosis, to specific oncological treatment within a feasible timeframe.

Lung cancer was the most frequently diagnosed cancer in 2022, accounting for nearly 2.5 million new cases, or one in eight cancers worldwide (12.4% of all cancers globally), followed by female breast (11.6%), colorectal (9.6%), prostate (7.3%), and stomach (4.9%) cancers. Lung cancer was also the leading cause of cancer death, with an estimated 1.8 million deaths (18.7%), followed by colorectal (9.3%), liver (7.8%), female breast (6.9%), and stomach (6.8%) cancers (Bray et al., 2024).

With demographic-based predictions indicating that the number of new cancer cases will reach 35 million by 2050, investments in prevention, including targeting key cancer risk

factors (including smoking, overweight, obesity, and infection), could prevent millions of future cancer diagnoses and save many lives worldwide, bringing enormous economic and social dividends to countries in the coming decades (Bray et al., 2024).

The concept of therapeutic complementarity with plant extracts that do not compete with chemotherapeutics or compromise the cytochrome P450 pathway, combined with dietary nutritional information, needs to gain traction among clinicians. Recovering the patient's history from the perspective of the individual's wholeness is a differentiator in the professional/personal relationship and in quality of life (Wasim et al., 2025). Continuous prevention and health promotion actions through health education should be implemented, especially against obesity and smoking (Rebelo et al., 2025).

Furthermore, numerous studies have demonstrated changes in the concentration and function of some components of the Immune System (IS) caused by physical exercise. Physical exercise has important modulatory effects on immune cell dynamics and, possibly, their function. Neuroendocrine factors that influence cell redistribution and the release of cytokines in response appear to mediate the relationship between the immune system and physical exercise. The hypothesis "Moderate and regular physical exercise increases immunocompetence" was partially confirmed, as there was statistical confirmation of a cause-and-effect relationship between physical exercise and immunological parameters such as CD4 and IgA, specifically, an increase in their values, regardless of chronotype, associated with a benefit in immunological protection at the mucosal level, particularly the respiratory mucosa (Leandro et al., 2002).

It has been confirmed that when young individuals, with sedentary habits, whether morning or afternoon, perform moderate and regular physical exercise at the same time, their immune competence increases, at least at the CD4 and IgA levels (Guardado Cruz et al., 2005).

Over the last century, humans have become less physically active, adopting increasingly sedentary habits. This has led to an increase in the incidence of chronic diseases such as cardiovascular disease, type 2 diabetes, and metabolic syndrome, musculoskeletal disorders, lung diseases, certain types of cancer, and neurological disorders. Regardless of health status, a sedentary lifestyle has also affected the quality of life and life expectancy of these populations. Physical activity can influence health status by altering metabolic states and the immune system. A literature review of studies addressing the effects of physical

exercise on the development of the immune response and its possible signal transduction pathways was conducted using the SciELO and PubMed databases (Terra et al., 2012).

The available literature has shown that during exercise, several leukocyte subpopulations are altered according to the intensity and duration of the activity performed. Moderate-intensity exercise stimulates a pro-inflammatory response, while high-intensity exercise tends to promote anti-inflammatory responses aimed at reducing skeletal muscle damage. Such changes are seen in antigen-presenting cells (such as macrophages and dendritic cells), neutrophils, natural killer (NK) cells, and surface molecules such as Toll-like receptors (TLRs) and major histocompatibility complex class II (MHC II), in addition to changes in the entire cytokine repertoire (Terra et al., 2012).

The current state of knowledge allows us to consider that changes in the immune system are dependent on the parameters inherent to exercise and that for all these changes to occur, some cellular signaling cascades are activated, giving rise to a complex phosphorylation/dephosphorylation process that culminates in the activation of transcription factors, mRNA translation, protein synthesis and cell proliferation (Terra et al., 2012).

Review studies have shown that regular moderate physical exercise (PE) benefits the cardiovascular system, respiratory function, and muscle tone. It reduces stress levels, improves emotional stability, promotes metabolic control, optimizes body mass, and improves immune function. Furthermore, a lower incidence of bacterial and viral infections and neoplasms has been observed in individuals who regularly exercise (Gonçalves, 2014).

Changes in the immune system depend on parameters inherent to exercise, such as volume and intensity, which must be observed for best results. Moderate-intensity exercise directs the immune response toward a predominance of Th1 cells, thus promoting protection against infections by intracellular microorganisms. In turn, the increased concentrations of anti-inflammatory cytokines (Th2) resulting from high-intensity exercise aim to reduce muscle tissue damage resulting from inflammation; however, it can result in increased susceptibility to infections (Gonçalves, 2014).

Therefore, people with healthy cardiovascular, metabolic, immune, and mental health systems may be better able to withstand the effects of potential viral infections. Considering the benefits of regular physical activity, it's understood that increasing its levels among the population could make them better prepared for future pandemics. Furthermore, it could help combat obesity and other cardio-metabolic conditions. All of these aspects, taken together,

can make the population better prepared for both COVID-19 and other future pandemics (Pitanga et al., 2020).

Therefore, the mitigation of conditions such as burnout among health professionals (especially nursing technicians), fibromyalgia associated with hypothyroidism, systemic arterial hypertension of unknown origin or associated with hypertensive peaks that are difficult to control with medication, diabetes mellitus, post-traumatic stress due to domestic violence, Long Covid-19 syndrome, chronic parasitosis (oncoparasitosis), and depressive anxiety as a symptom of exposure to a situation of chronic pathological stress (e.g., bullying), illness among caregivers of patients with chronic-degenerative diseases, all of them, situations that fit the clinical picture of the Cancer State syndrome, correspond for twenty-five years to the sphere of our investigations and clinical actions prescribing homeopathic and phytotherapeutic medications at a complementary level, culminated in the improving of mental health in psychosocial care by the Laboratory of Studies of Aging Processes (PROVE-MEPPSO/IPUB/UFRJ) also aiming at promoting longevity and quality of life for individuals, families, communities and populations (Patel et al., 2018; Varricchio, 2023).

It is well known that the innate immune response includes physical barriers (e.g., skin), chemical barriers (e.g., tears, complement system), and the participation of cells such as macrophages, neutrophils, dendritic cells, natural killer (NK) cells, and microbicidal molecules such as nitric oxide (NO) and superoxide anion (O2-). Based on Varricchio (2008) upon the activation of monocytes in macrophages, Santa Clara Jr. (2008) and collaborators (2017) associated with the empirical report by Hobaica et al. (2020) on the increase in development and physical activity in mouse pups born from mother, who accidentally ingested *E. tirucalli* extract (Hobaica et al., 2025), comprehensive theoretical studies followed (Ximenes Lins et al., 2024).

The qualitative methodology proposed here can be applied to any other homeopathic or herbal medicine classically used in immune modulation, such as Echinacea (Varricchio et al., 2025), as long as it is described in the Brazilian pharmacopoeia and authorized by the National Health Surveillance Agency (MS/ANVISA), recording the clinical experience of doctors from different regions of Brazil.

Projects for qualitative research in users have been focusing on the participation of phytotherapeutic and homeopathic extracts in increasing the performance of physical activities and their relationship with innate immune responses, both in patients and in people

without established diseases, but capable of being included by semiological evaluation in the syndrome called Cancerinic State (Varricchio et al., 2025).

To conclude, it is believed that the methodological association of the qualitative research employed (Varricchio, 2023) correspond to the simple, effective and efficient contemporary strategy that, after due approval by clinical research ethics committees, may yield protocols for the development of national and international multicenter phytotherapeutic semiological studies and can robustely determine the potential clinical effect of interventions (Varricchio et al., 2025).

5 PRODUCTS

- Semiological study on Cancerinism and Neoplasms (Varricchio, 2010).
- Tasty and economical preparations. Services to the Community through the Environmental Health, Parasitology, Bioethics Project (SAPB-LIPAT/FF/UFRJ Project). 2016. Available at: https://sites.google.com/view/lipat/sapb-servi%C3%A7os_a_comunidade?authuser=0#h.p_NyEEsX0H7nTJ.
- Jungian Art Therapy and Its Possible Contributions in the Context of Domestic Violence. Fabio Tavares da Silva.2017. Available at: https://sites.google.com/view/lipat/sapb-servi%C3%A7os_a_comunidade?authuser=0#h.p_bbbVb0lxxzr3
- Environmental awareness through agricultural practices (Turmeric, Rosemary, Rosa canina, Lemongrass, Star anise). Sandra Ávila Gaspar. 2018. Available at: https://sites.google.com/view/lipat/sapb-servi%C3%A7os_a_comunidade?authuser=0#h.p_XCZZP7xNSqEE

-Sanitization of hands. MS/ANVISA. 2020. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.g3uiy62x8f9e

-Spirituality in Palliative Care. Gonçalves et al., 2020. Available at: https://sites.google.com/view/lipat/sapb?authuser=0#h.sdx4w5tum7ae.

- Importance of Physical Exercise (even during the period of social isolation) in the pandemic (Priscila Breder, 2020. Available at: https://sites.google.com/view/lipat/sapb?authuser=0#h.p_kr_RVamdA2Tj.

-MEDICINAL GARDEN GUIDE FOR STUDY AND RESEARCH - Gardens everywhere. 7th Ward HGSCMRJ/BR. Varricchio et al., 2020. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.dy93b6ip3uff

-Technical Product: Encephalitis. Varricchio; Pyrrho. 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.ww65hl7xkc5o.

-Technical Product: COVID-19: Encephalitis and Neuropsychiatric Manifestations - Challenges and Rehabilitation of People in Intermediate and More Advanced Stages of Life. Varricchio et al., 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.s4cpayokyf2k.

-Technical Product: COVID-19, Clinical and Neuropsychiatric Manifestations: Challenges and Rehabilitation of People in Intermediate and More Advanced Stages of Life. Varricchio et al. 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.9qsgkt8in4os.

-Technical Product: Euphorbiaceae and Exceptional Situations: Biotechnological Potential. Wasim, Naema et al. 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.s5rjv6a0xmdm.

-Technical Product: Natural Products.Sandra Ávila Gaspar et al. 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.d710s8jx9ma3.

- Technical Product: Care for Animals in Devitalized Environments (Neglected Diseases, Environmental Disasters, Cancerous State of Society). Nelson Bretas de Noronha Gomes et al. 2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.4oiaoa6eghps.

-Technical Product: Biotechnological Potential of Natural Products in Climate Disasters with Psycho-Socio-Environmental Repercussions. Naema Wasim et al.2021. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.wmqqfh7s0891.

- Educational video: Attention to dysphagia. Andréa Braga dos Santos. 2021. Available at: https://sites.google.com/view/lipat/sapb?authuser=0#h.yjwkv33fdpus.

-Sickle Cell Anemia: Review. Complementary therapeutic potential of Homeopathy. Wasim, N. et al., 2022. *VITAE* - Homeopathy Service Bulletin of the Santa Casa da Misericórdia Hospital RJ. 7th Ward. SAPB-LIPAT/FF/UFRJ PROJECT SUPPORT. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.wmrbarukekve.

-Palliative Care: Approach by Nursing Technicians. Emília Salomão Schirmer Hammes et al. 2023. Available at: https://sites.google.com/view/lipat/sapb-artigos?authuser=0#h.4xy6oekc9gqw.

-Educational flyer: Smoking. Denise Gayer. 2024. Available at: https://sites.google.com/view/lipat/sapb?authuser=0#h.35x51umvlk7.

- Mitigation of Plurimetabolic Syndrome (Nagamatsu et al., 2024; Gomes et al., 2024).
- Pollutants, Environmental Engineering, Environmental Health (Overweight and Smoking In Rebelo et al., 2025).
- Infections and feeding with natural products of nutritional value in immunomodulation (Delaunay de Souza et al., 2023; Wendling et al., 2025).

5.1 LIMITS OF THE STUDY

Theoretical proposal, limited to the experience and observation of a single group of patients and a single group of professionals.

5.2 CONTRIBUTIONS

Theoretical subsidies were produced to contribute to the necessary construction of information in basic research for the subsequent development of refined qualitative clinical research through consistent methodological associations for clinical care based on Homeopathic and Phytotherapeutic Semiology and Physiopathology.

The aim was to systematically prepare the elements collected for initial clinical evaluation, for subsequent meta-analysis, by teams working with patients, whose sample numbers of the population, study design and outcome measures are regionalized, in addition to those achieved by the SAPB Project - LIPAT/LIC-HUCFF/PROVE-IPUB/UFRJ and Homeopathy Services: Gaffrée Guinle University Hospital and 7th Ward of the HGSCM in Rio de Janeiro, Brazil.

The perspective of this simplified model of qualitative methodological approach is its use in a feasible and viable manner in multicenter study designs that include the participation of homeopaths, in addition to allopaths and doctors prescribing herbal medicines authorized by ANVISA and present in RENASUS.

6 CONCLUSION

Ethical clinical research is complex in its design, requires authorization from the Research Ethics Committee, and sometimes does not achieve the expected value and recognition given all the methodological effort undertaken.

Our group clinical practice relies on the participation of professionals who opt for well-designed, ethical, and consistent case series studies. Thirty years ago of clinical experience in Homeopathy and Phytotherapy, methodologically organized observations were developed, submitted to peers, and published.

From the understanding of associated qualitative research methods, it was possible to perceive the potential of these methods, capable of conferring consistency and value to the singular information collected in the anamnesis, as well as to that peculiar information, together with that identified during the physical examination and the analysis of complementary exams.

The desire arose to communicate the possibility of outlining a work that could be carried out on a daily basis, but from the outset methodologically organized through the association of these four methodologies mentioned, qualitatively evaluating Homeopathic and Phytotherapeutic Semiology and Physiopathology, through multicenter studies.

A posteriori, to deepen the studies initiated, and after a review of clinical records authorized by the CEP, to move towards the preparation of statistical analyses of these studied phenomena, for the expected results, regarding the potential outcome of the combined participation of the treatments carried out, as well as the value of the intervention carried out.

In view of the serious threatening predictions for the well-being of the world's population, this necessary methodological appropriation becomes urgent for everyone, because, above all, it is a civic construction.

Finally, while clinicians advance their collaborations, members of basic research will continue investigating mechanisms of action for immunomodulation, which, in addition to homeopathy and phytotherapy, will involve functional nutrition and exercise.

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REFERENCES

Abdelaaty, A. S., Mohamed, A. B., & Soliman, F. M. (2017). Phytochemical and antioxidant evaluation of Euphorbia officinarum latex. Journal of Applied Pharmaceutical Science, 7(8), 71–76. https://doi.org/10.7324/JAPS.2017.70810

Abdellaoui, S., Bergaoui, A., & Ben Salah, H. (2011). Biological activities of latex from Euphorbia officinarum L. African Journal of Biotechnology, 10(74), 16929–16937. https://doi.org/10.5897/AJB11.2071

Andrade, E. M. de, Vieira, I. F., Ramos da Silva, I. S., Bellizi, G. M., Wendling da Silva, A. V., & Varricchio, M. C. B. N. (2022). Revisiting the complementary therapeutic potential of diluted and dynamized solution in patients with Grade IV AIDS with side effects in the SAE of Hospital São Francisco – Municipality of RJ (HESFA/UFRJ). INFO-SAPB – Magazine Supporting the SAPB-LIPAT Project, 6(1). Retrieved October 2, 2025, from https://sites.google.com/view/lipat/sapb-revista_info-sapb#h.w82a8ch0732f

Antonio, G. D., Tesser, C. D., & Moretti-Pires, R. O. (2013). Contributions of medicinal plants to care and health promotion in primary healthcare. Interface (Botucatu), 17(46), 615–626. https://doi.org/10.1590/S1414-32832013005000014

Apolinário, J. C. G., Varricchio, M. C. B. N., Carillo, R., Jr., & Pinto, L. F. (2000). Pathophysiological approach to the balanced sulfuric homeopathic constitution in adults. Brazilian Homeopathy Journal, 6(2), 93–97.

Appendino, G., & Szallasi, A. (1997). Euphorbium: Modern research on its active principle, resiniferatoxin, revives an ancient medicine. Life Sciences, 60(10), 681–696. https://doi.org/10.1016/S0024-3205(97)00031-9

Aquino, C. L., Barbosa, G. M., Varricchio, M. C. B. N., Veiga, V. F., Kuster, R., Zancan, P., Penna, M. S., & Holandino, C. (2008). High dilutions of E. tirucalli L. (aveloz) modify the viability and glycolytic metabolism of cell lines. International Journal of High Dilution Research, 7(24), 132–139.

Bellavite, P., et al. (1997). The similia principle: From cellular models to regulation of homeostasis. British Homoeopathic Journal, 86(2), 73–85. https://doi.org/10.1016/S0007-0785(97)80038-4

Bellavite, P., Conforti, A., Piasere, V., & Ortolani, R. (2005). Immunology and homeopathy. Evidence-Based Complementary and Alternative Medicine, 2(4), 441–452. https://doi.org/10.1093/ecam/neh141

Bellavite, P., Ortolani, R., Pontarollo, F., Pitari, G., & Conforti, A. (2007). Immunology and homeopathy. 5. The rationale of the ‘Simile’. Evidence-Based Complementary and Alternative Medicine, 4(2), 149–163. https://doi.org/10.1093/ecam/nel117

Bentes Lopes, J., Varricchio, M. C. B. N., Pyrrho, A. dos S., & Lage, C. L. S. (2023). Ecoperception in narratives of subjects of ethnic origin in the face of COVID-19: Primary mental health care. SEIVA – SAPB-LIPAT/FF/UFRJ Project Support Journal, 7(2). Retrieved October 2, 2025, from https://sites.google.com/view/lipat/sapb-revista_seiva?authuser=0#h.4ovacivznsar

Bouyahya, A., Et-Touys, A., Bakri, Y., Talbaoui, A., Abrini, J., & Dakka, N. (2017). Antimicrobial and antioxidant activities of Euphorbia resinifera extracts. Asian Pacific Journal of Tropical Disease, 7(12), 747–752. https://doi.org/10.12980/apjtd.7.2017D7-164

Bouyahya, A., et al. (2018). Euphorbia resinifera: A review on phytochemistry, pharmacological and toxicological studies. Phytotherapy Research, 32(11), 2270–2280. https://doi.org/10.1002/ptr.6157

Bray, F., Laversanne, M., Sung, H., et al. (2024). Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: A Cancer Journal for Clinicians, 74(3), 229–263. https://doi.org/10.3322/caac.21834

Cardano, M. (2017). Qualitative research. In M. Cardano, Manual of qualitative research: The contribution of argumentation theory (pp. 23–45). Petrópolis, RJ: Vozes.

Carillo Junior, R. (1997). Fundamentals of constitutional homeopathy. São Paulo, Brazil: Santos.

Carillo Junior, R. (2000). Homeopathy, internal medicine and therapeutics. São Paulo, Brazil: Santos.

Castilhos, P. F., Barbato, P. R., & Boing, A. C. (2023). Prevalence and factors associated with the use of medicinal plants and phytotherapy in Brazil. Fitos Magazine. https://doi.org/10.32712/2446-4775.2023.1477

Charmaz, K. (2017). Special invited paper: Continuities, contradictions, and critical inquiry in grounded theory. International Journal of Qualitative Methods, 16(1), 1–8. https://doi.org/10.1177/1609406917719350

Chen, C. L., Chen, Y. P., Lin, M. W., Huang, Y. B., Chang, F. R., Duh, T. H., et al. (2015). Euphol from Euphorbia tirucalli negatively modulates TGF-β responsiveness via TGF-β receptor segregation within membrane rafts. PLoS ONE, 10(10), e0139598. https://doi.org/10.1371/journal.pone.0139598

ClinicalTrials.gov. (n.d.). Resiniferatoxin in treating patients with severe pain caused by cancer (NCT00804154). Retrieved from https://clinicaltrials.gov/study/NCT00804154

Conselho Federal de Medicina (Brazil). (1980). Resolution No. 1000/1980: Homeopathy as a medical specialty. Official Gazette of the Union, July 21, 1980, Section I, Part II.

Conselho Federal de Medicina (Brazil). (2011). CFM Resolution No. 1,973/2011. Official Gazette of the Union, August 1, 2011, Section I, 144–147. Modified by CFM Resolution 2005/2012.

Delaunay de Souza, N., Freire Souza Silva, F., Gaspar, S. A., Gorini, C. C., Varricchio, M. C. B. N., Pyrrho, A. dos S., Brioso, P. S. T., & da Silva, S. (2023). Euphorbia tirucalli elicitor in Vigna unguiculata cultivation: Bioprocess, bioproduct and biotechnological potential plastic digester. Contemporary: Journal of Ethics and Political Philosophy, 3(10), 16713–16730. https://ojs.revistacontemporanea.com/ojs/index.php/home/issue/view/20

Fleck, M. P. A., Leal, O. F., Louzada, S., Xavier, M., Chachamovich, E., Vieira, G., Santos, L., & Pinzon, V. (1999). Development of the Portuguese version of the WHO quality of life assessment instrument (WHOQOL-100). Revista Brasileira de Psiquiatria, 21(1), 19–28. http://www.scielo.br/pdf/rbp/v21n1/v21n1a06.pdf

Fleck, M. P. A., Louzada, S., Xavier, M., Chachamovich, E., Vieira, G., Santos, L., & Pinzon, V. (2000). Application of the Portuguese version of the abbreviated assessment

instrument quality of life “WHOQOL-bref”. Revista de Saúde Pública, 34(2), 178–183. https://doi.org/10.1590/S0034-89102000000200012

Forsberg, L., de Faire, U., & Morgenstern, R. (2001). Oxidative stress, human genetic variation, and disease. Archives of Biochemistry and Biophysics, 389(1), 84–93. https://doi.org/10.1006/abbi.2001.2311

Frankham, J., & MacRae, C. (2015). Ethnography. In B. Somekh & C. Lewin (Eds.), Theory and method of social research (pp. 59–78). Petrópolis, RJ: Vozes.

Gayer, D., Wasim, N., da Silva, F. T., Nagamatsu, D., Hobaica, P. E. M., Gomes, N. B. de N., Bentes Lopes, J., Bolognani, F. de A., Pyrrho, A. dos S., da Silva, J., & Varricchio, M. C. B. N. (2025). Preliminary qualitative assessment of the use of artificial intelligence (AI) for scientific investigations. SEIVA – Magazine Supporting the SAPB-LIPAT/FF/UFRJ Project, 9(1). Retrieved April 16, 2025, from https://sites.google.com/view/lipat/sapb-revista_seiva?authuser=0#h.yai50nsn9pp8

Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory: Strategies for qualitative research. Nursing Research, 17(4), 364. https://doi.org/10.1097/00006199-196807000-00014

Gomes, N. B. de N., Nagamatsu, D., Bolognani, F. de A., de Freitas, F. J., de Freitas, J. M. V., Varricchio, M. C. B. N., Pyrrho, A. dos S., & Castelo Branco, M. T. L. (2024). Potential pathophysiological mechanisms observed in chronic toxicology of Euphorbia tirucalli: Preliminary study. Revista Aracê, 6(4), 11490–11516. https://doi.org/10.56238/arev6n4-035

Gonçalves, P. N. de J. (2014). Physical exercise and the immune system [Master’s thesis, Fernando Pessoa University]. Faculty of Health Sciences, Porto.

Grelle, L., Fonseca, F., Martins, D., del Castanhel, F., & Maurici, R. (2023). Anxiety and depression symptoms post-COVID-19: Associated factors. Journal of Psychology, Health & Diseases, 24(3), 994–1005. https://doi.org/10.15309/23psd240317

Guardado Cruz, A., Alves, V., Fernandes da Silva, C., & Rosa Santos, M. (2005). Physical exercise and immunity – Influence of chronotypic variables. Nursing Journal, 2(1), 15–27.

Hahnemann, S. (1810). Doctrine and homeopathic treatment of chronic diseases. Paris: Paris Publisher.

Hammersley, M., & Atkinson, P. (2019). Ethnography: Principles in practice (4th ed.). New York, NY: Routledge.

Hansel-Martins, C., Bolognani, F. de A., Lopes, J. B., Pyrrho, A. dos S., da Silva, J., & Varricchio, M. C. B. N. (2023). Endocrine disruptors, mental disorders: Strategies in environmental health. Foco Magazine, 16(8), e2861. https://doi.org/10.54751/revistafoco.v16n8-088

Hansel-Martins, C., et al. (2024). Medicinal intercultural plant garden: Homeopathy and phytonutritional care. Revista Contribuiciones a las Ciencias Sociales, 17(1), 6173–6188. https://doi.org/10.55905/revconv.17n.1-371

Hobaica, P., Nagamatsu, D., Gaspar, S. A., Gomes, N. B. N., Pyrrho, A. dos S., & Varricchio, M. C. B. N. (2020). Homeopathic solutions 30CH in Bittner's tumor. INFO-SAPB – Support Journal for the SAPB-LIPAT/FF/UFRJ Project, 4(2). Retrieved October 2, 2025, from https://sites.google.com/view/lipat/sapb-revista_info-sapb?authuser=0#h.p_2VXMCTdGGOWw

Janigro, D., & Szallasi, A. (2009). Resiniferatoxin for pain treatment: Current status and future directions. Expert Opinion on Investigational Drugs, 18(11), 1781–1791. https://doi.org/10.1517/13543780903324047

Khan, T., & Kaplan, J. M. (2018). Mitochondria promotes neuropeptide secretion in Caenorhabditis elegans by preventing activation of hypoxia inducible factor [Preprint]. https://doi.org/10.1101/298034

Khuda-Bukhsh, A. R. (2003). Towards understanding molecular mechanisms of action of homeopathic drugs: An overview. Molecular and Cellular Biochemistry, 253(1–2), 339–345. https://doi.org/10.1023/A:1026048907739

Koivunen, J., Aaltonen, V., & Peltonen, J. (2005). Protein kinase C family in cancer progression. Cancer Letters, 235(1), 1–10. https://doi.org/10.1016/j.canlet.2004.08.005

Koivunen, E., Madhavan, S., Bermudez-Garrido, L., Grönholm, M., Kaprio, T., Haglund, C., Andersson, L. C., & Gahmberg, C. G. (2024). Hypoxia favors tumor growth in colorectal cancer in an integrin αDβ1/hemoglobin δ-dependent manner. Life Science Alliance, 8(2), e202402925. https://doi.org/10.26508/lsa.202402925

Lata, S., & Saxena, K. (2013). Euphorbia species: Traditional uses, phytochemistry and pharmacology. International Journal of Pharmacy and Pharmaceutical Sciences, 5(4), 1–6.

Leandro, C., Nascimento, E. do, Manhães-de-Castro, R., Duarte, J. A., & de-Castro, C. M. M. B. (2002). Physical exercise and the immune system: Mechanisms and integrations. Portuguese Journal of Sports Sciences, 2(5), 80–90.

Lovatto, P. A., Lehnen, C. R., Andretta, I., Carvalho, A. D., & Hauschild, L. (2007). Nutrition of non-ruminants: Meta-analysis in scientific research – Focus on methodologies. Revista Brasileira de Zootecnia, 36(Suppl.), 285–294. https://doi.org/10.1590/S1516-35982007001000026

Manzini, E. J. (2004). Semi-structured interview: Analysis of objectives and scripts. In International Seminar on Research and Qualitative Studies, 2, Bauru (pp. 1–10). Bauru: USC. Retrieved October 1, 2023, from https://www.marilia.unesp.br/Home/Instituicao/Docentes/EduardoManzini/Manzini_2004_entrevista_semi-estruturada.pdf

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370–396. Retrieved November 1, 2022, from http://www.dominiopublico.gov.br/download/texto/ps000137.pdf

Mwine, J. T., & Van Damme, P. (2011). Why do Euphorbiaceae tick as medicinal plants? A review of Euphorbiaceae family and its medicinal characteristics. Journal of Medicinal Plants Research, 5(5), 652–662. http://www.academicjournals.org/JMPR

Nagamatsu, D., Sales, F., Gomes, T., Wasim, N., Hobaica, P. E. M., Gomes, N. B. N., Santa Clara Jr., P. A., Varricchio, M. C. B. N., Kuster, R. M., Pyrrho, A. dos S., & Castelo Branco, M. T. L. (2017). Absence of cytotoxic effects of high ultradiluted solutions of total extract of Euphorbia tirucalli L. upon Melan-A and MCF7 lineages: Another mechanism of action? INFO-SAPB – Support Journal for the SAPB-LIPAT/FF/UFRJ Project, 1(1). Retrieved October 7, 2025, from https://sites.google.com/view/lipat/sapb-revista_info-sapb?authuser=0#h.p_Ao3lwclpMYL6

Nagamatsu, D., Hobaica, P. E. M., Varricchio, M. T., Pyrrho, A. dos S., & Varricchio, M. C. B. N. (2019). Geopharmacobotany III: Semiological aspects, toxicology, bioproducts of Euphorbia tirucalli [E-book]. Rio de Janeiro: Edição Marcia CBN Varricchio. ISBN 978-65-901189-1-2. Retrieved October 7, 2025, from https://sites.google.com/view/lipat/sapb-livros

Nagamatsu, D., Gomes, N. B. N., Cavalcanti, L. C., de Almeida, D. da Silva/Tukano, Bolognani, F. de A., de Freitas, F. J., Varricchio, M. C. B. N., da Silva, J., Pyrrho, A. dos S., & Castelo Branco, M. T. L. (2024). Ethnomedicine, traditional medicine, homeopathy and mental health: Potential adaptogenic-simile and drain of dilutions of Euphorbia tirucalli? INFO-SAPB – Support Journal for the SAPB-LIPAT/FF/UFRJ Project, 8(1). Retrieved October 7, 2025, from https://sites.google.com/view/lipat/sapb-revista_info-sapb?authuser=0#h.u7zg2olemi1f

Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., … Unützer, J. (2018). The Lancet Commission on global mental health and sustainable development. The Lancet, 392(10157), 1553–1598. https://doi.org/10.1016/S0140-6736(18)31612-X

Pitanga, F. J. G., Beck, C. C., & Pitanga, C. P. S. (2020). Physical inactivity, obesity, and COVID-19: Perspectives across multiple pandemics. Revista Brasileira de Atividade Física & Saúde, 25, e0114. https://doi.org/10.12820/rbafs.25e0114

Pustiglione, M., & Carillo, R., Jr. (1994). Samuel's art of healing Organon Hahnemann – Systematized and annotated version. São Paulo, Brazil: Homeopatia Hoje.

Pustiglione, M., Goldenstein, E., & Chencinski, Y. M. (2017). Homeopathy: A brief overview of this medical specialty. Journal of the São Paulo Homeopathy Association (APH), 80(1/2, Suppl.), 6–15.

Qdaisat, S., Wummer, B., Stover, B. D., Zhang, D., McGuiness, J., Weidert, F., … Sayour, E. J. (2025). Sensitization of tumors to immunotherapy by boosting early type-I interferon responses enables epitope spreading. Nature Biomedical Engineering. https://doi.org/10.1038/s41551-025-01380-1

Rebelo, R. de M., Hammes, R. S. S., Cavalcanti, L. C., Gayer, D. S., Varricchio, M. T., Varricchio, M. C. B. N., da Silva, J., Pyrrho, A. dos S., Lage, C. L. S., & Castelo Branco, M. T. L. (2025). Environmental pollution, smoking and public health: Environmental technology resources. In D. C. Catapan (Ed.), Sustainability and environmental management (pp. 1–15). Curitiba, PR: Editora Foco. https://doi.org/10.54033/stebook.978-65-83117-16-8_4

Resende, A. V. de S., Cruvinel, D. R. V., Monte, V. P. Z., Bolognani, F. de A., Varricchio, M. C. B. N., & de Freitas, F. J. (2024). Profile description: Sociodemographic data of patients treated by the Homeopathy Service of the 7th Ward of Santa Casa da Misericórdia do Rio de Janeiro. Homeopathy Journal – APH, 85(2). https://aph.org.br/revista-aph/index.php/2023/issue/view/Volume-85-2

Saad, B., Azaizeh, H., Abu-Hijleh, G., & Said, O. (2006). Safety of traditional Arab herbal medicine. Evidence-Based Complementary and Alternative Medicine, 3(4), 433–439. https://doi.org/10.1093/ecam/nel058

Salomão, E., Hammes, R., Ramos, I., Pyrrho, A., Varricchio, M., da Silva, J., & de Freitas, J. V. M. (2023). Palliative care. Retrieved October 7, 2025, from https://drive.google.com/file/d/1o_IOEz4RSwMdEnQBYeL0VPwrFc0f1M_3/view?usp=share_link

Santa Clara Jr., P. A. (2007). Study of the immunomodulatory effect of Euphorbia tirucalli extracts [Undergraduate thesis, UNI-RIO]. Rio de Janeiro, Brazil.

Santa Clara Jr., P. A., Pereira, C., Sales, F., Gomes, T., Varricchio, M. C. B. N., Kuster, R. M., & Castelo Branco, M. T. L. (2017). Euphorbia tirucalli from campus Ilha do Fundão/UFRJ and routes of apoptosis in vitro to Melan-A and MCF7 lineages. INFO-SAPB – Support Journal for the SAPB-LIPAT/FF/UFRJ Project, 1(1). Retrieved October 2, 2025, from https://sites.google.com/view/lipat/sapb-revista_info-sapb?authuser=0#h.p_Ao3lwclpMYL6

Silva, V. A. O., Rosa, M. N., Miranda-Gonçalves, V., Costa, A. M., Tansini, A., Evangelista, A. F., et al. (2019). Euphol, a tetracyclic triterpene, from Euphorbia tirucalli induces autophagy and sensitizes temozolomide cytotoxicity on glioblastoma cells. Investigational New Drugs, 37(2), 223–237. https://doi.org/10.1007/s10637-018-0620-y

Silva, V. A. O., Rosa, M. N., Tansini, A., Martinho, O., Tanuri, A., Evangelista, A. F., et al. (2019). Semi-synthetic ingenol derivative from Euphorbia tirucalli inhibits protein kinase C isotypes and promotes autophagy and S-phase arrest on glioma cell lines. Molecules, 24(23), 4265. https://doi.org/10.3390/molecules24234265

Strauss, A. L. (2017). The discovery of grounded theory: Strategies for qualitative research. New York, NY: Routledge. https://doi.org/10.4324/9780203793206

Szallasi, A. (2006). Vanilloid (capsaicin) receptors and mechanisms. Pharmacological Reviews, 58(2), 287–324. https://doi.org/10.1124/pr.58.2.5

Teixeira, M. V. Z. (2008). Homeopathic treatment of emotional and behavioral disorders in childhood and adolescence. Revista Pediatria (São Paulo). Retrieved from http://www.pediatriasaopaulo.usp.br/upload/pdf/1239.pdf

Teixeira, M. V. Z. (2023). Humanize SUS network. Retrieved from https://redehumanizasus.net/dr-marcus-zulian-teixeira-disponibiliza-seus-e-books-no-portal-de-livros-abertos-da-usp-e-na-amazon/

Terra, R., da Silva, S. A. G., Pinto, V. S., & Dutra, P. M. L. (2012). Effect of exercise on immune system: Response, adaptation and cell signaling. Revista Brasileira de Medicina do Esporte, 18(3), 208–214. https://doi.org/10.1590/S1517-86922012000300015

Vannier, L. (1931). La doctrine de l'homeopathie française. Paris: G. Doin & CIA.

Varricchio, M. C. B. N., Pereira, C., Sales, F., Gomes, T., Daudt, E., Aquino, C. L., Barbosa, G. M., Gomes, N., Pyrrho, A. dos S., Hobaica, P. E. M., Castelo Branco, M., & Kuster, R. (2008). Chronic toxicological effects of highly diluted solutions of Aveloz (Euphorbia tirucalli L.) on healthy mice: A preliminary study. International Journal of High Dilution Research, 7(25), 174–178.

Varricchio, M. C. B. N. (2010). Technology in research. I Homeopathy: Biotechnological potential of the adaptogen-like effect on secondary prevention and research in metabolic disorders and host defense mechanisms [E-book]. ISBN 978-85-910453-0-3. Retrieved from https://sites.google.com/view/lipat/sapb-livros#h.ls3474liobf4

Varricchio, M. C. B. N. (2023). Indigenous and Roma leadership in urban territories, demands for care and psychosocial attention in times of pandemic: Challenges, possibilities and expectations [Master's dissertation, Federal University of Rio de Janeiro]. Retrieved October 2, 2025, from https://drive.google.com/file/d/1JlHjsqIA1jpdJkrHd-egDtfirulXN00b/view?usp=sharing

Varricchio, M. C. B. N., Bolognani, F. de A., Vieira, I. F., Bentes Lopes, J., Pyrrho, A. dos S., da Silva, J., Castelo Branco, M. T. L., & de Freitas, F. J. (2025). Methodological proposal for qualitative research in semiology. Caderno Pedagógico, 22(7). https://doi.org/10.54033/cadpedv22n7-212

Ventura, M. M. (2007). The case study as a research modality. Revista SOCERJ, 20(5), 383–386. http://sociedades.cardiol.br/socerj/revista/2007_05/a2007_v20_n05_art10.pdf

Wasim, N., Bolognani, F. de A., Cler, J. da S., Bentes Lopes, J., de Freitas, J. V. M., de Freitas, F. J., Pyrrho, A. dos S., & Varricchio, M. C. B. N. (2025). DELPHI method: Pre-evaluation of an instrument in a health education service. Journal of Social and Environmental Management, 19(4). https://doi.org/10.24857/rgsa.v19n4-103

Wendling da Silva, A. V., Gaspar, S. A., Bolognani, F. de A., de Freitas, J. V. M., Pyrrho, A. dos S., da Silva, S., Varricchio, M. C. B. N., & Castelo Branco, M. T. L. (2025). Honey and propolis: Complementary therapeutic potential in human health. In Health sciences: Studies for maintenance and improvement of life – Volume XVI (pp. 12–25). Goiânia, Brazil: Editora Conhecimento Livre. https://doi.org/10.37423/250409854

Ximenes Lins, R., Varricchio, M. T., Hobaica, P. E. M., Gomes, N. B. de N., Bentes Lopes, J., Bolognani, F. de A., de Freitas, F. J., & Varricchio, M. C. B. N. (2024). Immune modulation, environment and ethics: Health and humanities. Revista Aracê, 7(1), 513–526. https://doi.org/10.56238/arev7n1-030